

Embedding the Green Finance Taxonomy into Sustainable Finance Frameworks

Findings and recommendations based on piloting activities with market actors to embed the taxonomy

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Case Study

During 2022, a series of pilot implementation projects with volunteer organisations, trialled embedding the South African Green Finance Taxonomy 1st edition (SA GFT) for their processes. This is one of four case studies showcasing the taxonomy as a **valuable tool in setting criteria for the issuance of green debt instruments** in the way it can be used to standardise the requirements and attract finance. This case study presents key insights from these pilot projects, opportunities and practical approaches and some challenges were noted in embedding the taxonomy into sustainable finance frameworks.

Work was carried out by the National Business Initiative (NBI) and Carbon Trust. Oversight for this project was provided by the Taxonomy Working Group, chaired by the South African National Treasury, the members of whom we warmly thank for their engagement and contributions. Embedding the South African Green Finance Taxonomy is supported by the UK PACT (Partnering for Accelerated Climate Transitions), which is a flagship programme under the UK's International Climate Finance (ICF) portfolio. The programme is jointly governed and funded by the Foreign, Commonwealth and Development Office (FCDO) and the Department for Business, Energy and Industrial Strategy (BEIS). The UK is committed to tackling climate change and is investing £11.6bn via ICF over the five years to March 2026.

Special thanks go to the participants of the pilots, whose efforts and engagement were vital to the process and outcomes, and whose learnings and insights are represented in this case study series:

- > Development Bank of South Africa (DBSA) led by Saphira Patel, Head: Environmental and Social Sustainability Unit
- > Metier Private Equity led by Galelekile Makhathini, Investment Executive ESG Officer
- > Old Mutual Africa Infrastructure Investment Managers (AIIM) led by Tania Swanepoel, ESG Advisor
- > Sanlam Corporate Investments led by Tshogofatso Sekgwele, Investment Specialist
- > Standard Bank Group led by Anneke Lund, Executive: Sustainable Finance
- > The City of Tshwane led by Dolly Mafa, Director Sustainability Finance Mechanisms and Mphakiseng Zuma, GFS: Office of the CFO

This case study is applicable to:

Commercial banks; industry; market exchanges; debt investors; municipalities

Ways of Working

It has become the norm for thematic¹ debt issuers to develop sustainable issuance / finance frameworks to govern investment and financing activities. The frameworks reflect the issuer's agenda, priorities and market demands, and typically include details for how assets are screened and prioritised for Environmental, Social and Governance (ESG) performance. Criteria across issuance frameworks differ but tend to be linked to international standards and principles².

The SA GFT is a definitional tool, while a framework governs the end-to-end transactional process and is more holistic. The SA GFT requirements pertain mainly to the identification and selection of project types, specific eligibility criteria, and environmental and social risk management for use of proceeds financial instruments. While the SA GFT primarily lends itself to bonds, it is not incompatible with a sustainability-linked finance approach. Underpinning interventions that are to be implemented within an organisation's strategy to enhance sustainability performance, related to climate change mitigation and adaptation, should be compatible with the SA GFT principles. Ideally included is a clear demonstration of a pathway to achievement of SA GFT alignment, and at the very least don't counteract the Do No Significant Harm (DNSH) and Minimum Social Safeguard (MSS) criteria.

Typically, frameworks' selection criteria are registers of intended impact areas and aligned project types. However, international standards and principles have begun to place emphasis on the use of external taxonomies. Applying the SA GFT would result in relatively more stringent technical performance requirement than that which is generally applied. This case study asserts the ways in which GFT technical standards map to internal frameworks in Figure 1 below.

The team performed the following activities to embed the SA GFT into frameworks for volunteers:

- > Assessed the frameworks' eligibility criteria and the principles to which they best align
- > Mapped the SA GFT's technical criteria to that of the framework
- > Developed tools for streamlining the comparison / gap analysis
- > Used a sample of assets to test the tool and refine the design
- > Reflected on barriers and opportunities to implementation

¹ Thematic instruments in this case referring to different sustainability-themed financing products.

² Such as the International Capital Market Association (ICMA) principles or the Loan Market Association (LMA), Asia Pacific Loan Market association (APLMA) and Loan Syndications and Trading Association (LSTA) principles

Results and Insights

For GFT alignment, the requirements of three key principles must be met: Making a Significant Contribution (MSC), DNSH and MSS. To embed the SA GFT into an issuance framework in a way that all eligible assets are GFT aligned, these three principles must be integrated into the assessment process. The nature of the SA GFT technical standards lends itself to integration into project type and impact requirements/eligibility criteria governance.

