nairobi securities exchange
Discover Opportunity

THE KENYA GREEN BOND MARKET

Issuer's Guide

Green Bonds Programme
KENYA

Sustainable Finance Initiative
KENYA BANKERS ASSOCIATION
Climate Bonds INITIATIVE
fsdafrica
UKaid from the British people
FMO Entrepreneurial Development Bank

Acknowledgements

The Nairobi Securities Exchange (NSE) Listing Rules with provisions for Green Bonds were developed by NSE with the support of the Green Bonds Program Kenya which was initiated by Kenya Bankers Association (KBA), the Nairobi Securities Exchange (NSE), Climate Bonds Initiative (CBI), FSD Africa and FMO, the Dutch Development Bank. The revised NSE Listing Rules with provision for Green Bonds were approved by Capital Markets Authority in December 2018 with input from The National Treasury and Planning and other market stakeholders including banks, corporates, investors and transaction advisors. The revised Rules were formally launched in February 2019. Subsequently, this Guide was developed by a team consisting of NSE, CBI and the Green Bonds Programme Kenya (GBPK) Program Manager.

For more information about the GBPK: https://www.greenbondskenya.co.ke/

Contents

Introduction

The Green Bond market enables business, government and investors to tap into the opportunities associated with the green economy, and make the urgent and strategic shift to climate adaptation and resilience.

The recent report of the Intergovernmental Panel on Climate Change (IPCC) highlights the rapid, far-reaching and unprecedented changes needed to limit global warming to 1.5°C[1]. In response many countries and cities globally have committed to net zero greenhouse gas emissions by 2050.

Kenya is a resource-based economy with great infrastructure investment needs. Poverty and inequality, alongside accelerated climate change impacts, environmental pollution, and deforestation, loss of natural capital and biodiversity, water stress and soil erosion are serious concerns. According to the Kenya National Climate Change Action Plan 2013-2017, the costs of extreme climatic events are expected to reach the equivalent of 7 percent of GDP by 2020[2]. Such losses could result from lower crop and livestock yields, forest fires, damage to fisheries, reduced hydropower generation, reduced water supply and lower industrial production.

At the same time, these challenges present new innovation and investment opportunities. The Kenyan Green Economy Strategy and Implementation Plan (GESIP) for example has identified an investment need of KES 2.4 trillion (USD 23.5 billion) associated with the shift to the national green growth path. The national green growth path offers opportunities for business innovation, investment and poverty reduction and will result in a higher GDP growth rate, improved social welfare and higher agricultural productivity while opening up new opportunities in green jobs.

Among the financial instruments available to mobilize investments in activities with environmental and climate benefits, are Green Bonds. With the fast growth observed in the international market, the potential of this instrument was explicitly reinforced in the scope of G20 by the "Climate Finance Study Group" and in Kenya by GESIP.

Green bonds are therefore a means to raise capital for green projects that address the risks posed by the country's exposure to climate change, environmental degradation and associated social impacts. Green bonds have proven to be one financial instrument that is already enabling billions of dollars to flow into sustainable infrastructure globally, mobilising both private sector and public sector capital towards sustainable and climate resilient infrastructure.

This Guide expands on the requirements for Green Bonds as contained in the NSE Listing Rules and provides more information regarding the steps to issue a Green Bond.

[1] Internationally, the UN Intergovernmental Panel on Climate Change (IPCC) warned in October 2018 that there are only 12 years left to reduce greenhouse gas (GHG) emissions to such a level where the increase in global average temperature by the end of the century is kept below 1.5-2 degrees C above pre-industrial levels. The limit of 1.5-2 degrees global warming by 2100 is a threshold identified by scientists to limit the most severe impacts of climate change and the most catastrophic environmental breakdown may be avoided.

[2] Government of Kenya. 2013. National Climate Change Action Plan, 2013–2017

1. Overview of the Green Bond market

1.1 What is a Green Bond

A green bond is a bond, meaning a debt instrument (a type of loan), which can be issued by entities such as corporate (banks and other companies), parastatals, governments and quasi-governments (counties, municipalities).

The issuer of the bond (the borrower) owes the bond holder (the creditor) a debt and depending on the terms they agreed, is obliged to pay back the amount lent within a certain period of time (tenor) and with a certain interest (coupon). Unlike a loan, the bond is a transferable instrument that can be traded on a secondary market if it is a public issue.

Green Bonds are regular bonds with one distinguishing feature: the proceeds are allocated exclusively for projects with environmental benefits (understood to be intrinsically coupled with social co-benefits). In other words, financially, green bonds are the same as regular bonds, offering comparable risk/reward profiles and following the same issuance procedures but the proceeds are used for a wide variety of climate and other environmental projects.

While the NSE rules only include provisions for Green Bonds, it is helpful to understand the definitions of other types of sustainability-oriented bonds in the market.

Table 1: Definitions of different types of bonds

Green bond	**A bond labelled as 'green 'or 'environmental' where bond proceeds are directed to projects or assets with environmental benefits.**
Climate bond	A subset of green bonds where proceeds are directed to projects/assets that have specific climate benefits.
Certified Climate Bond	A green bond where the use of proceeds has been certified by the Climate Bonds Initiative (CBI) as being in line with a low carbon climate resilient economy.
Social Bond	A bond where the proceeds are used for projects and assets with positive social outcomes such as health care and education[3].
Sustainability bond or SDG Bond	A bond that is financing a range of both social and environmental projects/assets. An SDG Bond invests in projects and assets that are aligned and contribute to the achievement of the Sustainable Development Goals.
Blue bond	The proceeds are used for projects and assets related to the marine and coastal industries and ecosystems. A Blue Bond could be categorized as a Green Bond if the project brings climate and/or other environmental benefits. A small number of "Blue Bonds" have been issued globally to date.

[3] A Social Bond should not be confused with a Social Impact Bond (or a Development Impact Bond). In financial terms, a SIB is not technically a bond, but one form of outcome based contracting. Although there is no single agreed definition of a SIB, most definitions understand a SIB as a partnership aimed at improving the social outcomes for a specific group of citizens or 'beneficiaries'. SIBs can address diverse policy areas such as health services, education, and unemployment.

In summary, the different bonds have the common objective of ensuring capital is channeled to long-term sustainable uses for society. What differs is the underlying sector/project focus and the associated impact indicators.

The issuance of a Green Bond is designed to be a simple add-on to the normal bond issuance process. Table 2 below shows two columns:

- Column A describes the regular bond issuance process that is generally kicked off when the issuer decides to get rated and ends with the monitoring of the performance of the bond in the secondary market;
- Column B shows the simple supplementary steps that the issuer should undertake in order to add the green layer to the bond.

Table 2 also shows how the regular bond issuance process (A) and the Green Bond issuance process (B) can take place concurrently. The two processes are both described in terms of the internal procedures the issuer should set up before and after the launch of the bond into the market.

