Developing a National Green Finance Taxonomy

Project Briefing Report

9 October 2020
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About this document

South Africa’s National Treasury published the technical paper “Financing a Sustainable Economy” in May 2020 with the aim of unlocking access to sustainable finance and stimulating the allocation of capital to support a development-focused and climate-resilient economy.

One of the recommendations of the paper is to “develop or adopt a taxonomy for green, social and sustainable finance initiatives, consistent with international developments, to build credibility, foster investment and enable effective monitoring and disclosure of performance”.

A Steering Committee and Working Groups were established to support the implementation of the Technical Paper recommendations. These include a Taxonomy Working Group chaired by National Treasury and including representatives from Department of Environmental Affairs, Forestry and Fisheries; Department of Monitoring and Evaluation; the Johannesburg Stock Exchange, and the industry associations for banking, pensions, and asset management.

The initial phase of work for the Taxonomy Working Group is supported by IFC, part of the World Bank Group, through IFC’s Green Bond Market Development program in partnership with SECO (Swiss State Secretariat for Economic Affairs) and Sida (Swedish International Development Cooperation Agency). It also benefits from global support from the IFC-facilitated Sustainable Banking Network (SBN).

National Business Initiative and the Carbon Trust were selected to carry out research and stakeholder consultation on behalf of the Working Group for the first phase to: (i) establish a governance structure and principles for the development and ongoing maintenance of a national sustainable finance taxonomy, and (ii) to develop an initial draft taxonomy for green and climate finance activities, leveraging existing international frameworks. This initial phase of work is expected to run until June 2021.

Purpose and limitations

This report is not exhaustive in terms of the international or South African green economy landscape, opportunity or need, and does not reconcile the full context and merit for sustainable development in South Africa. The project objective is to develop the green finance taxonomy as a central tool supporting the realisation of sustainable development and is to be delivered as a combination of technical development and stakeholder engagement to inform the resulting output. In this context, this document serves to provide the reader with the necessary background to engage meaningfully as a stakeholder in the project to develop an initial Green Finance Taxonomy for South Africa, including early stage concepts, research, and references that are expected to inform the taxonomy development.

Views and feedback on this document are warmly invited from all interested and affected stakeholders. Your feedback should be sent to:

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About the South African National Treasury

The National Treasury is a department of the South African Government that manages the South African governments’ finances and economic policies. The National Treasury’s mandate is to ensure accountability, transparency, and sustainable management of public finances to promote economic development, good governance, and social progress. This includes safeguarding South Africa’s economy from shocks to the financial system by building resilience through solvency and effective risk management.
Its financial stability mandate intrinsically requires that National Treasury include consideration for the significant financial sector risks presented by climate change (physical, liability and transition climate-related risks), together with greater understanding of inter-linked environmental, social and governance risk exposure.

As regards financial institutions, this requires identifying, managing, and disclosing environmental and social risks in their portfolio through strengthening the regulatory framework and uptake of best practices.

National Treasury seeks to support unlocking economic opportunities in adapting to climate change, meeting the UN Sustainable Development Goals, and enabling a just transition to a low carbon economy. A national taxonomy has been identified by National Treasury as one of a number of crucial elements enabling this objective and will be the custodian for the taxonomy development process.

About IFC

IFC (member of the World Bank Group) is the largest global development institution focused on the private sector in developing countries. The Bank Group has set two goals for the world to achieve by 2030: end extreme poverty and promote shared prosperity in every country.

The IFC leverages its products and services—as well as products and services of other institutions across the World Bank Group—to create markets that address the biggest development challenges of our time. The IFC applies financial resources, technical expertise, global experience, and innovative thinking to help clients and partners overcome financial, operational, and other challenges.

IFC is also a global leader in developing and applying environmental, social and governance (ESG) standards to financial sector transactions and has been one of the earliest and leading green bond issuers and an investor in green bonds in emerging markets. IFC is a founding member of the international Green Bond Principles Executive Committee. IFC launched a green bond program in 2010 to help catalyse the market and unlock investment for private sector projects that support renewable energy and energy efficiency. In 2018, IFC partnered with European asset manager Amundi to establish the Amundi Planet Emerging Green One (EGO) Fund, the world’s largest green-bond fund dedicated to emerging markets. As of June 30th, 2020, IFC has issued $10.387 billion across 172 bonds in 20 currencies. For more information, visit www.ifc.org/greenbonds

IFC’s Green Bond Market Development Program provides advisory services to help strengthen the development of the private sector in South Africa and is managed by IFC’s Financial Institutions Group Department.

About National Business Initiative

The National Business Initiative (NBI) is an independent and voluntary coalition not-for-profit development organisation launched in 1995 by President Nelson Mandela that works to address South Africa’s most pressing social and environmental challenges. NBI’s role remains to build a South African business community that plays a meaningful, trusted and action-orientated role in the achievement of a sustainable, equitable and inclusive society.

The NBI’s membership encompasses approximately 100 leading South African corporations and multinationals, including a significant proportion of the country’s leading listed companies, a number of the major state-owned enterprises (Eskom, Transnet, the Industrial Development Corporation - IDC) and a variety of medium sized firms. The NBI’s strategic objective is to engage its member companies in economic and social transformation.

The NBI has long recognised and advocated for ambitious, collective and coordinated climate action as a crucial mechanism for achieving sought-after socio-economic transformation, and has led the environmental agenda for business through work in green economy, climate finance and sustainable finance, energy efficiency, water and climate change.
The NBI’s implementation track record is built on their ability to bridge between government and business, working collaboratively with business, government, and civil society organisations to build successful partnerships.

**About Carbon Trust**

The Carbon Trust is a not-for-dividend company established by the UK government in 2001 with the mission to accelerate the move to a sustainable, low carbon economy. Carbon Trust provides specialist support to business and the public sector to help cut carbon emissions, save energy, and commercialise low carbon technologies. By stimulating low carbon action, Carbon Trust contributes to key goals of lower carbon emissions, the development of low carbon businesses, increased energy security and job creation.

Carbon Trust is on the forefront of sustainable finance with a dedicated green finance team based in London with in-country experts including South Africa. The green finance practice works with a diversity of financial institutions to help develop credible frameworks, quantify the environmental impacts of green finance, analyse, and transition investment portfolios, and provide assurance and verification.

Carbon Trust Africa was officially established in South Africa in 2016 and is now a dedicated pan-African team with experience in a host of Sub-Saharan African countries and a multitude of projects ranging from green finance, energy access, climate action, corporate sustainability, energy efficiency, renewable energies.
1 Context

1.1 The imperative for South Africa moving to a green economy

South Africa’s defining development context is framed in terms of high levels of unemployment, poverty, and inequality, low quality of education provided especially to black South Africans, deficient infrastructure, public health systems and public service, corruption, a lack of social cohesion and South Africa’s resource-intensive and environmentally unsustainable growth path¹ — all serving to impede the country’s progress towards an inclusive and prosperous society. At the same time, South Africa faces several urgent socio-economic transformation and development challenges in the coming decades, not least the need to ensure a sustainable and secure energy and water supply, sustaining ecological integrity, meeting infrastructure maintenance, renewal and expansion needs, and responding to the bulk service delivery requirements that will require sizeable investment.

In this context, the National Development Plan 2030 (NDP) – the national “development lodestar and roadmap” defines nine focus areas for development, that converges substantially with the UN Sustainable Development Goals (SDGs) ¹, namely:

- Creating employment
- Expanding infrastructure
- Transitioning to a low carbon economy
- Transforming urban and rural communities
- Improving education and training
- Ensuring quality healthcare
- Building a capable state
- Fighting corruption and improving accountability
- Consolidating social cohesion

Inextricable from the developmental imperative, climate change poses a significant risk to South Africa’s development gains, exacerbating the existing national challenges. Climate change impacts threaten to undermine the country’s progress since the World Summit on Sustainable Development was held in Johannesburg in 2002 to advance the Millennium Development Goals, and subsequent efforts to achieve the SDGs.

Climate change is already a measurable reality and, along with other developing countries, South Africa is especially vulnerable to its impacts. South Africa is a signatory to the United Nations Framework Convention on Climate Change (UNFCCC) and has affirmed its commitment to making a fair contribution to global efforts to address climate change by submitting its Nationally Determined Contribution (NDC) and ratifying the Paris Agreement in November 2016.

As indicated in South Africa’s National Climate Change Response Policy (NCCRP), responding to climate change is a costly exercise that requires a collective response. Mainstreaming climate change in decision-making by actors throughout the economy, with a comprehensive resource package comprising financial resources, technical cooperation, and technology transfers on multiple levels nationally and internationally are all key to an effective response.

The NCCRP also rightly acknowledges the important role financial institutions play as development partners and, in the allocation and transfer of capital in the economy. The NCCRP further highlights the necessity for a multidimensional South African climate finance strategy to enable climate-resilient development, employing a range of traditional and emerging finance options and instruments and embracing capital market innovations.
South Africa’s Nationally Determined Contribution (NDC) to the Paris Agreement recognises the cost of climate change to South Africa’s economy and the imperative to participate in the global effort to mitigate and adapt to climate change. The NDC sets targets to limit national GHG emissions to between 398 and 614 MtCO₂e over the period 2025–2030 and also aims to address climate change adaptation through six goals founded in adaption planning and investment. These adaptation goals aim to enhance South Africa’s adaptive capacity and resilience to climate change. The NDC indicates that the key challenge for South Africa is to catalyse, at an economy-wide scale, financing of and investment in the transition to a low carbon and climate resilient economy⁵.

The World Bank estimates that US$1,380 billion is needed for South Africa’s climate mitigation actions and US$308 billion is needed for climate adaptation in South Africa⁶. Similarly, IFC estimates that investment opportunity for climate business in South Africa is approximately US$558 billion to 2030. This includes investments in renewable energy, transportation, energy efficiency, waste management, and green buildings. Such investments will give a tremendous boost to job creation and economic growth, while contributing to greater economic and climate resilience.