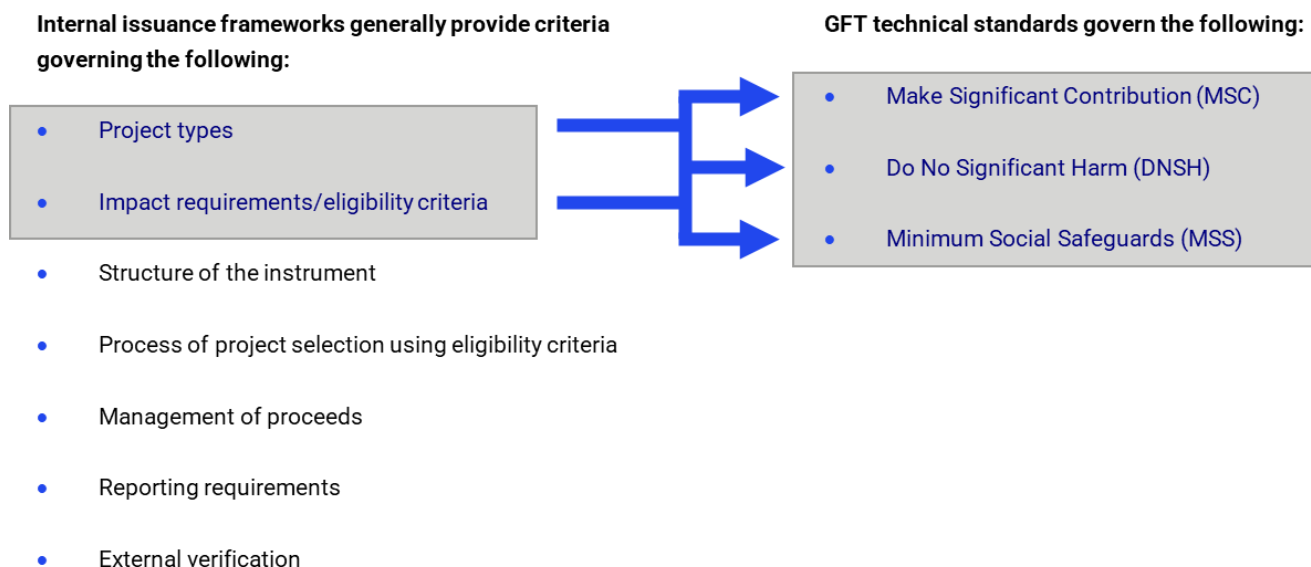


Figure 1: Mapping of internal frameworks aligned to international standards and principles to SA GFT technical standards

Making a Significant Contribution

As a first step to showcase compatibility of the SA GFT with typically applied principles, we performed a high-level mapping comparing the ICMA Green Bond Principles (GBP) environmental objectives to the GFT environmental objectives. The exercise found a mutual compatibility, at this most basic level, that would allow for simple integration and alignment to the SA GFT for existing frameworks and typical practice.

To be considered taxonomically aligned, economic activities must be proven to contribute significantly to at least one of the six environmental objectives listed in Table 1. Currently only climate change mitigation and climate change adaptation are available for reporting in respect to the GFT, therefore the environmental objectives in highlighted in pink would not be eligible for assessment using the GFT. The specifications, metrics and thresholds for proving this contribution are specific to each economic activity. However, the GBP specifies that use of proceeds must contribute to the five environmental objectives but doesn't provide specifications, metrics and thresholds with which to evidence the contribution. While it is possible to provide an indicative mapping of GBP project categories to SA GFT sectors and economic activities (see Table 2), the scope of the project categories would depend on the individual actors' objectives and therefore would vary. The GFT's requirements are more stringent than the GBP, therefore in most cases use of proceeds that meet the GBP's requirements for green bonds will need to be subjected to additional scrutiny to meet the GFT's requirements.

Table 1: GBP recommended environmental objectives vs. GFT compulsory environmental objectives

GBP Environmental Objectives	Comparable SA GFT Environmental Objectives
Climate change mitigation	Climate change mitigation
Climate change adaptation	Climate change adaptation
Natural resource conservation	Sustainable use of water and marine resources
	Sustainable resource use and circularity
Pollution prevention and control	Pollution prevention
Biodiversity	Ecosystem protection and restoration

An indicative mapping of GBP project categories to GFT macro-sectors and economic activities provides insights into how GFT requirements could be embedded into internal frameworks based on GBP criteria. Essentially, the GBP Categories would allow a top-level organisation (roughly compatible with the SA GFT macro-sector) and the SA GFT technical standards would provide robust evaluation criteria for an economic activity under evaluation. Examples are provided in Table 2.

Table 2: Mapping the recommended GBP project categories to the GFT economic activities

GBP Project Categories	SA GFT Macro-sector	SA GFT Economic activities (1st Edition)
Renewable energy	Energy	Production of electricity, heating and cooling from Solar PV, Concentrated Solar Power, Wind Power and Ocean Energy/ Hydropower/ Geothermal/Bioenergy, Storage of Electricity, Storage of Thermal Energy, Storage of Hydrogen, Transmission and distribution networks for renewable and low-carbon gases, Installation and operation of Electric Heat Pumps, Production of Heating/Cooling using Waste Heat
Energy efficiency	Construction, Industry	Acquisition and ownership, Manufacturing of low carbon and resource efficiency technologies, Manufacturing of various materials, chemicals or compounds, Building renovation and major refurbishment
Pollution prevention and control	Water and waste	Anaerobic digestion of sewage sludge, Separate collection and transport of non-hazardous waste in source segregated fractions, Anaerobic digestion of bio-waste, Landfill gas capture and utilisation