Table 2: The Green Bond issuance process

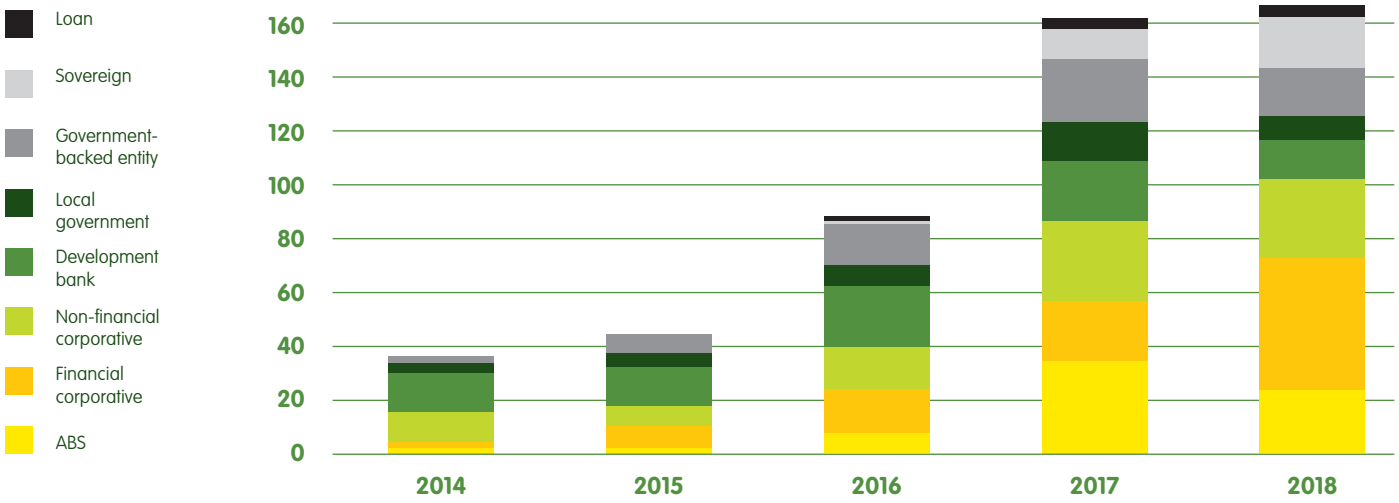
Issuing a regular bond (A)	Issuing a Green Bond – additional steps (B)
Pre-Issuance • Get rated • Get market intelligence on currency, tenor, size • Decide on transaction advisor • Submit application to the relevant regulator • Issue prospectus • Comfort letter / due diligence • Outreach through road shows and sales	**Pre-Issuance** • Define a Green Bond Framework • Define how project meets green bond eligibility criteria (Use of Proceeds) • Put in place project selection process and select eligible projects (Selection of Projects and Assets) • Set up accounts and process to earmark and allocate proceeds – ring fence the proceeds (Management of Proceeds) • Establish Reporting processes • Get pre issuance external review (External Review)
Launch the bond into the market	
Post-Issuance • Price and allocate bond to support secondary market performance • Communication to the capital market • Monitor secondary market	**Post-Issuance** • Allocate proceeds to the projects • Monitor the projects • Publish Annual Green Bond Report • Post issuance Audit if necessary

The procedures of a Green Bond issuance do not significantly differ depending on either the nature of the issuer (for instance corporate, sovereign or semi-sovereign) or the bond type (use of proceeds bond, project bond or sovereign bond).

1.2 The growth of the Green Bond market

The green bond market has grown exponentially over the past 5 years, reaching USD 167 billion issued in 2018, a 100% increase compared to 2016. Any creditworthy institution can issue a green bond. Internationally, development banks, major commercial banks, large companies and municipalities are all issuing green bonds. As with any new bond market, the green bond market was kick-started with high-grade issuances, in this case from development banks. The European Investment Bank issued the first green bond in 2007 followed by the World Bank in 2008. Corporates and municipalities entered the market in 2013.

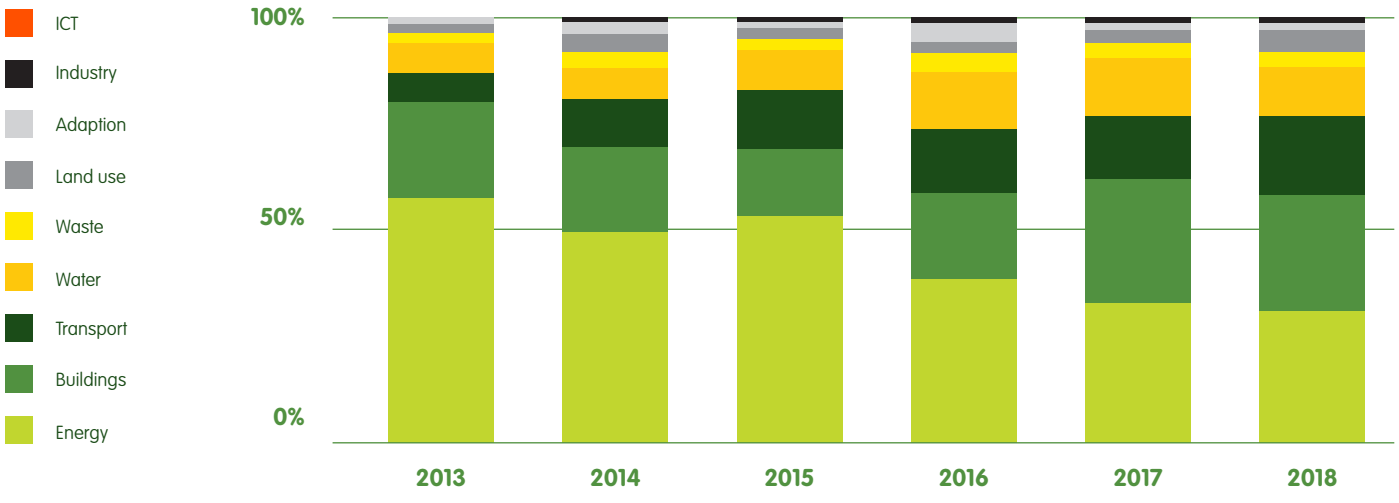
Figure 1: The Green Bond Market: 2012 – 2018: Green Bonds by issuer type



Source: Climate Bonds Initiative, 2019

In terms of sector breakdown, the green bond market has become much broader in terms of the underlying green assets that are being financed, including in sectors such as transportation and real estate. Waste, land use, and climate change adaptation themes continue to be the smallest contributors, in part due to a lack of clear definitions of which project types qualify under these themes.

Figure 2: Breakdown of use of proceeds allocation per sector globally



Source: Climate Bonds Initiative, 2019

1.3 Green Bonds bring benefits for both issuers and investors

Green bonds can deliver several benefits for both issuers and investors. For investors, they offer comparable returns with the addition of environmental risk management, provide greater transparency over the management of proceeds and satisfy sustainability commitments; for issuers they improve investor diversification and attract new investors, enhance reputation and enable matching of financing terms with project life.

Below is a summary of some of the benefits that have been reported based on empirical evidence. The prominence of these benefits may vary from market to market.

Benefits to issuers

Investor diversification across regions and types - environmentally green / low-carbon integrity of the bond enables issuers to raise capital from a much broader base of investors.

Strong over-subscription - demand for green bonds generally outstrips supply and investors acquiring green bonds often hold them to maturity. As a result, green bonds are generally "sticky" in the secondary market as investors are not inclined to sell their green bonds.