“Transition risk” is widely regarded as the risk that the value of assets and income will become less than expected because of climate policy and market transformations, such as the switch away from coal-fired power. In addition to the significant investment opportunity afforded by an ambitious climate response, South Africa faces transition risk of more than $120 billion in present value terms between 2013 and 2035 concentrated in the coal value chain.⁴

Suffice to say, the need to pivot the national development trajectory and investment approach is evident. The pivotal challenge for South Africa is to catalyse economy-wide investment and financing of the technology and capacity required, and at the scale and pace needed to transition to a low carbon and climate resilient economy and society.

Aggravating the country’s current economic difficulties, South Africa also faces the immediate needs of rebuilding an already weak and struggling economy post COVID-19. Gross Domestic Product (GDP) is expected to contract by at least 4% to 10%, with up to 1 million jobs and 1,600 businesses at risk.⁶

Beginning with a green stimulus, acceleration toward a green economy is a key opportunity to fast-track job creation, improve liquidity, and put South Africa on a path to economic competitiveness. Green and sustainable finance offers a way to address our national economic priorities and to create investment opportunities, attracting local as well as international capital. Directing financial flows to projects that build economic resilience and adaptive capacity is vital to long-term national stability and socio-economic transformation. Activating and increasing financial flows into the green and low carbon economy will catalyse job creation and increase resilience in portfolios that in turn will help safeguard those jobs and enhance long-term competitiveness.

### 1.2 The challenge and necessity for a just transition and social inclusivity

South Africa is a resource intensive economy facing decreasing natural resources and a widening gap between the rich and poor, exacerbating inequality.⁹ The need to balance ecosystem protection with social development in a developing economy has been emphasised at the World Summit for Sustainable Development, South Africa’s Green Economy Summit in 2010 and COP17, the 2011 United Nations Climate Change Conference in Durban in 2011. Additionally, South Africa clearly states the need to ensure a just climate transition' within chapter 5 of the NDP. Furthermore, South Africa recognises the just transition playing a role in the country’s greenhouse gas emission (GHG) reduction efforts as stated in the NCCRP, South Africa’s NDC⁶ under the Paris Agreement of the UNFCCC.

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ⁱ 'transition to a low carbon, climate resilient economy and society, that also includes defending and protecting the rights of the most vulnerable, including women, children, people with disabilities, those that are poor and the working class more broadly’ Source NPC, 2019. Social Partner Dialogue for a Just Transition.
The need for an equitable transition which is cognisant of a wider social impact has been a priority in South Africa’s sustainable development pathway for a number of years. This is particularly relevant when investing in infrastructure with long term consequence for both environmental and socio-economic development. Of particular relevance is energy sector development.

The Integrated Resource Plan 2019-2030 reflects South Africa’s energy roadmap to 2030. Within the energy sector plan, 1,500 MW of coal-fired power has been included for development and is largely due to the fact there is a concern that coal based economy which supports thousands of jobs may be lost in the transition to renewable energy. This aptly highlights how South Africa is struggling to decouple energy growth from carbon emission reduction going forward.

Now more than ever, South African policies need to allow communities and workers to acquire the skills and knowledge which move beyond fossil fuel reliant energy technologies to drive an evolving sustainable low carbon economy. These policies should additionally be aligned and implemented across a broader stakeholder ecosystem that involves government, civil society, labour, and business, thereby building resilience in society through inclusivity.

Internationally, various countries have implemented just transition programmes aimed at protecting workers through a transition away from a carbon intensive economy yet not leaving the fossil fuel-based workforce behind. A regional example announced early in 2020 under the European Green Deal Investment Plan, the ‘Just Transition Mechanism’, provides support to carbon intensive regions within Europe through access to €100bn over the period of 2021-2027. This aid is aimed to address social, economic, and environmental challenges in the most impacted territories by providing financial support, transition plans, attractive conditions for public and private investors and technical assistance. Though examples such as this, South Africa’s just transition strategy could leverage lessons to effect South Africa’s policy and government development agenda.

1.3 What is a green economy for South Africa?

The conceptualisation of a green economy provides a useful focus for a mutually agreed development vision. However, in reality, there is only one economy and that economy must be green to remain resilient and competitive. A green economy is not somehow separate or additional to our current understanding of economic activity, but rather an intrinsic element of the vision for a thriving, resilient and competitiveness and the enabling activities required to achieve it.

The National Development Plan is considered the most complete and overarching guiding policy document in this context. However, the definition for a green economy is quite broad. The NDP’s definition is intrinsic to much of South Africa’s policy environment, given that South Africa’s approach has deliberately been to mainstream sustainable and climate-resilient development rather than develop standalone policy.

The South African National Development Plan: Vision 2030 states that a green economy is – “a system of economic activities related to the production, distribution and consumption of goods and services that result in improved human well-being over the long term, while not exposing future generations to significant environmental risks and ecological scarcities”

Related objectives are expressed in a variety of policies and strategies, as well as legal and regulatory mechanisms, as a direct result of South Africa’s mainstreaming approach to sustainable development. The intricacies and complexities of the South African green economy-related policy landscape is, in part, an expression of the multifaceted challenge of sustainable development in South Africa. It is unlikely to be distilled to a single objective and, it might be argued that the identified policy disparity need not detract from transition towards a green economy as a broadly defined but commonly agreed vision.
South Africa’s green economy ambitions and objectives are most explicitly expressed in the National Environmental Management Act, NEMA (Act no. 107 of 1998 as amended) together with the National Climate Change Response White Paper, NCCRP (Department of Environmental Affairs, 2007), taken as the foundations for this project.

Drawing from and recognising the interactions and particular foci of NEMA and NCCRP, we also considered the National Strategy on Sustainable Development (Department of Environmental Affairs, 2011), National Biodiversity Strategy and Action Plan 2015-2025 (Department of Environmental Affairs, 2014) and South Africa’s Low Emission Development Strategy (Department of Environmental Affairs, 2018), amongst others, to amalgamate and propose a more detailed definition for a green economy, as indicated below:

No one green economic activity may possess all traits but should progress at least one of the dimensions without substantially detracting from another.

1.4 The role of sustainable finance and green finance

The NCCRP explicitly calls for inclusion of the financial services sector in shaping South Africa’s climate and green finance architecture alongside project developers and policy makers. The NCCRP prioritises the development of comprehensive resource and investment mobilisation strategies, capacities, mechanisms, or instruments that support and enable implementation of climate change responses. It recognizes the importance of private sector funding in achieving national climate change response actions and identifies the opportunity for the financial sector to mainstream climate change in risk and investment decisions.

The need and urgency to scale sustainable finance directed towards building a more climate resilient and low carbon economy for South Africa is echoed by South Africa’s National Treasury. In its landmark Technical Paper *Financing a Sustainable Economy*, National Treasury recently published the following definition considering the scope and processes for sustainable finance.
Sustainable finance therefore drives development that is sustainable in each of its economic, social and environmental dimensions, being relevant to the 17 United Nations Sustainable Development Goals (SDGs), while concurrently fostering greater transparency and long-termism in the economy.

The Technical Paper includes additional useful definitions of green and climate finance as sub-categories of sustainable finance:

**Climate finance:** Local, national, or transnational financing, which may be drawn from public, private and alternative sources of financing. These financial resources 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.

**Green finance:** Financing of investments that provide environmental benefits in the broader context of environmentally sustainable development. It involves efforts to internalise environmental externalities and adjust risk perceptions to boost environmentally friendly investments and reduce environmentally harmful ones. It covers a wide range of financial institutions and asset classes, and includes both public and private finance.

To supplement our understanding, we have provided other international definitions applied. Including:

- The following definition for climate finance provided by the United Nations Framework Convention on Climate Change (UNFCCC):

> “Climate finance refers to local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change.”

- The following definitions for climate finance and green finance respectively provided by the International Capital Markets Association (ICMA):
The South African definition is consistent with these accepted international examples but is differentiated by making express that climate finance includes the **cost of transitioning to a low carbon and climate resilient economy**. This recognises that efforts towards adaptation and mitigation cannot be disengaged from equity and socio-economic development in the process to reshape the South African economy for long-term competitiveness and sustainability. The South African definition therefore expresses the inclusion of costs to realising a just transition as inherent to the costs of implementing adaptation and mitigation efforts themselves.

For the purposes of this project – and reinforced by existing national policy initiatives - green finance is considered to be that which contributes to the development of the green economy and in particular is financing that supports the implementation of South African environmental policies and the achievement of South Africa’s environmental objectives.

1.5 **The rise of green debt instruments**

A green bond is a type of fixed-income instrument that is specifically earmarked to finance or refinance green eligible activities that will have a positive environmental impact. These bonds can be issued by banks, governments or corporates and are typically asset linked and backed by the issuing entity’s balance sheet. Green bonds, whether or not listed on a green or sustainability exchange segment, are the most widely adopted sustainability debt instrument.

The emergence of green bonds provided an innovative means to mobilise private capital towards investing in green projects. These bonds are, therefore recognised as important instruments in sustainable finance as they appeal to both governments and investors as they (i) help achieve environmental commitments and (ii) provide financial benefits that are environmentally conscious.

Green loans are another debt instrument increasingly identified for lending activities dependent on environmental criteria for the planned use of funds, whether to finance or re-finance, in totality or in part, new or existing eligible green projects, assets or activities.

In 2018, the Green Loan Principles were developed by the Loan Market Association (LMA) which set standards and guidelines for green loans, including use of proceeds, process for project evaluation and selection, management of proceeds and reporting; and are therefore closely modelled on the Green Bond Principles (GBPs).

Green loans have similarly given rise to a diversity of debt-based products aimed at green outcomes, ranging from mortgages, savings and investments accounts, investment indices, and appliance and business financing. This is an area with the potential for substantial innovation.