Environmentally sustainable management of living natural resources and land use	Agriculture, forestry and fisheries	Forestry and Land Rehabilitation, Crop Production, Livestock Production, Ecosystem Conservation, Wildlife Management, Eco-tourism
Terrestrial and aquatic biodiversity conservation	Agriculture, forestry and fisheries	Fisheries and Aquaculture
Clean transportation	Transportation	Commuter road, passenger rail and freight rail transport, Infrastructure for low carbon transport, Passenger cars, road commercial vehicles and road freight transport, Inland passenger and freight water transport
Sustainable water and wastewater management	Water and waste	Water collection, storage, distribution treatment and supply with high energy efficiency of the system, Centralised wastewater treatment, Water monitoring, Water saving, recycling and reuse technologies, Water treatment
Climate change adaptation	Enabling activities & various activities under the climate change adaptation environmental objective	Non-Life Insurance, Various activities under the climate change adaptation environmental objective
Circular economy adapted products, production technologies and processes and/ or certified eco-efficient products	Industry & Water and waste	Reuse, redistribution, refurbishment and recycling facilities, Remanufacturing of electromechanical products, Eco-efficient products and processes, Material recovery from non-hazardous waste, Gas and Air Capture, CO2 transport and sequestration, Reuse, redistribution, refurbishment, recycling storage and handling infrastructure, Water saving, recycling and reuse technologies,
Green buildings	Construction	Construction of new buildings, Building renovation and major refurbishment, Individual measures and professional services, Acquisition and ownership

Do No Significant Harm

The team found that often the due diligence process for large project finance deals, which are bundled together for green bond issuance, is substantial. Projects are sometimes independently reviewed for alignment with the 8 IFC Performance Standards and the Equator Principles. If this is the case, many DNSH criteria and MSS criteria are met automatically. However, this would not be the case for smaller share/debt-holdings or non-project finance as they do not meet the level of due diligence required for alignment commiserate with project financing transactions that have to meet Equator principles.

There is a risk that green assets are disadvantaged by a more difficult credit approval process as compared to non-green assets. One of the aims of the SA GFT is to attract impact investors that have different criteria for identifying investment opportunities, thus creating a market for such green assets.

One premise of the SA GFT is that activities triggering DNSH do harm or adds to system risk; as such it may form part of risk management in due diligence and investors should be cognisant of such issues for informed decision-making. Amongst other criteria, the climate change DNSH requires a climate risk and vulnerability assessment (CRVA) to be undertaken for projects of all sizes. This includes: Identifying climate risk hazards under different climate scenarios and for different areas, for example using the risk tool within the Council for Scientific and Industrial Research's (CSIR's) GreenBook ([Green Book I Adapting settlements for the future](#))

- > Plans to implement adaptation solutions to reduce material physical climate risks to the activity as identified in the previous step

The inability to test alignment for DNSH was concerning because, while the lack of data meant the assets' conformance could not be positively demonstrated, it also meant that performance that might trigger disqualification could also not be detected.

It is recommended that the GFT is considered for integration into issuance frameworks as an initial step, while materiality concerns for other projects is considered, including:

- > Undertaking detailed umbrella climate risk and vulnerability assessments for certain areas and/or sectors. For example, a large-scale solar rooftop PV study for a specific area which can then be referred to for each relevant project
- > Expanding current monitoring and reporting of projects to include taxonomic considerations
- > Consider the role of external consultants which may be required for assessments or verification

Minimum Social Safeguards

The MSS criteria primarily requires adherence to domestic labour and employment law, as well as international standards, much of which is likely already checked as part of legal due diligence. These safeguards should be evaluated and verified in principle for products or instruments in terms of risk management.



Opportunities and Impact

As previously mentioned, the JSE regulate all listed debt issuances. If issuers or borrowers were to begin embedding / applying the taxonomy and making declarations of instrument compatibility with the SA GFT, a new asset class would come into being which itself may attract a type of investor with expectations of robust processes and impact performance. Should such an asset class grow in time, further financial products could come into being, as the SA GFT (and global recognition of taxonomies) implementation grows.

Though not presently required by the JSE, the ICMA GBP Process for Project Evaluation and Selection include a specification to “provide information, if relevant, on the alignment of projects with official or market-based taxonomies”.

If South Africa are to follow in the EU’s footsteps, this could evolve toward widespread voluntary taxonomic alignment reporting of green bonds as listed on the JSE sustainability segment. The GFT would increase the quality of sustainable debt instruments on the market through standardization and ensuring a rigorous and evidence-based approach to defining ‘greenness’.

Ultimately, if thoughtfully integrated into early-stage due diligence processes via an internal issuance framework, the GFT has the potential to increase the quality of sustainable debt issuances and stimulate green investment domestically and internationally. As reporting becomes more widely disseminated across the market, competitiveness may play a role in speeding the uptake of GFT reporting.

***Disclaimer:** this case study is based on experiences of individual organisations through limited applications, and recommendations are based on general insights. The piloting process and this case study are part of the broader South Africa-UK PACT project overseen by National Treasury; however, this case study is not endorsed by National Treasury, nor does it express the views of National Treasury.*



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