Lower cost of capital - green bonds enable issuers to raise large amounts on the capital markets; Refinancing through green bonds and obtaining lower-cost debt is particularly attractive for low-carbon infrastructure assets as they have a particularly low operating risk post-construction compared to the construction phase.

Tighter yields - given the demand for green bonds, there has been strong pricing achieved by recent green bond issuance. Some corporate issuers claimed to have achieved a lower cost of capital especially for bonds denominated in Euros and Dollars.

Stickier Pool of Investors - typically green bond investors invest for the long term, which is a major benefit for infrastructure projects seeking longer term investments.

Reputational benefits - Requirements for enhanced transparency and disclosure associated with a Green Bond issuance will appeal to investors. Green credentials also enhance issuer reputation overall and can be part of a wider sustainability strategy

Alignment with both International Commitments and the National Development Agenda – issuers receive international recognition as an innovator and leader in progress towards the Sustainable Development Goals (SDGs)

Benefits to investors

Enhanced risk management and improved long-term financial returns: Good Environmental, Social and Governance (ESG) track record is recognized as a proxy for overall more efficient companies. Investing in sustainability meets and often exceeds the performance of comparable traditional investments [4] Furthermore, the transparency and disclosure requirements on use of proceeds and performance of the projects are an additional risk management tool.

Addressing climate risk: Green bonds can help mitigate climate change-related risks in the portfolio due to changing policies such as carbon taxation which could lead to stranded assets. Instead a green bond invests in climate friendly assets that over time bear a lower credit risk, such as green buildings.

Asset allocation thresholds - investments in green bonds have enabled institutional investors to exceed asset allocation thresholds especially when investing in emerging markets.

Strengthened reputation and assurance - growing the formal certified green bond market, with high quality information about the green impact and use of proceeds, provides assurance to portfolio investors that their funds would not be misallocated to assets with false green credentials.

Alignment of CSR (or core business when pure play) with funding scheme - some investors make the case that the intrinsic risk and return for most green bonds was usually the same as any conventional bond with the same rating and hence the benefits were for "purpose based investing" only.

Green Bonds give investors a chance to direct capital to climate change solutions, where at the moment there is little opportunity ("lack of deal-flow"). Like the $22 trillion of investors who are members of the Global Investor Coalition on Climate Change.

For pension funds, investment in green bonds matches long-term liabilities and will also help build a sustainable society for pensioners to retire into.

Alignment with National Development Agenda, the Institutional Investor Stewardship Code as well as International recognition as an innovator in green finance.

[4] Morgan Stanley Institute for Sustainable Investing Sustainable Reality: Understanding the Performance of Sustainable Investment Strategies (2015)

1.4 Who buys Green Bonds?

As the Green Bond markets have grown and attracted increasing attention, there are more mainstream investors buying these instruments.

- Whilst the initial group of investors were those with green mandates and sustainability related investing activities (often referred to as impact investors), mainstream investors are increasingly buying green bonds. Globally the uptake is 50/50 in terms of mainstream and impact investors .
- Large pension funds and asset managers are increasingly looking for sustainability and low carbon related investments and often, the green bonds fit exactly what they are looking for.
- There are substantial climate change risks to insurers and insurers are becoming increasingly aware of this. Increasing the amount of low carbon investments in their portfolio is part of that long-term risk mitigation.

Table 3: Examples of Green Bonds issued on the African continent

Issuer	Volume	Tenor	Coupon rate	Year launched	Bond purchasers and subscription rate	Purpose utilization
African Development Bank	USD 500m	3 years	0,75	2013	Third Swedish National Pension Fund, AP4, BlackRock, Calvert Investments, Nordea IM, Pictet AM, Praxis Intermediate Income Fund, State Street Global Advisors, TIAA-CREF.	Renewable energy generation, energy efficiency, vehicle energy efficiency fleet retrofit or urban transport modal change, biosphere conversation projects, solid waste management, fugitive emissions and carbon capture, urban development, and water supply and access.
Cape Town Municipality	ZAR 1bn (USD 80m)	10 years	10,17%	2017	4x oversubscribed. The first bond to be listed on the JSE Green Segment.	Water, low-carbon transport
Nigerian Government	NGN 10.69bn (USD 30 m)	5 year	13,48%	2017	Nigerian institutional investors.	Renewable energy, afforestation
Access Bank Nigeria	NGN 15bn (USD 42m)	5 Years	15.5%	2019	Subscription rate 115%. Domestic institutional investors and DFIs.	Water Infrastructure (flood defence), Solar
North-South Company Limited	NGN 8.5bn (USD 24m)	15 Years	15.6%	2019	15 Institutional Investors (including 11 Pension Funds)	Hydropower
Ned bank	ZAR 1.66bn (USD 116m)	7 years	Floating	2019	The issuance was 3x oversubscribed. Investor base consisted predominantly of domestic asset managers but also international investors. All investors invested in the local currency.	Renewable energy. The bond is CBI Certified and SDG aligned.

A comprehensive library of labelled Green Bonds and associated data can be found at:
https://www.climatebonds.net/bond-library

1.5 International good practice and National priority green sectors

At the international level, two main voluntary processes for green bond issuance have emerged; these are also the basis for the NSE Listing Requirements for Green Bonds:

- the Green Bond Principles provide process guidance around issuance and disclosure
- The Climate Bonds Standard adds science-based criteria to identify assets that are compliant with a sub-2 Celsius degree world[6], consistent with the Paris Climate Agreement.

The Green Bond Principles (GBPs) are a set of underlying global principles for the green bond issuance and disclosure process. They are an industry-led initiative convened by the International Capital Market Association (ICMA), promoting the idea that green bonds are about the use of proceeds for green assets rather than green issuers. The Green Bond Principles were launched in 2014 and have since undergone yearly revisions. They cover the establishment of sound management processes for the use of proceeds of green bonds and the use of independent reviewers for both environmental credentials and reporting practices. The GBPs are based on four pillars, outlining disclosure and guiding the issuer:

1. **Use of proceeds:** what "green" projects and assets the bond proceeds finance
2. **Process for project evaluation and selection:** how the eligible projects are selected and evaluated
3. **Management of proceeds:** how the proceeds are tracked, allocated and spent
4. **Reporting:** how often and what information the issuer will disclose to investors including Key Performance Indicators (KPIs) and the associated methodologies – for instance, the methodology for the calculations of yearly CO2 Emissions Reductions (KPI).

The Climate Bonds Standard is a standard for green bonds that is entirely compatible with the GBPs whilst also adding clear definitions (thresholds and requirements) for the Certification of green assets. Those green definitions of projects and assets provide climate science-based trajectories that are consistent with a rapid decarbonisation in line with the COP21[7] Paris Climate Agreement and advocating for ***limiting global warming by well below 2 degrees*** by the end of the century.

- The Climate Bonds Taxonomy[8] sets out which sectors are compliant with a "sub-2-degree world"; sector-specific science-based criteria are developed to ensure the level of ambition is met and consistent through the application of the taxonomy.
- CBI acts as a Secretariat convening Technical Working Groups of experts to develop the criteria[9]; Industry working groups of business leaders to test their feasibility; and finally the Climate Bonds Standard Board, which is made up of investors with green mandates, that approves the criteria and Verifiers

[6] A "sub-2 degree world" is one where the increase in global average temperature by the end of the century is kept below 2 degrees C above pre-industrial levels. The limit of 2 degrees global warming by 2100 is a threshold identified by scientists to limit the most severe impacts of climate change

[7] COP stands for Conference of the Parties, referring to the countries that have signed up to the 1992 United Nations Framework Convention on Climate Change. The COP in Paris was the 21st such conference.