The notion of green bonds or loans are also represented in the diversity of other monikers with limited formal recognition but associated with the projects, assets or context financed, for instance blue bonds, climate bonds, and renewable energy bonds.

“**Climate Finance is financing that supports the transition to a climate resilient economy by enabling mitigation actions, especially the reduction of greenhouse gas emissions, and adaptation initiatives promoting the climate resilience of infrastructure as well as generally of social and economic assets.”**

“**Green Finance is broader than Climate Finance in that it also addresses other environmental objectives such as natural resource conservation, biodiversity conservation, and pollution prevention and control.”**
Figure 1 illustrates the rise in variously specified debt instruments, issued globally between 2013 and 2019, and highlights the increase in sustainability and transition bonds over the past year. It is also evident that the annual issuance value of green bonds has grown significantly over the past five years and the “green” category is still dominant, although it may be that this predominance in sustainable finance may be more diluted in future.

Figure 1: Annual issuance in sustainable debt (US$ million), 2013-2019, (Source, The Economist, 2020)

The European Investment Bank (EIB) issued the first green bond in 2007 and a decade later, green bond issuance reached a record of US$155bn globally.\(^{19}\) By 2019, the green bond and green loans market reached approximately US$257.7bn (4% or US$10bn comprising green loans) with the European market accounting for 45% of the issuance followed by Asia-Pacific and North American markets, at 25% and 23%, respectively.\(^ {20}\) The total increased by 51% compared to 2018 with Certified issuance increasing by 86% from US$24bn to US$45bn.\(^ {20}\)

Figure 2 shown green bond issuance in emerging markets from 2012 – 2018.

Figure 2: Green Bonds Issuance in the Emerging Market(US$ million), 2012 – 2018 (Source IFC, 2018)\(^ {21}\)

As of 2018, East Asia and the Pacific had the greatest volume of green bond issuances to date accounting for 81%, with Latin America and the Caribbean accounting for 10% and South Asia accounting for 5%.\(^ {28}\)
The largest issuing countries so far have been China (US$108.6 bn), India (US$7.7bn), and Mexico (US$7bn) with financial institutions being largely responsible for the growth of green bond markets, contributing 57% (Figure 3) of the total issuances.28

Figure 3: Emerging Market Green Bond in emerging markets by sector ($ million), 2012 – 2018 (Source IFC, 2018)

Within these emerging markets, most green bonds proceeds were earmarked for projects related to renewable energy (comprising 60%) followed by low-carbon buildings (13%) and transport (10%).28

In addition to green debt, social and sustainability debt has also come to the fore; these respectively being to realise positive social impact and a combination of social and environmental impacts, usually in terms of the SDGs.

The SDGs and new initiatives like the Task Force on Nature-related Financial Disclosures (TNFD) are likely to drive expanded innovation in non-climate green and socially focused instruments. Impact Investing is also a growing trend globally which will see greater demand for projects and businesses which meet clear and measurable definitions and outcomes.

Bond issuance has also proven to provide support for disaster management. The World Bank in April 2020 issued the largest single green, social and sustainable bond (US$8bn) to date aimed at assisting countries to respond to the impact of the COVID-19 pandemic.23 Additionally, the EU Technical Expert Group on Sustainable Finance has identified the role of the Sustainable Taxonomy, EU Green Bond Standards, and Paris-Aligned and Climate Transitions Benchmarks as playing an important role in the response to the COVID-19 pandemic for both the public and private sector.24

1.6 What is a “green” taxonomy?

Finance classifications – also referred to as taxonomies – are a comparatively new mechanism in sustainable financing, to assist classification and defining and monitoring sectors, assets, and projects with specific characteristics, such as being defined as green.

A taxonomy provides a common language and agreed methodologies for determining eligibility, that provides clarity and reduces disparities in the market. A taxonomy is an implementation tool that can enable financial market participants to identify and respond to investment opportunities that contribute positively to green objectives.

Taxonomies enable a coordinated and consistent approach for financial market participants to ensure the right foundations are in place to identify, prepare, assess, define, monitor and disclose investments that meet the criteria to be considered green, climate-friendly, and socially inclusive.25

Figure 4 provides an overview of the potential benefits of a sustainable finance taxonomy.
A taxonomy is also able to serve as an anchoring or complementary common reference for frameworks, practice standards and guidelines, regulations, tools, and other related mechanisms that support the realisation of green finance activity as shown in Figure 5.

To enable coordination and encourage financial flows that help achieve national sustainable development objectives, it is best that a taxonomy is founded in data and evidence and aligned to national policies. In addition, alignment with international practices and frameworks facilitates the participation of international investors. Actions focused on creating unified understanding and certainty are likely to be tremendously impactful in unlocking green economy projects and/or financial innovation.

One of the mechanisms to enable South Africa to finance a sustainable economy, is to adopt a taxonomy for sustainable finance. As shown by National Treasury in the recently published Technical paper, establishing a taxonomy will assist in building consistency and credibility to support a low carbon and climate-resilient economy, as well as one which is socially inclusive and sustainable.

A taxonomy tool within the South African market would be a key mechanism in the arsenal to drive increased investment in the green economy.
Fundamentally, the acceleration to a green economy requires both the transition of existing primary industries away from environmentally destructive practices, technologies and products, and the growth of new more sustainable industries and sectors.

However, one of the primary challenges is defining what a ‘green economy’ is composed of and therefore what projects and sectors qualify as green, sustainable, and inclusive. Some definitional delineation is needed to create the necessary certainty and alignment in principle and practice as shown in Figure 6.

A green finance taxonomy should encompass the economic activities both for the transition to and the realisation of a green economy. Figure 7 provides a summary of the activities that could qualify for inclusion in a Green Finance Taxonomy.
Internationally, a number of leading taxonomy-development initiatives have paved the way; these offer a sound starting point for South Africa to develop its own Green Finance Taxonomy, taking into consideration our international standing in addressing climate change and our particular development needs.

1.7 Developing a South African Green Finance Taxonomy

Although international initiatives have offered classifications and technical guidance, and taxonomies have proven catalytic for green finance especially in emerging markets, market participants are not yet receiving consistent information that is comparable or material for their analysis and decision making. To address this, IFC (part of the World Bank Group) is developing tools and building the capacity of countries to align with international good practice while addressing national priorities.

At this critical juncture, South Africa is well placed to both align with and contribute to the emerging global good practice in taxonomy development, doing so can:

- Catalyse a major leap forward for sustainability-focused finance nationally
- Attract international capital seeking investments with positive impact, particularly in relation to climate change
- Empower regulatory agencies to assess the green credentials of local financial institutions, issuers, companies, and investors
- Ensure that South African realities are incorporated into global good practice.

Under the leadership of the National Treasury, and with support from IFC, the National Business Initiative and Carbon Trust are working to develop a national taxonomy framework and the first green finance taxonomy for South Africa, as described in Figure 8.

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*For example, the IFC Green Bond Technical Assistance Program (GB-TAP) of the Amundi Planet Emerging Green One Fund is developing the Green Finance Review Protocol (GFRP) for external review, quality reporting and green taxonomy implementation in emerging markets. This IFC initiative will enable multiple jurisdictions and investors to stay consistent which will ease the flow and use of information and investments.*
The project aims to work with public and private sector stakeholders in the South African financial sector during the course of 2020 and 2021 to facilitate a national dialogue and the supporting research process.

It is anticipated that the work to be performed in this short timeframe is likely to cover only a portion of South Africa’s taxonomic need. The framework and governance mechanism developed will serve to drive and guide further developments, expanding and enhancing the first green taxonomy.

1.8 Adapting for South Africa’s context and needs

The question ‘what is green’ has a second interpretation, and that is to ask how the performance of a particular asset might be considered ‘green’ in the local context. South Africa’s green economy should be viewed from two perspectives:

1. Economic activities that are intrinsically aligned to and/or are expected to make a substantial contribution to the future South African green economy. For some economic activities, this is obvious, e.g. solar PV, since this is based on absolute assessments. However, for others, such as the manufacturing of primary materials or goods, consideration relative to the performance of the process will be needed.

2. Economic activities that presently have significant detrimental environmental impact but are needed as part of the future South African green economy and for which there are presently no know alternatives.

For the latter, a particular process may in the South African context be considered relatively ‘green’ compared to business as usual, even if it does not meet international best practice. Furthermore, economic activities might be exposed to particular physical or transition risk in the South African context that may invalidate its eligibility for consideration as ‘green’.

These issues raise the question of how to treat South Africa’s position as a developing country, and how to encourage investment in so-called ‘transition assets’.

Transition assets are assets which might not be considered ‘green’ according to international best practice but form an important part of South Africa’s development and decarbonisation pathways e.g. fugitive emissions management from petrochemical facilities and mines, or Combined Heat and Power (CHP) installations at smelters.
Therefore, the South African taxonomy might go beyond international examples in terms of:

- Unique South African economic activities to be included, per the ‘green definition’ and taxonomy principles. Gaps will emerge between South African green finance priorities and the existing taxonomies’ economic activities\(^{iv}\). In such instances accurately identifying these and highlighting where there is benefit in extending the taxonomy will be of value as such economic activities may address social and vulnerable transitions under the local context.

- South African specific criteria or sets of thresholds for economic activities that class them as a certain level of green. This graduated approach, if agreed, would be a uniquely South African approach to the inclusion of transition projects to the taxonomy, transition being identified so as not to confuse the level of ambition.

- South African specific development concerns, which are especially relevant for adaptation and resilience investment needs. This takes the form of specific additional criteria and/or adjusted thresholds. For example, ineligibility of long-lived projects vulnerable to physical climate risk considering the specific regional risks projected for South Africa.

The process to develop a national green finance taxonomy should therefore strongly consider international good practice and stakeholder input concerning this challenge.