[8] A more detailed version of the Taxonomy can be found at https://www.climatebonds.net/standards/taxonomy

[9] Available sector-specific criteria can be found at https://www.climatebonds.net/standard/sector_criteria

- Approved verifiers assess the green credentials of bonds by providing the Climate Bonds Standard Board with an Assurance Report confirming compliance with the requirements of the Climate Bonds Standard and Certification Scheme.
- Certified bonds are present in countries throughout all continents; the largest market in terms of size is the US. Certified climate bonds currently account for less than 15% of the market globally but certification is the dominant practice in some markets such as in Australia and India
- It can be noted that the CBI criteria are not available for all sectors yet. In this case, issuers can use other sources for further green sector guidance, such as from the DFIs, UNEP etc.

Table 4: Summary table, key differences between GBP and CBI

	Green Bond Principles	Climate Bonds Standards
The objective?	• Support standardisation and best-practices in the green bond market.	• An internation investor-focused not-for-profit organisation.
What is it?	A set of principles that outlines good practice for the process of issuing a green bond, including: 1. Use of proceeds 2. Project evaluation and selection 3. Management of proceeds 4. Reporting	• The stabdard has set of prescriptive definitions and specifications that the issuer needs to follow to get certification. • The standards encompass the GBP - effectively a CBI certified bond should also technically be GBP compliant, but not vice versa.
Project categories	• climate bonds and other environmental projects. Also includes social projects.	• Climate change mitigation and adaptation projects. Does not include social projects.
Is it voluntary	• Yes.	• Yes.
Is third-party assurance required?	• Recommended, can adopt second opinion.	• Yes - the CBI certifies the external verification report.
Any penalty involved if violation of green criteria	• Issuers are extempted from liability if there is a violation of GBP.	• Climate Bond Standards Board will withdraw the certification and make announcement if there's any violation.

Other international standards and guidelines

Other standards and guidelines are being developed and adopted in different parts of the world, for example the Chinese and the ASEAN Green Bond Standards which are largely aligned with ICMA and CBI.

In addition, the European Union is currently developing a common green taxonomy for the European market, which is expected to become the most stringent standard in terms of green requirements and thresholds. Compliance with the standard would be required by all green bonds issued in Europe and thereby also represent the level of expectation by European investors.

National Priorities as per the National Policy on Climate Change and other relevant Government strategies

As described earlier, the country's ambitions for sustainable development are outlined in the Vision 2030 Strategy, the Green Economy Strategy and Implementation Plan (GESIP), the National Climate Action Plan, and the National Policy on Climate Finance and the Climate Change Act 2016. These policies constitute the Government's efforts to advance the sustainable development agenda focused on addressing key challenges such as poverty, unemployment, environmental degradation, climate change and variability, infrastructure gaps and food security. These policies identify priority sectors to support sustainable development and the transition to a green economy (see Appendix C for details of the priority sectors under the National Policy on Climate Finance). The synergies between the Kenya National Policy on Climate Finance and the Climate Bonds Initiative taxonomy are substantial. However the Policy on Climate Finance highlights additional areas of key relevance to the Kenyan economy, such as sustainable tourism and affordable housing.

In a comparison between the international sector criteria and the national priorities the following should be noted:

- The international classifications and national green priority sectors are mostly aligned. The Climate Bonds Taxonomy includes the additional sector of Information, Communications and Technology. The National Policy on Climate Finance lists trade; tourism and disaster risk management as separate categories, although these are mainly aligned with the Climate Bonds Taxonomy buildings, energy efficiency and adaptation categories.
- The National Policy on Climate Finance also identifies research and innovation around green technologies and climate change. These are types of expenditures that have been included in green bonds issued by the public sector, such as sovereigns and sub-sovereigns and can be considered eligible if they relate to the taxonomy areas.
- All fossil-fuel related projects are excluded. Whereas oil and gas companies can issue a green bond to finance green projects (e.g. a solar park), energy efficiency improvements in oil and gas production or related supply chain, such as refineries are not eligible under a green bond issuance as any such efficiency improvements would still not achieve enough impact to offset the overall emissions for that industry to put us on a "sub-2 degree pathway". Foreign investors are particularly careful not to invest in fossil-fuel based assets when they are selecting green-labelled investments.

It is important to note that the development of green bond guidelines and standards are an iterative process; guidance is updated and improved as the market diversifies and more instruments, issuers and asset classes come to market. Both the Green Bond Principles and Climate Bond Standard are reviewed once a year. It is the issuers' obligation to ensure they adhere to the latest version of the Guidelines and Standards at the time of issuance.

2. How to issue a Green Bond in Kenya
– a step by step guide

2.1 Overview

The NSE Listing Rules for Green Bonds have been developed using the four pillars of the Green Bond Principles and the guidance of the Climate Bonds Standard. The Guidelines are aligned with international practices to attract foreign investor demand for green investment instruments[10] but also refers to National priority green economy sectors for further guidance.

Considerations when issuing a green bond: In terms of an issuer's financial strategy, a green bond issuance would be assessed alongside other potential funding sources. Some advantages to consider may include that local currency issuance will not present a currency volatility risk for the issuer during repayment as compared to a foreign denominated loan (assuming the underlying asset revenue stream is in local currency), investor diversification due to the climate risk mitigation and better governance, simplicity of the green verification process and the ability to relatively quickly raise additional capital via repeat issuances.

Any type of bond can be a Green Bond if assets qualify. What matters is that the proceeds go to green assets or projects. If you're able to issue a bond, then in principle you can issue a Green Bond if you have eligible projects and assets. You have to disclose what those assets and projects are and report at least annually on their green credentials.

As indicated in Table 2 earlier, the usual bond issuance requirements apply, i.e. the institution will need approval from the relevant regulator. The bond will need to be structured, working with an investment bank or an advisor. The institution may need a credit rating.

[10] There is currently unmet demand for green, as pricing benefits show (see preliminary Climate Bonds analysis here). The current lack of supply will mean investors will have to look to emerging markets to meet their green mandates.

Green Bond issuance steps

Overview

A PREPARATION/PRE-ISSUANCE

1. Identify qualifying green projects and assets

The key feature of a Green Bond is that the proceeds are for green projects or assets. The "greenness" of a company does not matter - it's about the physical assets or projects.

2. Develop the issuer's Green Bond Framework

Setting out the policies and procedures governing the Green Bond

B ISSUANCE

5. Issue your Green Bond

The usual steps apply as for any other conventional bond:

- Seek required issuance approval from regulators
- Structure the bond working with an investment bank or advisor; get credit rating.
- Market and price the Green Bond.

3. Arrange independent verification

Credible independent review and verification is a requirement and protects your reputation. Verifiers can also help identify green assets.

4. Set up tracking and reporting

The value of the assets or projects must stay equal to, or greater than, the amount of the bond. The issuer needs to track this and be able to show how they are doing it — transparency is essential.