To be clear, while climate change is a central challenge facing South Africa and efforts to address climate change will be substantially cross-cutting, the Green Finance Taxonomy is to include activities for realisation of the green economy which will go beyond climate change, as demonstrated in Figure 6 and emphasised in Figure 9. However, because of the state of development of international taxonomies – presently largely focused on climate change mitigation and adaptation – the South African Green Finance Taxonomy will initially have the greatest depth and breadth with regards these two environmental objectives. It will be a focus for later development to build on this basis for greater and more comprehensive taxonomy development for further other environmental objectives relevant to South Africa’s green economy.

\(^{iv}\) Especially in terms of international taxonomies that focus exclusively on climate change mitigation and/or adaptation but do not (yet) address other environmental objectives relevant for South Africa, are developed for economies that do not have exposure to emissions intensive industries significant to the South African landscape, and in terms of South Africa’s vision and roadmaps for green economy innovation needs.
Figure 9: The breadth of activities with cross-cutting or other environmental benefits to be recognised as ‘green’ and included in the Green Finance Taxonomy
2 International developments in green finance frameworks

2.1 International green finance guidance and taxonomies

Internationally, there are a number of green finance initiatives, frameworks and tools that provide context and guidance for sustainable development, for consideration in developing a South African taxonomy.

2.1.1 Leading global guidance

*The International Capital Markets Association Green Bond Principles (GBP):* In 2014 ICMA introduced a well-defined transparency framework for issuing green bonds, the GBP. These principles illustrate voluntary guidelines that clarify the approach for issuance and governance of a green bond and recommend transparency and disclosure, thereby promoting integrity in the development of the green bond market. The essence of the governance arrangements concern how projects are identified, evaluated and selected as eligible and continued processes for monitoring on-going eligibility; how proceeds are used and managed in terms of eligible projects; ensuring that the proceeds are spent on the eligible assets or projects and tracking the use of the proceeds on a regular basis; and ensuring the transparency and suitability of information that issuers must and should disclose to the investors.

The most current GBP were issued in 2020 and are complemented by the ICMA Social Bond Principles (SBP, 2020), Sustainability Bond Guidelines (SBG, 2020), Sustainability-Linked Bond Principles (SLBP) and harmonised impact reporting metrics recommendations for each of green and social bonds through the ICMA Handbook for Impact Reporting of Green Bonds (2020) and ICMA Harmonized Framework for Impact Reporting Social Bonds (2020). High-level mapping to GBP environmental objectives and other green classifications was published from the ICMA (2019) Green Project Mapping project28. The project provides a basis for comparison to green taxonomies and classification systems currently used in the market (e.g. The China Green Bond Catalogue, the Climate bonds taxonomy, the MDB IDFC, and the EU taxonomy amongst them).

*The Climate Bonds Taxonomy by the Climate Bonds Initiative:* The Climate Bonds Initiative taxonomy includes technical standards for a range of assets and projects which help deliver a low carbon and climate resilient economy and are fully aligned to the ICMA Green Bond Principles.

While this taxonomy illustrates a range of categories that classify projects and assets compatible with 2-degree trajectory, it is anticipated that the taxonomy will grow as the green bond and loans space grows, illustrating the need to accommodate an evolving field29.

*The Joint MDB (multilateral development banks) Methodology for Climate Finance Tracking:* In 2011, a number of MDBs came together to develop a methodology for tracking their climate finance contributions in a manner which is comparable, transparent, and consistent. Subsequently in 2015, these MDBs aligned their principles for tracking climate mitigation activities with those of the International Development Finance Club (IDFC).

The principles set out consistent and harmonised definitions and guidelines for categories, sub-categories and example activities, projects and assets that would be considered, subject to additional principles and Environmental, Social and Governance (ESG) evaluations. The European Investment Bank (EIB) is presently the acting coordinator of the Joint MDB Climate Mitigation Finance Tracking Group (this is a rotating role) which consists of the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development (EBRD), the European Investment Bank, the Inter-American Development Bank Group (IADB), the Islamic Development Bank and the World Bank Group. There is also an Adaptation Working Group coordinated by IADB and a Climate Finance Reporting group coordinated by EBRD.
2.1.2 International developments

China issued two official guidelines in 2015, Green Bond Endorsed Project Catalogue and the National Development & Reform Commission’s (NDRC) Green Bond Guidelines, that provide comprehensive lists of projects eligible to be listed as green bonds. These taxonomies led to a massive and near immediate increase in green bond issuance by Chinese institutions in the following year, contributing to approximately 30% of global green bond issuance in 2016. However, these taxonomies are adapted for national objectives and include fossil fuel-based projects, which is a departure from practices in other international examples.

Since 2015, a growing number of emerging markets are issuing either lists of eligible sectors and projects or more comprehensive taxonomies that include technical criteria and monitoring guidance. They include Bangladesh, Brazil, Indonesia, Kenya, Malaysia, Mexico, Mongolia, Morocco, Peru, and Vietnam, amongst others.

Figure 10 notes those national jurisdictions with taxonomies or taxonomies in development. Other notable early-stage taxonomy development programmes have been initiated in Canada, New Zealand, Indonesia, Colombia, and Japan.

These developments have been spurred by growing momentum and desire for development of sustainable investment markets (by national governments, financial regulatory agencies, multilateral development banks and the market alike), and the developments concerning financial system climate-related risk subsequent to the publication of the final recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (FSB TCFD).

The Sustainable Banking Network (SBN) is a voluntary community of financial sector regulatory agencies and banking associations from 40 emerging markets members that have committed to advancing sustainable finance in line with international good practice. The SBN is supported by IFC as Secretariat and includes a green bond working group to support members in designing market-level frameworks to promote green bond issuance. Common approaches and member experiences, including a case study from the Johannesburg Stock Exchange, were featured in the report “Creating Green Bond Markets”, published in 2018. Of the SBN member countries, 12 are noted to have a taxonomy available or in progress. It is anticipated that the other membership is likely to follow, with the potential to leverage international taxonomies appropriately.
In 2019 and the result of a multi-year policy integrated process, the European Union completed a comprehensive stakeholder and expert consultation as part of their Sustainable Finance Action Plan\textsuperscript{30} to develop a Taxonomy on Sustainable Activities\textsuperscript{31} for the European Union. This taxonomy is to influence global issuances that seek to comply with the requirements of European investors and is one of the mechanisms supporting the realisation of the European Green Deal\textsuperscript{32}. At the same time, the EU Taxonomy on Sustainable Activities are integrated with EU policy, relying on the comprehensive and consistent enabling environment (including existing industry standards) for a transition to a climate-neutral economy.

The scope of the EU Sustainable Finance Taxonomy covers 6 environmental objectives: mitigation, adaptation, water & marine resources, circularity, pollution prevention, protection and restoration of ecosystems and aims to cover all economic activities to the extent possible. Additionally, the taxonomy is classified on the basis of economic activities that use NACE codes (Statistical Classification of Economic Activities in the European Community) to link standards with economic activities.

The EU Sustainable Finance Taxonomy defines user-principles (i) substantially contribute to at least one of the six objectives, (ii) do no significant harm to any of the other five objectives, and (iii) comply with minimum safeguards premised on European Commission commitment to reaching climate neutrality by 2050 and other environmental ambitions. Furthermore, the taxonomy is highly aligned to the EU’s comprehensive policy environment and relates performance thresholds and criteria already specified in regulations and therefore has comprehensive carbon emissions thresholds included across all activities. The March 2020 version covers activities making substantial contribution to climate change mitigation and adaption in a number of economic activity categories, such as forestry, agriculture, manufacturing, electricity gas steam and air conditioning, water sewerage, waste and remediation, transportation and storage, information and communications, construction and real-estate.

Each economic sector category is prefaced with sector specific impact relevance, EU policy context, and management requirements, supplemented with a standard for each activity in the sector, including: description, significant mitigation performance criteria, metrics and thresholds, rationale, and DNSH (Do No Significant Harm) assessment for all other objectives. The EU Taxonomy is anticipated to have significant impacts outside of the boundaries of the EU with many other current and recent national taxonomic developments having alluded to the EU Taxonomy, either as a basis or reference for locally contextualised developments.

For example:

- The Malaysian taxonomy development, supported by the World Bank, is heavily influenced by the EU Taxonomy.
- Though the study noted that stakeholder views were mixed, an analysis for unlocking the Australian Sustainable Finance sector\textsuperscript{33} recommended reviewing the EU taxonomy to consider how it could be adopted; and confirmed that Australian stakeholders viewed such definitions and standards as important mechanisms.
- The Standards Council of Canada (CSA Group) announced in 2019 the development of a green taxonomy\textsuperscript{34} that will “build on existing global frameworks”, however with a focus on recognizing “Canadian natural-resource sectors as being Green or In Transition”. In February 2020, CSA Group announced a process to develop a “Transition Finance Taxonomy” as part of a National Standard of Canada for Transition Finance\textsuperscript{35}. Commentary has indicated the desire to strongly consider transition for the national resource-base, and thereby the distinction from the EU Taxonomy\textsuperscript{36}.

It is noted that some taxonomic fragmentation at this early stage of development is likely, as national contexts and regional and sectoral specifications are considered.
The World Bank Group published a national taxonomy development guidance that sets out the current state of international development, provides further insights to the common or differentiating features of the principle international taxonomies presently available, and identifies the features and development foundations and processes recommended for a national taxonomy.

2.2 Activity in global capital debt markets: Green and sustainability segment development

The Sustainable Stock Exchanges Initiative (SSE) provides a platform for global dialogue and exchange between the stock exchanges, investors, companies, and regulators with the objective to create a greater sustainable capital market. Since its initiation in 2009, the SSE has encouraged stock exchanges to become a Partner Exchange by making a voluntary public commitment to share information on corporate responsibility efforts, such as disclosing environment, social and corporate governance (ESG) performance indicators among shareholders and stakeholders. It now lists 102 member Exchanges with more than 52,000 listed companies with a market capitalisation upwards of USD 88 trillion.