C POST-ISSUANCE

6. Monitor use of proceeds and report annually

Confirm at least each year, through a public report, that the funds are still properly allocated to green projects. The report needs to be signed off by an Independent Verifier.

2.2 The steps for issuing a Green Bond

This section expands on the requirements in the NSE Listing Rules for Green Bonds to provide more detailed explanations and examples. It should also be noted that the Capital Markets Authority has developed a Policy Guidance Note (PGN) for non-listed Green Bonds, and that the two documents contain the same requirements.

1. Use of proceeds - Identify qualifying green projects and assets

The main difference between a plain Vanilla Bond[11] and a Green Bond is that, for green issuances, the proceeds are allocated to projects and assets that are considered "Green". It is therefore crucial that the issuer clearly identifies the categories of "Green" that the underlying projects and assets fall under these categories in order to be eligible for inclusion in the bond.

As per the NSE Rules, eligible projects may fall under the categories identified in the international Green Bond Principles, the Climate Bonds Taxonomy (see Annex B) and the National Policy on Climate Finance (see Annex C) and other National Green Strategies and Policies.

It is important to note that the Green Bond Principles represent the minimum required by the market while the Sector Criteria of the Climate Bonds Standard are the most specific as they provide very clear requirements and thresholds that projects and assets have to meet.

Existing assets or new capital expenditure can be used: Similar to the process of re-financing, proceeds of a Green Bond can be applied to existing assets, such as a solar energy plant already operating. For example, a solar energy company can issue a Green Bond to re-finance their existing assets, and then use the funds to develop new solar plants. Proceeds can also be allocated to upcoming capital investment, as long as funds are fully deployed within a maximum of two years.

Loan books can be used as well as physical assets: For financial institutions – development banks, commercial banks and others - books of green loans that have provided funding to these categories of investment would qualify for green bond issuance.

Treasury and environmental departments within the issuing organisation need to work together: The identification of qualifying assets and projects will require cooperation between finance and environmental departments; establishing cooperation between them at an early stage saves time throughout the process.

[11] A Vanilla Bond is the standard version of a bond that lacks any exotic features.

Guidance

on qualifying green assets

Renewable energy	• Renewable energy generation projects, including construction, operation and maintenance of wind and solar power projects. • Other renewable energy projects include geothermal and tidal. • Rehabilitation of power plants and transmission facilities to reduce GHG emissions; this includes smart grid projects. • Manufacturing of energy efficient and renewable energy products.
Green and climate smart infrastructure, including transport, water and waste management	• Rail transport projects, including construction, equipment purchasing and technology upgrading. • Urban motor and electric public transport projects, including charging stations for electric vehicles. • Urban rail transit projects, including light rail, metro, monorail, tram networks etc. • Clean water and drinking water projects, including projects for safe rural drinking water. • Small-scale irrigation and water conservation construction projects to build highly efficient water-saving irrigation systems. • Urban water–saving projects to reduce water loss from pipe leakages in the distribution system. • Prevention, control and adaptation to droughts and flood. • Waste management: waste-to-energy generation. • Wastewater treatment and methane capture.
Climate smart agriculture and forestry	• Green agriculture development projects include organic agriculture production that adopts sustainable agriculture techniques and ecological principles. Agriculture supply chain projects can also qualify. • Green forestry development projects include afforestation projects. • Construction, operations and maintenance of biomass power generation projects. • Nature protection, ecological restoration and disaster prevention projects include ecosystem restoration, soil erosion prevention.
Resource efficient manufacturing	• Industrial energy and water conservation projects for upgrading technology and process, equipment and facilities to reduce energy use, water use and pollutants. This can include cogeneration projects. Circular economy projects that improves resource reuse, remanufacture and recycling.
Green real estate and green affordable housing	• Greening of existing buildings, energy and water facilities and energy metering. • Greening of new buildings includes the construction, operation and maintenance of green certified buildings. • Energy efficiency and conservation projects in buildings.
Sustainable tourism	• Sustainable tourism can be described as an industry committed to making a low impact on the environment and local culture, while helping to generate future employment for local people. The objective is to ensure that development is a positive experience for local people; tourism companies; and tourists themselves.
Sustainable coastal and marine resource management, etc.	• River revitalisation and preservation, habitat restoration. • Marine ecosystem conservation.

Within the broad green categories illustrated above, there are further details needed to qualify as green. As described earlier, under the NSE and CMA rules, green bond issuers can use the Climate Bonds Standard and Certification Scheme to have their green credential confirmed, or in the case where CBI technical criteria are not yet available, other detailed green sector guidance from international organizations such Development Finance Institutions.

Green guidelines per sector available online

Green Bond Principles (GBP)

The GBP provide high-level project categories. These categories can be complemented by taxonomies such as those provided by the Climate Bonds Initiative and Multilateral Development Banks.

https://www.icmagroup.org/green-social-and-sustainability-bonds/resource-centre/

CBI Taxonomy and Sector Criteria guidance notes

Definitions of green projects and assets, which are consistent with the COP21 Paris Climate Agreement

See Annex B
Or for the most up to date version see:
https://www.climatebonds.net/standard/taxonomy

Available sector-specific criteria can be found at https://www.climatebonds.net/standard/sector

The National Policy on Climate Finance

Identifies priority sectors to support sustainable development and the transition to a green economy

See Annex B

2. Develop the Issuer's Green Bond Framework

Once the issuer has done the high level assessment confirming that its assets indeed could qualify as green, the next step is typically the preparation of a Green Bond Framework. This document discusses how the internal processes within the issuer meet the Green Bond eligibility criteria by describing how the issuer ensures the steps outlined in this Guide are followed.

In the Green Bond Framework, the issuer should establish, document and maintain the internal decision-making process that it will use to determine the eligibility of the underlying projects and assets. Whilst there is not a prescribed way to write it, the structure of Green Bond Framework commonly reflects the four pillars of the Green Bond Principles, which are also fully integrated in the Climate Bonds Standard:

- **Use of Proceeds:** this describes the issuer's green project criteria as per step 1 above.
- **Selection of Projects and Assets:** This describes the issuer's internal set up for the selection of projects and assets. It is about the specific governance mechanisms the issuer has established to select the underlying projects and assets. For instance, most issuers will set up a Selection Committee consisting of Senior Members of staff from relevant departments (such as Finance, Engineering and CSR) who will be in charge of screening the underlying projects and assets according to the requirements discussed in the Use of Proceeds section above. The Committee will generally provide recommendations for the selection of projects and assets that will then be sent to the Board of Directors for final approval. It is important to highlight that, while each issuer might have a different way of selecting underlying projects and assets, the key point is that this selection process should be as transparent as possible in order to provide investors with comfort that the internal processes within the issuer are robust[12].
- **Management of Proceeds:** this describes the mechanisms that the issuer has established in order to manage and track the proceeds internally, e.g. ring-fencing or earmarking. See step 5.
- **Reporting:** This describes the content and frequency of reporting, including relevant impact indicators. See further step 6.

The Green Bond Framework typically begins with the elaboration of a statement regarding environmental objectives of the Green Bond and is generally reflected in the "Introduction" or "Overview" section of Green Bond Framework.

The Green Bond Framework is a very important aspect of the issuance process because it provides the issuer with the opportunity to explain directly to investors why and how Green Bonds fit within their long-term vision or corporate strategy.

An issuer's Green Bond Framework is a physical document that is made publicly available to the market and is considered the centrepiece of the green bond issuing process.

A library of Green Bond Frameworks is available at CBI's website:
https://www.climatebonds.net/bond-library

3. Arrange independent verification

Both policymakers and investors want assurance that green investments are genuinely green. Internationally, the majority of Green Bond issuers use independent review to increase investor confidence in the credentials of projects funded by Green Bonds.

As per section 2 paragraph 2.13 of the NSE Rules, an issuer of a Green Bond shall comply with the specific Eligibility Requirements described for green bonds (as outlined in this Guide), in addition to the regular requirements for bond listing as set out under the Capital Markets (Securities) (Public Offers, Listing And Disclosures) Regulations.

The Eligibility Requirements under paragraph 2.13.1 stipulate that the issuer shall appoint an Independent Verifier who will verify i) that the projects to be financed are indeed categorized as green in line with the Green Standards and Guidelines and ii) that internal processes

[12] For example, investors have started to scrutinise the background of the members of Selection Committees (or equivalent) in order to assess the robustness of the selection process. Specifically, investors will typically expect the Selection Committee to include members with either a science or engineering background who can apply a sound and scientific approach to the selection process.

and procedures in place for project selection and tracking of funds as per the Issuers Green Bond Framework. The independent verification is typically provided by organisations with a strong environmental knowledge base.

The Independent Verifier will produce a pre-issuance verification report (often referred to as an External Review), which serves as an independent assessment on the green credentials of a bond. Almost all the external reviews for Green Bonds will fall under one of the two categories below:

Second-Party Opinion: these are independent, research-based assessments on the sustainability credentials of Green Bonds and their underlying projects and assets and are typically applied under the Green Bond Principles. The methodological approach underpinning the assessment is generally designed by the Opinion Provider. Second-Party Opinions are normally issued at Pre-Issuance and can vary quite a lot depending on the methodology used by the Opinion Provider. As an example, the Republic of France commissioned Vigeo Eiris (the reviewer) to provide a Second-Party Opinion on the Green Bond issuance in January 2017.

Assurance Reports: these are an independent audit conducted following the procedures described in ISAE 3000, which is a standard used by accountants to process historical non-financial information. Assurance Opinions provide an assessment of both the green credentials of the bond as well as of the internal procedures established by the issuer. Assurance Opinions are used by independent Third Parties Auditors or Verifiers in the language of the Climate Bonds Standard, to provide an assessment of a bond's eligibility against the Climate Bonds Standard[13]. For example, the Federal Republic of Nigeria issued and certified their first Green Bond issuance under the Climate Bonds Standard in December 2017. The Assurance Report was released by DNV GL.

Independent Verifiers are generally engaged while or soon after the issuer has set up a Green Bond Framework and the review is normally made public before the road show. This is because the issuer can then use the independent review as a way to promote the green credentials of the bond during the road show and it is now common practice for the review to accompany the bond's prospectus when it is sent to potential investors.

Independent Verifiers are generally recruited by issuers via a procurement process whereby a ToR is published requesting interested parties to submit a proposal. Based on their proposals, three or four Verifiers are then pre-screened with the final decision taken by either a panel of external experts or by the relevant governance body in accordance with the organisational structure of the issuer itself.

Given the important role of the Independent Verifier in terms of assuring the green integrity of the bond, the NSE Rules also stipulates some minimum requirements for the Independent Verifier which includes demonstrated compliance with the International Capital Markets Association's Guidelines for External Reviewers, or accreditation under the Climate Standards and Certification Scheme, or any industry body acceptable to the Exchange and the Authority. Verifier firms registered in Kenya must also undertake the Independent Verifier training course run by the NSE.

[13] Assurance Reports are only prepared to provide an assessment of the green or climate credentials of a bond and its underlying projects and assets while Second-Party Opinion can also provide an assessment of the sustainability (including social sustainability) credentials of an issuer's Green Bond Framework.

- For further information and a list of the local independent verifiers that have gone through the NSE training: https://www.nse.co.ke/products-services/debt-securities/the-green-bond.html
- For lists of CBI approved verifiers: https://www.climatebonds.net/certification/approved-verifiers
- ICMA voluntary guidelines for External Reviewers: https://www.icmagroup.org/green-social-and-sustainability-bonds/external-reviews/

The same Independent Verifier may be used for the verification and sign off on the Annual Green Bond Report as per the NSE Listing Rules. See further section 6 on Reporting.

4. Management of proceeds - Set up tracking and reporting

Full disclosure on the allocation of proceeds (to provide transparency to the investor) is necessary for a Green Bond.

Key considerations:

- The proceeds from green bonds must be used only for specified projects, so there must be systems in place to segregate green bond proceeds and keep track of their use. Issuers that have done this in the past have used separate coding for the green bond proceeds and have created special green bond allocation codes to help ensure funds are used properly.
- The nominal value of the pool of assets or projects must stay equal or greater than the amount of the bond. An issuer needs to track this and be able to show how they're tracking; transparency is essential.
- Monitoring procedures must be set up to make sure proceeds are never knowingly placed in non-green investments (such as greenhouse gas intensive projects) throughout the life of the green bond.

Generally, there are two ways to manage the proceeds:

Earmarking: The proceeds enter the balance sheet of the issuer and are set aside for future allocation to the Nominated Projects and Assets. This is common practice amongst issuers of Green Bonds (including sovereign issuers) and is widely used to finance future capital investment or to refinance payments on long-term projects.

Ring-fencing: This occurs when the issuer decides to separate the proceeds from its business-as-usual operations. For instance, ring-fencing could happen when a public utility company managing wind farms decides to separate financially from the parent company in order to allow investors to have more of a direct link to a specific asset (the wind farms) while also enjoying the full credit support of a parent company's balance sheet.

Furthermore, when establishing the processes for the Management of Proceeds, the issuer also needs to decide how it will manage unallocated proceeds. Typically, any balance of proceeds that have not been allocated to Nominated Projects and Assets should be held in temporary cash investments, short-term deposits and other short-term liquidity instruments (for instance, short-term notes with a tenor of less than two years).

Moreover, it has become best practice in the market for the issuer to clarify that the proceeds will not be used to fund carbon-intensive projects while they remain unallocated. Finally, proceeds should not remain unallocated for any longer than a limited period of time that both the Green Bond Principles and the Climate Bond Standard defined as no longer than 24 months.

5. Issue your Green Bond

The usual steps apply here, as for any other conventional bond:

- Seek required issuance approval from the regulators, i.e. the relevant primary sector regulator as well as the Capital Markets Authority and the Nairobi Securities Exchange for listed Green Bonds (simultaneous submission of application documents to NSE and CMA).
- As per section 2.14 of the NSE Listing Rules, the additional information that should be contained in the Information Memorandum for a Green Bond issuance includes:
    - The issuers Green Bond Framework as described in step 2 above (its content is described in the NSE Rules section 2.15 as: ***"a) statement on the environmental objectives of the Green Bond and the process to determine project eligibility and related eligibility criteria; (b) A statement of the systems, policies and processes to be used for the management, allocation and reporting of the bond funds and investments".***
    - The qualifications of the contracted Independent Verifier
    - The pre-issuance verification report produced by the Independent Verifier, confirming that the projects to be financed qualify as green.
- Structure the bond, working with an investment bank or advisor. As noted in Annex D, any sort of structure, from corporate private placement to asset-backed securities, can be used.
- Market and price the Green Bond.