Of these, 32 Exchanges with a market capitalisation of USD 28 trillion, are noted by SSE to have green, social and or sustainability bond listing segments, including South Africa as the only African exchange in this group. A further 3 Exchanges have such segments while not being SSE members.

Figure 11 highlights these Exchanges' jurisdictions.

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3 South African green finance

3.1 The national green finance ecosystem at present

The green economy in South Africa is comprised of a diverse range of stakeholders and funders with various levels of involvement and influence, as described in Figure 12.

**SA Government**
There are a number of funding programmes which serve as diverse financing approaches which aim to crowd in private investment. Examples of these include:
- The Green fund - set up the then Department of Environmental Affairs managed together with Development Bank of Southern Africa which provides financial support to green initiatives,
- The Energy Efficiency and Demand-side management Fund managed by the Department of Energy,
- National Expanded Public Works Programme contributing to land and ecosystem restoration and water resource management,
- Sector Innovation and Green Economy under the Department of Science and Technology provides policy, strategy and direction supporting the transition to a green economy,
- The Industrial Development Corporation investments into low carbon technologies.

**Private Sector**
Traditionally, the private sector’s role in addressing social and environmental impacts have been through corporate social responsibility. Financial institutions and corporates are, however, leaders within the green bond issuance space channelling majority of the funding into the renewable energy sector. Additionally the private sector have been significantly participating in funding the REIPPPP programme unlocking billions in investment for developing renewable energy.

**Research and Educational Institutions**
Research and educational institutions mainly play a role in piloting technological solutions and creating an environment which fosters innovation within the green economy.

**International Agencies**
Bilateral donor agencies have played a substantial role in funding green economy initiatives in South Africa such as Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), Department of International Development (DFID), KfW Development Bank and Government of Flanders (Belgium). In addition to this, global and regional entities remain important contributors in the support of a diverse range of green economy initiatives such as the Global Environment Facility (GEF), with support from UNDP, United Nations Industrial Development Organisation (UNIDO), United Nations Environment Programme (UNEP) and the Development Bank of Southern Africa (DBSA).

**Non-Government Organisations (NGOs)**
NGOs significantly contribute to stimulating the green economy by brokering collaboration between stakeholders and funders largely as a coordinator.

**Labour**
Trade Unions remain dubious of the green economy highlighting the need for a ‘Just transition’ which focuses on retaining jobs and skills through a transition to a low carbon economy. This has emphasised the importance of multi-stakeholder initiatives in enabling the transition to a greener economy.

Figure 12: Green finance ecosystem within South Africa (Source: adapted from PAGE, 2017)

Until recently, the majority of green projects have been public sector funded or have typically only had access to grant and concessional finance, which has generally curtailed projects’ scale and risk tolerance. This is similarly the case for the Near-Term Priority Flagship Programmes, for which the vast majority of funding has come from public funds with some climate financing mechanisms successfully accessed to enable implementation; and some individual line ministries having successfully applied and used international funds such as from international development financial institutions and development funds.
Concerning financing climate action in South Africa, the National Climate Change Information System by the Department of Environment, Forestry and Fisheries (DEFF) provides a snapshot of the status of public sector financial support, shown in Figure 13.

![Support status (US $)](image)

**Figure 13: Support type, and support status and source financing South African public sector climate action (as at July 2020) [Source: DEFF, 2020]**

Financing by the financial services sector has been inhibited by structural barriers and therefore development of the green economy limited by the levels of private equity and venture capital.⁸

A notable outlier and proof case, the renewable energy programme mobilised R150bn of domestic investment, revealing that there is considerable latent capacity in South Africa for investments that can be considered sustainable.

South Africa is fortunate to have a well-regulated and robust financial services sector providing a significant range of services. Climate action in South Africa is at a critical implementation juncture, and engagement with these actors indicates that private finance institutions are actively assessing their investment capacities in this regard.

### 3.2 Environmental, social and governance (ESG) requirements the taxonomy may support

#### 3.2.1 Pension Funds Act Regulation 28

Regulation 28 of South Africa’s Pension Fund Act requires funds to consider all factors that could materially affect an investment, “including factors of an environmental, social, and governance (ESG) character”. In June 2019, the Financial Sector Conduct Authority (FSCA) published a Guidance Notice on “Sustainability of Investments and Assets in the context of a Retirement Fund’s Investment Policy Statement”, setting out expectations regarding disclosure and reporting on issues of sustainability. For example, Regulation 28(2)(b) of the Pension Funds Act, 1956 (Act No. 24 of 1956), requires that all funds provide an investment policy statement with Regulation 28(2)(cxix) requiring consideration of ESG factors before investing in an asset.

Expectations set out by the FSCA highlight that funds should reflect in their investment policy statement how the fund intends to monitor and evaluate the sustainability of the asset. This includes which ESG factors are going to be considered and the impact of these factors on the assets of the fund. Additionally, guidance is given for funds which hold assets with limited application of ESG factors. In so doing, the FSCA encourages transparency to stakeholders on matters concerning sustainability.
3.2.2 King IV and CRISA for Retirement Funds

King IV Governance Code is a corporate governance model with a set of core principles and leading practices to support ethical and effective leadership and allow entities to substantiate a claim that good governance is being practiced. Amongst others, it requires consideration of material ESG factors and recognises climate change as a likely material driver of change for enterprises.

The Johannesburg Stock Exchange (JSE) has made application of King IV provisions mandatory for entities listed on the exchange, requiring that listed companies apply all King Code Principles with specific King IV Code Practises being mandatory. JSE-listed companies are required to report annually the extent to which they comply with the King IV Code.

King IV includes a sector supplement for Retirement Funds and identifies that the Code for Responsible Investing in South Africa (CRISA) should be considered in conjunction with it. CRISA is a set of voluntary principles, which provides guidance to the investor community on how to give effect to sustainability considerations, which include ESG factors.

Both, King IV and CRISA, encourage institutional investors and their associated services providers to adopt the applicable principles and practices on the ‘applying and explain’ basis to ensure that reporting enables stakeholders to make informed assessments of the organisation’s performance its short, medium and long-term King IV’s sector supplement includes that the fund “is and is seen to be a responsible corporate citizen” – citing sustainability and ESG as considerations – and that the funds value creation process is inseparable from its elements of risks, opportunities, strategy, business model, performance and sustainable development.

3.2.3 Equator Principles

The Equator Principles (EPs) is a risk management framework that serves as a common baseline for financial institutions to identify, assess and manage social and environmental risks when financing projects. The principles are based on the IFC Performance Standards and World Bank Environmental Health and Safety Guidelines and have been used since their inception in 2003 by financial institutions for the assessment and management of the impact of large-scale development projects on the environment and society.

The 10 Eps apply to: 1) project finance advisory services 2) project finance 3) project-related corporate loans and 4) bridge loans. Projects proposed for financing are separated in three categories, Category A with potential significant adverse environmental and social risks, Category B with potential limited risks and Category C with minimal or no adverse risks. Category A projects require detailed risk assessments and due diligence to be performed while in some cases Category B projects may require more limited assessment and Category C projects even less so.

In July 2020 equator principle EP4 was launched – an update to EP3 of 2013 – which includes updates to thresholds related to project-related corporate loans and a requirement for a climate change risk assessment.

There are approximately 105 Equator Principles Financial Institutions (EPFIs) across 38 countries that have voluntarily adopted the EPs and have committed to implementing the EPs within their internal environmental and social policies for financing projects, including the four major commercial banks in South Africa. In so doing, these EPFIs have committed to not provide project finance or project-related corporate loans to projects where the project or client is unable to comply with the EPs and where this is seen to adversely impact sustainable development.

3.3 Compliance requirements for green bonds listed on the JSE

The Financial Sector Conduct Authority (FSCA) is the market conduct regulator of financial institutions in South Africa and oversees the JSE debt listing requirements. The FSCA’s mandate is to amplify integrity of financial markets and thereby promote fair customer treatment and assist in the efficiency and maintenance of financial stability.
The JSE is the exchange license holder and entities that intend to have securities traded on the JSE must apply for a listing and comply with the requirements of the JSE, as set out in the JSE debt listing requirements, before a listing is granted.

The JSE Debt Listing Requirements (as amended from time to time) are aimed at providing investor confidence through an efficient, transparent and secure financial market and reflects the rules and procedures that govern new applications and ongoing obligations of applicant issuers. The debt listing requirements illustrate the disclosure regulations that investors and professional advisers would require to make informed assessment of an applicant issuer’s business. This is being considered to include the terms of debt securities.

The issuance of debt, including green debt, is centred around the listing documentation that is reflective of debt securities terms and conditions together with subscription for and sale of the debt securities. These terms include; the rights of the investor, the obligations of the applicant issuer, the terms of any security or guarantee, the mechanics of payment and settlement and any credit enhancements or trust deeds, credit ratings.

As described under section 3.2 listing green debt on the JSE must follow the Green Segment listing requirements and the Green standards.

### 3.4 South African green bonds issuances

South Africa is only one of few African countries that have been active in the green bond sphere, looking to benefit from green bonds and take advantage of this form of finance that brings resources from both the public and private sector. In 2014 the JSE became the first African exchange to launch a Green Bond Segment and Green Listing Rules, helping to promote further green bond issuances. The JSE has recently evolved its Green Segment to a Sustainability Segment, further providing a more encompassing platform enabling sustainable finance.

Figure 14 below illustrates the progression of green bond issuance in South Africa to date. Whilst activity has been relatively limited when compared to international activity, there is growing interest and preparatory activity in the domestic market.

![Green bond timeline in South Africa](image)

**Figure 14: Green bond timeline in South Africa Johannesburg Stock Exchange’s Green Segment (adopted, source National Treasury, 2020)**
The JSE Interest Rate Market Green Segment was launched in 2014, and four of South Africa’s green bonds to date are listed there. The Debt Listing Requirements identified the Green Segment as a specialized debt security and included specific Green Segment listing requirements as well as on-going obligations concerning the instrument.

In essence, the Rules concerning the Green Segment required a prospective green instrument to be confirmed by an independent advisor in a report that the instrument is classified as green in terms of designated green standards, and furthermore that placing documents for the prospective green instrument must detail the use of proceeds and management and allocation of proceeds for eligible projects. For this purpose, issuers are to develop and implement a governance mechanism (a Framework) that dictates the aspects of conformance with the designated green standards.

The Rules stipulate the criteria for the independent Advisor and identify the designated green standards as the ICMA Green Bond Principles (or any other standard acceptable to the JSE, in its discretion) in relation to the classification of green instrument. In practice the JSE has also recognised Climate Bond Certification by the Climate Bonds Initiative, which in turn requires an Independent External Review by a recognised specialised service provider.

The Rules also stipulate ‘Continuing obligations’ that mandate the issuer to post-issuance confirmation of continued instrument conformance, continued independence of the advisor, reporting any updates in relation to disclosures made in listing documentation in respect of the advisor’s pre-issuance report, and ongoing compliance with the applicable green standard.

As of July 2020, the JSE’s Green Bond Segment has been expanded to a fully-fledged Sustainability Segment and interested issuers can now list social and sustainability bonds along with green bonds. The amended rules now refer to the Social Bond Principles, Sustainability Bond Guidelines, and Green Bond Principles (GBP), issued and governed by ICMA, or any other standard acceptable to the JSE, in its discretion. It maintains requirements for review by an independent sustainability advisor as well as ongoing reporting.

### 3.5 South African green financial debt and equity products

Green financial products are financial products that provide environmental benefit. Often, these products are designed to also overcome market challenges concerning risk (technology, market, financial etc.) and involve some concessionality.

Examples include energy efficiency mortgages, green credit cards, green car loans, efficient appliance financing, sustainable business working capital support programmes, and eco-savings deposits. These products are provided by a wide variety of institutional lenders, including banks, credit unions and mortgage loan originators.

Some examples of South African green financial debt and equity products are shown in Figure 15.

![Figure 15: Examples of green financial products in South Africa](image-url)
There has arguably been limited activity in this arena to date, although there is increasing demonstration of interest with the identification of the likes of ‘green and/or sustainable finance’ and innovation teams at major commercial financial institutions.

With regards to equity, green investment product opportunities are limited. In 2011, Nedbank launched South Africa’s first green index to serve as a benchmark for measuring performance of companies with environmentally sustainable business practices. It comprised a selection of stocks from 100 of South Africa’s largest companies on the JSE that meet the environmental and liquidity criteria. This has been discontinued since.

Green equity investment also comes in the form of the likes of green project funds and dedicated impact investment programmes. These are by and large government funded or funded through international development aid delivered by public and private implementing agencies and development banks.

3.6 South Africa’s potential green project pipeline

Though a widely agreed definition of green sectors and projects does not yet exist, several sources for indicative priority sectors to be financed have been identified by various strategies and studies and have set the scene for green finance flows. Amongst them are an array of public sector priority areas and projects identified through the focus areas noted by the Green Economy Accord, the National Climate Change Response Policy operationalised through the Climate Change Near-Term Priority Flagship Programmes, technology R&D roadmaps developed by the South African Department of Science and Innovation (DSI) (including technological areas such as hydrogen and fuel cells, renewable energy, waste etc.), technologies supported under the Renewable Energy Independent Power Producer Procurement Program (REIPPP), the National Climate Change Adaptation Strategy and the SA Low Emission Development Strategy, amongst others.

Several studies and documents have been published illustrating green and sustainable transformation focus areas. In 2014, the Council for Scientific and Industrial Research (CSIR) released a reference guide ‘Steering Towards Green Economy’ highlighting five key areas to steer South Africa’s Green Economy; transport and urban efficiency, energy, waste, water and agriculture. In 2016 the NBI, through ‘National Business Initiative Green Economy Finance Project’ identified seventeen investment areas for green economic transformation. The top three priority investment areas were, clean energy production, energy efficiency and water & water management.

In 2017, the CSIR together with the Department of Science and Innovation published ‘South African Risk and Vulnerability Atlas’ which highlighted the need for increased investment into disaster risk reduction through greater climate change mitigation and adaptation investment. Within the same year the then Department of Environmental Affairs published ‘The Green Economy Inventory for South Africa’ which identified the number and types of green economy initiatives in the country. The green economy inventory is unlikely to be exhaustive but provides a snapshot of major projects and programmes in South Africa (Figure 16).
Energy, transport and agriculture were identified as the most active and leading sectors with various initiatives spread across; non-motorised transport and planning, bio-energy, solar and farming. Of the surveyed initiatives, 53% were funded domestically (80% coming from public finance sources) and 27% funded internationally. Geographically, 60% of the green economy initiatives were located in KwaZulu-Natal, the Western Cape and Gauteng.

DEFF publishes an annual climate change report and maintains an information system which seeks to track the implementation of the NCCRP, including the national portfolio of climate related implementation projects and investment, which is updated on an annual basis.

What is significant is that the potential green project pipeline is anticipated to be many multiples of this. As noted, before, the financing need to realise the wider green economy beyond climate change related investments, is likely much greater than the indicative US$588 billion estimated by the IFC needed for transition to resilient low-carbon economy.
4 Approach for developing South Africa’s Green Finance Taxonomy

4.1 The Green Finance taxonomy’s purpose and scope

The taxonomy is central to developments in sustainable finance in the country. Principally the taxonomy will act as a transparency tool rather than a compliance tool and different user needs and use cases are to be accommodated, within the scope allowed by the definition of ‘green’.

The objectives for the taxonomy are articulated in Figure 17.

**Figure 17: Objectives for the first taxonomy development approach and result**

The Taxonomy’s principal function will be to govern what is recognised as “green” in a credible, dynamic, and consistent way. It is to be constituted of two fundamental parts, as shown in Figure 18:

**Figure 18: The two constituents of the founding taxonomy are to be the governance mechanism, and the first taxonomy itself**

The taxonomy development project will be overseen by the National Treasury convened steering committee, and systematic development reviewed by the National Treasury Taxonomy Working Group.

The Taxonomy Working Group includes members from other working groups to ensure integration across the different work streams. In this manner, major taxonomy user groups are directly engaged in the development process and the process is able to align to parallel developments addressing environmental and social risk and opportunity in the South African financial system.
4.2 Time frame for development

The green finance taxonomy project plan is structured across seven key steps in two phases over the course of 2020 and 2021.

Figure 19 shows the timeframe and duration of project activities.

#### Figure 19: Green taxonomy project plan

The scope for the first taxonomy will be to cover an initial core set of green and climate-focused categories. However, it will do so in a way that recognises the need and scope for expanding over time to include other environmental categories, as well as incorporating the social dimension and consideration of transitional activities as shown in Figure 20.

#### Figure 20: The first taxonomy will focus on aspects of ‘green’
The first taxonomy through this process will be developed iteratively, for a series of progressively developed taxonomy components and taxonomy drafts. The project team will undertake a series of targeted stakeholder engagements and call on technical contributions from experts, as well as market awareness raising activities to garner widespread input and anticipation for the taxonomy result.

Market and user-engagement will inform the prioritisation of the constituents of the green taxonomy to be developed during this project, and how international practice may be leveraged (including consideration of green transitional activities).

The taxonomy development process will look to leverage existing examples and adapt or originate aspects needed to accommodate South African socio-economic development and transition needs.

The development activities identified in Figure 21 highlight how we may draw on and tailor existing examples.

![Figure 21: Approach for aligning to and building on international best practice](image)

The practicalities of undertaking the process outlined in Figure 21 is demonstrated in greater detail in Figure 24.

The project will also include market awareness raising activities. Consideration for future expansion and enhancement is catered for by developing a replicable and principles-based approach – as depicted in Figure 22.

In order to determine appropriateness for inclusion into the South African Green Finance Taxonomy, an approach to classifying activities will adopted as demonstrated in Figure 23. While the original framework considers climate change transition, we have adapted it to be inclusive of environmental objectives besides climate change and should be read in that context.
Figure 22: Outline of the first South African green finance taxonomy development coordination and process
Figure 23: Approach classifying economic activities proposed for inclusion in the South African Green Finance Taxonomy (adapted Climate Bonds Initiative)
Figure 24: Practical steps to be taken in developing the South African Green Finance Taxonomy

1. **Starting point to identify activities**
   - Build matrix and catalogue of economic activities identified in the EU Taxonomy, as being as a minimum consistent with ‘Make Significant Contribution’ and ‘Do No Significant Harm’ principles (as developed for Climate Change Mitigation and Climate Change Adaptation environmental objectives).

2. **Early validation of starting point**
   - Validate the relevance of the economic activities introduced from the EU Taxonomy by considering significance of South African sectoral emissions contribution* and South African adaptation needs** and remove or streamline entries if relevant.

3. **Introduce South African activities**
   - Build on starting point, by adapting or adding activity entries not yet covered, by considering activities identified for action in South African policy and innovation landscape.
   - **...Identify (NO) PATHWAY TO ZERO economic activities relevant to South Africa, reviewed**
     - National Climate Change Adaptation Strategy and related adaptation.

4. **Leverage international materials**
   - Reapply the frameworks developed by the EU Taxonomy for specifying activity attributes and relevance.
   - Reapply EU Taxonomy standards as foundation.
   - Include and tailor applicable financial disclosure guidance.

5. **Adapt foundations to South African context**
   - Consolidated EU Taxonomy standards into fewer, more consolidated standards for respective economic activities.
   - Where EU-specific policy instruments were identified, these are struck out and:
     - Replaced with relevant South African policy instruments where these exist.
     - Replaced with non-jurisdictional references, where relevant South African policy instruments do not yet exist.
   - Where EU-specific performance thresholds were identified, these are:
     - Struck out and replaced with relevant South African thresholds where these have been defined and are consistent with international performance benchmarks.
     - Retained as ‘fully green’ performance standards, whilst being supplemented with ‘transitional’ performance benchmarks being from the thresholds published in South African regulations (being substantially poorer environmental performance).