Creditworthiness is judged the same as other bonds. Issuers should expect to get credit rated in the usual manner.

6. Report regularly (at least annually)

The reporting process is essential for investors because it creates a direct link between their investment and the environmental performance the underlying projects and assets.

As per the Continuing Obligations under section 2, para 2.22 – 2.25 of the NSE Rules, in order to maintain the status of a Green Bond, an issuer needs to provide confirmation to NSE, CMA and the investors at least annually, for the lifetime of the bond, that the funds are still properly allocated to green projects. The issuer should report to investors and the regulator at least annually but, some issuers might opt to report bi-annually or even every quarter.

It is also up to the issuer to decide what reporting channel is most efficient. For corporates and other issuers with annual reporting, there is potential to integrate reporting on Green Bonds with quarterly or annual financial reports.

As per the NSE and CMA rules, the green bond annual report should be disclosed through the issuer's website.

As per the NSE rules, the issuer should report about the following aspects:

On-going eligibility of projects and assets: Brief description of the projects and the amounts disbursed, including the percentage of proceeds that have been allocated to different project types and to financing and refinancing. The issuer should report any material changes[14] that have occurred to the Green projects and assets since issuance and whether those changes have affected eligibility. In case the eligibility of a portion of the Nominated Projects and Assets has been compromised, the issuer should report on whether the proceeds have been re-allocated to new eligible assets.

Balance of unallocated proceeds: the issuer should report the total balance of unallocated proceeds and how they are being held in accordance with the processes set up in the Management of Proceeds. Typically, this will also include a confirmation that the unallocated proceeds are not being used to fund carbon intensive projects.

Key Performance Indicators (KPIs)[15]: they refer to qualitative and quantitative environmental performance metrics of the Green projects and assets. For instance, these indicators could be the number of annual tonnes of abated CO_2, generated electricity in terms of Kw per hour, miles of transmission lines installed or number of hectares of restored forest land. KPIs are generally determined at Pre-Issuance (and disclosed in the Green Bond Framework) but their relevant data is gathered, monitored and presented at Post-Issuance. The issuer (possibly with support from the Independent Verifier) will establish its specific and relevant KPIs. See Annex F for sample key indicators.

The annual report on use and management of proceeds will be reviewed and signed off by the Independent Verifier to confirm the green status of the bond. This can be in the form of a letter signed by the Independent Verifier and will likely also include a statement from the Financial Auditor relating to the use of proceeds.

The green bond annual report is typically a relatively brief report of a few pages of data in line with what was stated the issuer's Green Bond Framework.

Under the NSE and CMA rules, as an additional level of reassurance to the investor that the proceeds are being allocated correctly to the green projects, it is mandatory for the issuer to re-engage the Independent Verifier to audit the annual Green Bond report. This will include assessment of the green credentials of the bond and of the eligibility of internal procedures within the issuer.

It can be noted that while it may be fine to use an existing Financial Auditor as the Independent Verifier, international best practice would prefer them to be two separate entities. For instance, a bank may have PWC as their financial auditor. To provide a higher degree of transparency, the bank selects KPMG as the independent Verifier for the provision of assurance services. PWC continues to be the bank's financial auditor and may still provide assurance services for the green bond's annual report.

[14] Material changes are generally referred to as substantial changes that have affected the eligibility of the Nominated Projects and Assets. For instance, if a Green Building is purchased and the new landlord decides to alter some of the characteristics of the building such as level of insulation, removal of solar panels and so on, then the building might no longer meet the eligibility criteria established by the issuer and, hence, it might not longer be considered "green".

[15] Impact reporting is reporting that seeks to quantify the climate or environmental impact of projects. It is gaining prominence in the green bond market. Common good practice should be considered for the impact reporting, such as use of baseline numbers and benchmarks. However, it is up to the issuer to define the parameters and scope of the impact reporting. Impact reporting should not result in issuers shying away from the market.

Examples: The Annual Green Bond Reports can typically be found on issuers' websites. In addition, a comprehensive library of labelled Green Bonds and associated data such as the Annual Green Bond Reports can be found at: https://www.climatebonds.net/bond-library

A sample report for a CBI certified bond can be found in Annex E.

Other possible examples to look at include the Dutch Development Bank FMO's report which, in addition to the summary information incorporated in their Annual Financial Report, is issued to investors in the format of a newsletter:
https://www.fmo.nl/l/library/download/urn:uuid:8026b566-c6c5-4a9d-8dd4-ada38b0defae/fmo+sustainability+bonds+newsletter+no+10.pdf

Subsequent green bond issuances are even simpler

For subsequent Green Bond issuances, the process is even simpler.

Repeat Green Bond issuers can use same framework for identifying green projects and assets, the same independent reviewer and the same processes for management of proceeds and reporting. If they need to replenish the pool of assets linked to the bond they can look to other qualifying green assets.

2.3 Additional FAQs about Green Bonds

Cost and timeline for issuance

The cost of the external review is borne by the issuer. Compared to the standard cost of issuing the bond itself, the certification costs are typically negligible. Internationally, the indicative costing as reported by CBI, for the whole verification process has been between USD 20,000 to USD 40,000. This can be more or less and depend on the types of assets included in the bond, number of assets included and the documentation provided by the issuer.

Pricing of Green Bonds - Does Green Bonds offer better pricing for issuers?

Given their financial terms are similar to that of other bonds, green bonds are priced the same way as other bonds issued through the capital markets i.e. taking into account the various risks attached to the bond (e.g. credit risk, liquidity risk, etc.), the tenor and currency, market conditions, etc.

The Climate Bonds Initiative is analysing green bond pricing in the primary market[16] following several issuer testimonies about a pricing benefit for green bonds. It is quite hard to determine exactly if the fact that a bond is priced inside, on or outside its credit curve is driven by the 'green' factor as market conditions vary constantly. However, the analysis points to some significant findings including that Green Bonds attract a broader range of investors. In 2017, approximately 50% of green bonds were allocated to dedicated green investors and the other 50% to mainstream investors such as pension funds. Also, over-subscription and tight pricing is the norm. Some green bonds display a "green discount",

[16] Full analysis can be found at **www.climatebonds.net/resources/reports**; bonds in EUR and USD with an issuance size greater than USD200m are included in the data set examined.

which means cheaper cost of funding for the issuer. However, others price at par or display a new issue premium like regular bonds.

Note: "new issue premiums" - a bond trades at a premium when it offers a coupon rate higher than prevailing interest rates. It is said to trade above its "par value". "Par value" - is the face value of a bond. The face value determines the maturity value and the actual value of the coupon payments of the bond.

What happens if the bond is no longer considered green?