6. **Engage with stakeholders, experts and users to**
   - Identify economic activities that are not yet included but are considered part of the vision for South Africa’s green economy.
   - Study case-by-case differences between international practice and South African context for developing localised standards.
   - Validate expectations for ‘transitional’ versus ‘fully green’ performance thresholds.
   - Validate expectations for social contribution and just transition.
4.3 Future-proofing the taxonomy

The final output of the project is the development of the first ‘Draft National Green Taxonomy for further consultation’ ("Version 1"), the first draft for the country to take forward and evolve. The first taxonomy can be expanded in scope, breadth, and depth – being founded in a credible governance mechanism having been institutionalised with this project. This is intended to be a dynamic document. However, users can immediately begin to rely on the Version 1 taxonomy and may anticipate further additions in time.

To facilitate this, a set of guiding principles will be developed for the taxonomy, tailored to South African needs. These will offer rules and procedures for maintaining, updating, and enhancing the taxonomy over time. These guiding principles will be developed through stakeholder engagement. The purpose of the principles is to provide the rule set by which activities are included in the first version and is the rule set by which future decision makers and others are to evolve the taxonomy consistently in future. Specifically, it should allow the inclusion or exclusion of future economic activities or investment contexts that have not, to date, been considered.

A further aspect to futureproofing is ensuring that the taxonomy is made the responsibility of a suitable custodian, ultimately responsible for maintaining the taxonomy. This entity may therefore also have additional roles in terms of monitoring user applications, where appropriate, and integrating the taxonomy suitably into the development of practice guidance, standards, and regulations as relevant. The design of the institutional structure of the project will take this into account.

The taxonomy should be maintained as a live tool; expanded in time for greater coverage and depth and evolved and updated as various triggers occur (e.g. policy changes, movements within industries, changes in performance thresholds) that necessitate the need for review in order for the taxonomy to remain relevant and effective. The first taxonomy will detail the methodology and responsibilities for maintaining a robust process and result.

The institution or body designated as the custodian will be responsible for the oversight of the review processes. It is proposed that the review/update process is performed by a working group through consultation with stakeholders. The technical/steering committee will subsequently perform a validation process approving suggested updates to form the updated draft for public comment. Once comments are assessed and incorporated, the updated taxonomy will become the renewed user version going forward.

Figure 25 indicates the basic review process envisaged for the taxonomy.
Figure 25: A conceptual taxonomy governance mechanisms with protocols to be developed through this project.
4.4 Targeted consultation process

It is vital that the perspectives and needs of Taxonomy end-users are a central focus of its development. Therefore, a series of engagements will be conducted with key institutions to identify the best alignment and cooperation/collaboration models that can be adopted.

The taxonomy will be developed iteratively, informed by a series of targeted stakeholder engagements, technical contributions from experts and broader awareness-focused engagements as shown in Figure: 26.

**Figure: 26 A tiered stakeholder engagement in the development of a South African Green Finance Taxonomy**

A key component to the successful delivery of this project is convening, engaging, and managing inputs from stakeholders. As a first step the project, the project team undertook a stakeholder mapping and group exercise to identify and rank the influence and potential taxonomy application and use cases.

The stakeholder and user groups identified as basis for targeted engagements, correspond to green economy and climate ecosystem actors shown in Figure 27.
The stakeholder engagement process commenced, with the project kick-off event already hosted in July 2020. The kick-off event provided an opportunity to raise awareness about the project and to invite parties to formally register their interest in the project and consultation processes.

The project team has engaged regularly with the Working Group established by National Treasury to oversee the implementation of this project. The Working group were the first set of stakeholders requested to complete the User needs and perspectives survey for the development of a South African Green Finance Taxonomy National Treasury Taxonomy. The survey will be distributed more widely to cover all the actor identified as key to the green economy landscape mentioned above. The survey has already been shared more broadly with the Urban Finance Working Group and will be discussed in more detail in Workshop 1 of user-group specific engagements discussed in more detail below.

Having identified and mapped the most relevant stakeholders for consultation, the project team identified the most efficient and effective means of engagement and communication, employing a variety of channels (Figure 28).
The project was launched in an online event held on 9 July 2020, raising awareness about the project, the Taxonomy development process and to engage stakeholders.

The event participants have also been invited to express interest in participating in future stakeholder consultations.

An inception report and stakeholder briefing document has been developed and presented to the National Treasury Climate Risk Steering Committee and a multi-stakeholder Taxonomy Working Group chaired by National Treasury.

The document will be shared with a broader set of stakeholders.

The Sustainable Finance Initiative website was established to support the Sustainable Finance Initiative chaired by National Treasury and serve as the project website. The site provides details on the work of the Taxonomy Working Group and taxonomy related project documents and updates.

In addition, the project launch event webinar is hosted on the IFC Sustainable Banking Network - Webinar Series website and available to the public.

A series of workshops will be convened in October 2020, catering for a wide range of stakeholders including Policy Makers and Government Agencies, Financial Market Practitioners, Companies and Project Developers and other groups to determine and incorporate the user needs and use cases.

The user groups will be used to profile and refine the draft zero taxonomy and to address any conflicts.

A User Needs & Perspectives Survey has been developed to collect viewpoints and preferences of relevant organisations, networks, and communities of practice.

The responses inform the identification of priorities and subsequent development steps in the design of a first version of a green finance taxonomy for South Africa.

The Taxonomy Working Group, chaired by National Treasury, has been established to oversee the development of a taxonomy for green, social and sustainable finance initiatives for the South Africa financial services industry as recommend by the National Treasury Financing A Sustainable Economy technical paper.

Figure 28: Stakeholder engagement and communication channels for the development of a National Green Finance Taxonomy
Figure 29 provides an overview of the taxonomy development milestones and key stakeholder engagement interfaces and processes.

The project team aims to engage and work with public and private sector stakeholders, as well as civil society organisations and research institutes, in the South African financial sector during the course of 2020 and 2021 to facilitate a national dialogue and the supporting research process. The main and in most depth engagement process will be done through user group specific workshops and monthly engagements with the Taxonomy Working Group.

Two rounds of user-group based engagements are anticipated, initially to present the zero draft and get detailed inputs and a second round of engagements to validate/test the beta taxonomy.

Figure 30 shows the user groups that will be consulted in a series of the focused workshops commencing in October 2020.
Workshop 1 will be used to engage with policymakers and government agencies. This will work include the different spheres of government and departments most relevant to or involved in of the green economy and climate change response.

The project team will engage the financial sector, including the JSE, major pension funds and other individual financial sector organisations key to the process as part of the Workshop 2.

Workshop 3 will focus on individual companies and industry associations as potential corporate bond issuers and project developers. The project team will leverage key industry such as BUSA, as well as other grouping of corporate actors in.

Workshop 4 will be used to engaged specifically on the incorporation of land-use, biodiversity, and ecosystems considerations. This workshop will assemble stakeholders with expertise in sustainable finance and project implementation as it relates to biodiversity and natural resource management.

There are several other active programmes and policy development activities currently underway with which this project should align and potentially collaborate. Workshop 5 will be used to identify the best alignment and cooperation/collaboration opportunities and approaches.

Workshop 6 seeks to increase the alignment of the taxonomy with international funders and mechanisms, to ensure that the use thereof supports access to international finance and funding mechanisms.

The first draft taxonomy would then be presented at a final and more general event comprising a broad set of stakeholders.

### 4.5 Key considerations

#### 4.5.1 Balancing user needs

Taxonomy end-users are central to the development of the taxonomy and, therefore, balancing user needs will require consensus and broad-based support. As illustrated earlier, the development of the taxonomy will include extensive stakeholder engagement where inputs from stakeholders and panels will be coordinated on the usability of the taxonomy so that it is dynamic in its use. The project anticipates direct users will fall into three groups, as outlined in Figure 31.

<table>
<thead>
<tr>
<th>User group</th>
<th>Example</th>
<th>User perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLICY MAKERS &amp; GOVERNMENT AGENCIES</td>
<td>These include law makers and government departments e.g. DEFF, SARS, National Treasury</td>
<td>These users may develop policy and delegated acts/regulations aligned through technically robust processes that inform future taxonomy updates, and align to or reference elements of the taxonomy, such as in the context of setting public measures and standards of labels for green financial products or green (corporate) bonds and use for economic and SDG monitoring purposes</td>
</tr>
<tr>
<td>FINANCIAL MARKET PARTICIPANTS</td>
<td>Includes market participants offering financial products e.g. financial institutions, banks, investors, bond issuers, pension providers.</td>
<td>These participants would use the taxonomy to evaluate own portfolio and products alignment, to shift investment strategy and develop products, to make discrete investment decisions, and to compile disclosures in terms of contribution and/or exposure</td>
</tr>
<tr>
<td>ASSET OWNERS</td>
<td>Include non-financial companies and developers with non-financial reporting directives, e.g. mining houses and manufacturers</td>
<td>These participants could compile disclosures against the taxonomy regarding capex and opex, covering activities that substantially contribute to the taxonomy objectives, and look to attract financing (for their activities and/or projects/assets) on the basis of being taxonomically aligned</td>
</tr>
</tbody>
</table>

Figure 31: Taxonomy user groups and illustrative applications
Additional stakeholders will include civil society, academia, research institutions, practitioners (including consulting firms), and businesses more broadly (both as issuers and as part of the value chain).

4.5.2 Unknowns and development constraints

It is uncertain how many economic activities might be identified within the taxonomy and how extensive the development, consultation and technical inputs will be to arrive at robust criteria. It may be that the number of economic activities that are uniquely South African, and which require development of extensive criteria and thresholds, are more than the resourcing for this project realistically allows. This is especially anticipated for issues of just transition, social resilience, and industrial transition technologies.

In light of these, this project will be practical given time and resources available and urgency of action required while remaining ambitious and having a broad relevance. The developed taxonomy will not seek to solve all problems for all stakeholders, but enable South Africa to take those first critical steps towards ensuring that investment in future infrastructure renewal and expansion is green, and positions South Africa as a resilient, competitive and low carbon economy and society.

Economic activities that are agreed upon for inclusion in the taxonomy, but not developed further under this project, will be identified as such and recommendations on how to drive the development of those taxonomy elements going forward will be provided to the custodian of the taxonomy as part of the project outputs.

4.5.3 Initial insights offered from existing green finance taxonomies

Most existing green finance taxonomies differentiate on the foundations, catalogue granularity and standards, most of which have some relationship to four main taxonomies are illustrated in Error! Reference source not found.. The specific green taxonomy development focus is largely differentiated by country-specific focus areas, development priorities, and sectoral objectives. For example, within the Mongolian green taxonomy, there is an emphasis on livelihood improvement (brought by technologies like clean appliances for example) in addition to climate change mitigation and adaptation objectives. Kenya on the other hand, applies the Climate Bonds Initiative’s Taxonomy as a basis for eligible green sectors within their national green bond guidelines, with the exception of the Information Technology and Communication sector (which is not yet developed but also not listed by the Kenyan guideline).

From the available taxonomies illustrated in Error! Reference source not found., the project has thus far considered six examples to capture and support understanding taxonomy development approaches and results.
<table>
<thead>
<tr>
<th>Reference point</th>
<th>Comprehensive principles-derived activity catalogue and standards</th>
<th>Comprehensive project/asset catalogue and standards</th>
<th>Activity/project/asset type catalogue**</th>
<th>Thematic catalogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Sustainable finance taxonomy</td>
<td>Climate Bonds CBI taxonomy</td>
<td>MDB-IDFC</td>
<td>ICMA Green Project Mapping*</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Replicates/points to the existing Taxonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mongolia Green Taxonomy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Styled on the existing Taxonomy but strongly localise (early stage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggested that it may take lessons from the existing Taxonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
</tr>
</tbody>
</table>

**ICMA states that it does not promote a particular taxonomy; mapping is only to provide indication of theme.

** Only climate change mitigation and adaptation

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**Figure 32: Taxonomic structural depth and coverage across focus areas of project-studied taxonomies**
From the available taxonomies illustrated in Figure 32, the project has thus far considered six examples to capture and support understanding taxonomy development approaches and results.

These are introduced in Table 1 below.

**Table 1 Introduction to six existing green finance-type taxonomies**

<table>
<thead>
<tr>
<th>Taxonomy</th>
<th>Description</th>
</tr>
</thead>
</table>
| **EU Sustainable finance taxonomy**                | Result of a multiyear technical and cooperative development process, with an EU-wide classification system for sustainable activities, integrated into regulation, aimed at a range of financial market participants. Final report on EU Taxonomy published March 2020, with:  
  - Technical screening criteria for 70 climate change mitigation and 68 climate change adaptation activities, including criteria for doing no significant harm to other environmental objectives  
  - Methodology to support recommendations on the technical screening criteria |
| **Climate Bonds Initiative (CBI) taxonomy**        | The CBI champions the Climate Bonds Standard and Certification Scheme, which was launched in 2010 and systematically developed since then. It is a labelling scheme for bonds and loans, focused on addressing climate change.  
  - The Standard functions with a guide to climate aligned assets and projects in the form of a Taxonomy with detailed technical standards being developed for the various categories of the Taxonomy  
  - It is proposed as a tool for issuers, investors, governments, and municipalities to determine what key investments deliver a low carbon economy  
  - See here for more |
| **MDB-IDFC**                                       | The principles and listing of categories, sub-categories and example projects and assets were develop jointly by the climate finance group of multilateral development banks identified and International Development Finance Club.  
  - The principles outline a methodology for tracking their climate finance contributions in a manner which is comparable, transparent, and consistent for adoptees. The principles set out consistent and harmonised definitions and guidelines for activities. Version 2 was released June 2015, covering 10 categories and 28 sub-categories specific to climate change mitigation finance reporting.  
  - See here for more |
| **ICMA Green Project Mapping**                     | Published June 2019, the mapping is presented as a “broad frame of reference” rather than especially as a taxonomy. It maps broad categories of projects to the five environmental objectives referenced in the ICMA Green Bond Principles.  
  - Though not a taxonomy by intent, the listing of themes/categories has been referenced by bond issuers and by the likes of the Moroccan Green, Social and Sustainability Bond Guidelines in turn  
  - See here for more |
| **PBOC Green Bond Endorsed Project Catalogue**     | People's Bank of China ("PBOC") Guidelines published in 2015 defining criteria and categories for green bond projects, also covering green financial bonds within the inter-bank market. The Project Catalogue is specifically set up for the development and oversight of the green bonds market, and to provide green labelled capital raising opportunity for corporates, assets, and projects with environmental benefits.  
  - See here for more |
| **Mongolia Green Taxonomy**                        | The first Mongolian Green Taxonomy was approved December 2019 after a year-long process.  
  - It is intended for financial market participants as well as policy makers, verification and standards setters, and industry. It also seeks to boost investment in green projects, track private sector flows, and inform national policies and strategies on green finance. It will be updated every 2 years in line with market, technology, and policy developments.  
  - See here for more |

Each of these taxonomies offers lessons and/or context which the South African green finance taxonomy development might leverage, adopting appropriate elements and objectives from existing taxonomies and localising where needed. These taxonomies differ in terms of depth (taxonomic levels of detail) and breadth.
(subject area coverage), as demonstrated in Error! Reference source not found., and different approaches to key development aspects Error! Reference source not found..
Figure 33: Taxonomic structural depth and coverage across focus areas of project-studied taxonomies
<table>
<thead>
<tr>
<th>Key</th>
<th>Dimension fully addressed</th>
<th>Dimension partially addressed or in progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 34: Taxonomic development aspects of project-studied taxonomies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Requirement</th>
<th>EU Sustainable finance taxonomy</th>
<th>Climate Bonds taxonomy</th>
<th>CBI taxonomy</th>
<th>MDB-IDFC</th>
<th>ICMA Green Project Mapping*</th>
<th>PBOC Green Bond Endorsed Project Catalogue</th>
<th>Mongolia Green Taxonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Uses principles to guide inclusion</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>not evident</td>
<td>not evident</td>
<td>✓</td>
</tr>
<tr>
<td>2. Aligned to policy environment</td>
<td>✓</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>✓</td>
</tr>
<tr>
<td>3. Identifies taxonomy-aligned themes/sector</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4. Identifies taxonomy-aligned activities/projects/assets</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>not that granular</td>
<td>not that granular</td>
<td>✓</td>
</tr>
<tr>
<td>5. Includes detailed technical standards</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>not that granular</td>
<td>not that granular</td>
<td>✓</td>
</tr>
<tr>
<td>6. Uses industrial codes for activities/projects/assets</td>
<td>✓</td>
<td>uses descriptions</td>
<td>uses descriptions</td>
<td>uses descriptions</td>
<td>✓</td>
<td>uses descriptions</td>
<td>✓</td>
</tr>
<tr>
<td>7. Relates thresholds to regulations</td>
<td>✓</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not relevant</td>
<td>not that granular</td>
<td>not that granular</td>
</tr>
<tr>
<td>8. Provides a revision mechanism</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>not evident</td>
<td>not evident</td>
<td>✓</td>
</tr>
<tr>
<td>9. Includes green value chain activities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>not that granular</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10. Includes &quot;transition&quot; activities/projects/assets</td>
<td>excludes all fossil fuel without CCS</td>
<td>excludes all fossil fuels without CCS</td>
<td>includes selected measures only</td>
<td>not relevant</td>
<td>includes ‘clean coal’ (considered for revision)</td>
<td>includes ‘low pollution’ options to coal</td>
<td>✓</td>
</tr>
<tr>
<td>11. Integrates social aspects</td>
<td>✓</td>
<td>not relevant</td>
<td>✓</td>
<td>✓</td>
<td>not relevant</td>
<td>not evident</td>
<td>✓</td>
</tr>
</tbody>
</table>
The EU’s taxonomy is the most extensive in both dimensions. While the EU taxonomy has not yet developed technical standards (detailed screening criteria) beyond the focus areas of climate change mitigation and adaptation, it remains the most compressive taxonomy and, subsequently, the most complex. Whereas the PBOC Green Bond Endorsed Project Catalogue and the Mongolia Green Taxonomy are more reflective of a cataloguing or listings approach, having sectors and activities/projects and assets pre-screened; these do not provide detailed technical standards for each category.

These taxonomic details raise questions as to how comprehensive South Africa’s first green finance taxonomy should be given the project timeframe and whether development should focus on comprehensively developing all taxonomy elements or limited elements across many objectives. Alternatively, development may be focused on selected elements together with prioritised objectives. Additionally, questions arise concerning the extent to which the project might adopt-and-adapt existing practices, and to what extent ‘adaptation’ or ‘origination’ are required to suitably address the local context needs. The first green finance taxonomy development focus will be informed through market and stakeholder engagement to best reflect and address a balance of ultimate and immediate needs.

4.6 Next steps

The immediate development next steps for the project are:

1. Release of the “zero-draft” version of the taxonomy as a basis for informed consultation with stakeholders.

2. Intensive stakeholder engagement process as described in Section 4.4, from October - November 2020, to develop Beta-draft of initial taxonomy.


45 Final version of amendments to JSE Sustainability Segment (May 2020): https://www.jse.co.za/content/JSEAnnouncementItems/DLR%20Sustainability%20Segment%20May%202020.pdf


47 Department of Science and Technology, 2017, Understanding the Social & Environmental Implications of Global Change [Second edition of the Risk and Vulnerability Atlas]