In the event of breach of the requirements of the Green Bond related requirements of the NSE Listing Rules by an issuer of a Green Bond, the Rules under section 3 state the following:

The Exchange or the Authority shall communicate to the issuer concerning the breach and shall authorize the issuer to take remedial steps to rectify the breach, subject to an agreed timeframe between the issuer and the Exchange or the Authority, in addition to any other action that the Exchange or the Authority may take.

The Authority shall take any other enforcement action against the Issuer for the breach as it may deem fit and in the interest of the investors.

Where it is found that the Independent Verifier did not perform its responsibilities as required in independently reviewing the green bond, the Authority may take enforcement action against the Independent Verifier.

Should the issuer fail to remediate the concerns, the green label will be removed and any tax-benefits associated with the green label will cease, resulting in reputational risk for the issuer. If the bond is certified under the CBI standard, a report will be issued on CBI's website.

As described above, in addition, the Regulator may take any other enforcement action as it may deem fit, such as fines, sanctions, reprimands, public censure etc.

Annex A: Definitions

Green Bond-related definitions as per the NSE Listing Rules

Independent Verifier: as per section 2.13.1 of the NSE Listing Rules, refers to an entity, independent of the issuer, its directors, senior management and advisers, compliant with the International Capital Markets Association's Guidelines for External Reviewers, or accredited under the Climate Bonds Standard and Certification Scheme, or any other professional body acceptable to the Exchange and the Authority, appointed by the issuer to confirm the green status of the Green Bond.

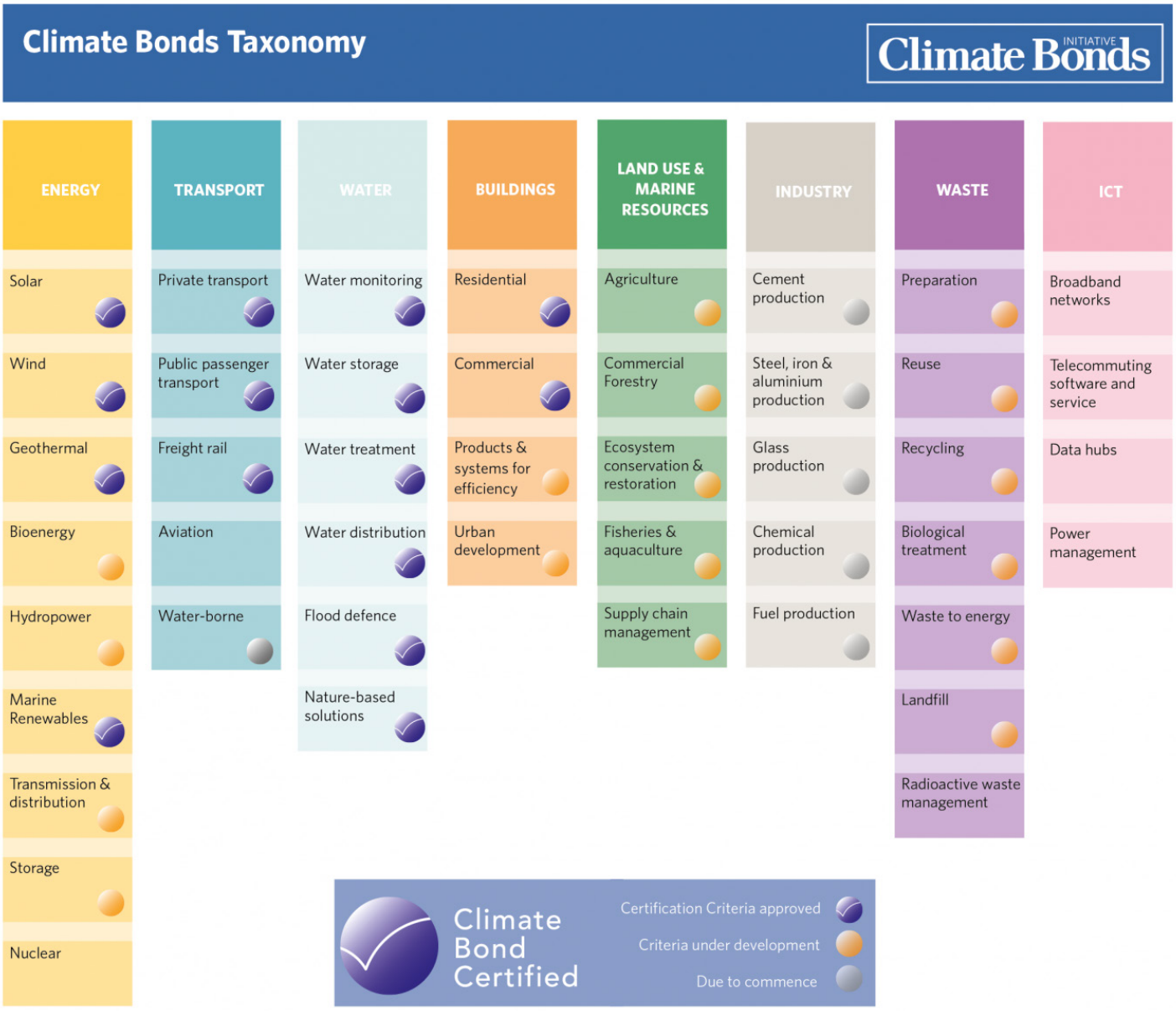
Green Bond: means a fixed income instrument whose proceeds are used to finance or refinance new or existing projects that generate climate or other environmental benefits that conforms to the Green Guidelines and Standards listed on the Exchange and is approved by the Authority

Green Guidelines and Standards: means green guidelines and standards including:

1. Green Bond Principles, as may be amended, issued and governed by International Capital Markets Association;
2. Green Bond Standards such as the Climate Bonds Standard, as may be amended, issued and governed by the Climate Bonds Initiative.
3. Government policies and guidelines such as the Kenya National Policy on Climate Change, National Policy on Climate Finance and Green Economy Strategy, among other Government policies; or
4. any other standard acceptable to the Exchange and the Authority

Labelling of Green Bonds: The Green label is assigned to bonds with climate and/or other environmental benefits as per the Green Bond Guidelines and Standards.

Annex B: Climate Bonds Taxonomy of eligible green projects[17]



[17] Taxonomy as of May 2019. For the most up to date version see **https://www.climatebonds.net/standard/taxonomy**

Annex C: Eligible green sectors and projects as per the scope of the National Policy on Climate Finance

These sectors have been identified as making significant contributions to Kenya's broader development goals; investments in these sectors can help Kenya transition toward a low carbon climate resilient development pathway.

Agriculture, livestock, fisheries and marine resources management	Forestry, including wetlands and coastal ecosystems such as mangroves	Energy	Transport	Trade
• Promotion of climate smart agriculture[18] • Price stabilisation schemes for livestock and crop farmers • Post-harvest management of crop, livestock and fisheries • Protection and conservation of fish in critical habitats • Marine resource management including coastal ecosystems and coral reefs.	• Reduction of deforestation and forest degradation • Conservation and sustainable management of forest areas • Increased afforestation and reforestation • Sustainable fuel wood plantations • Preservation, restoration and management of wetlands • Preservation, restoration and management of costal ecosystems such as mangrove forests. • Creation of opportunities for sustainable livelihoods for communities.	• Renewable energy: geothermal, solar, wind, biomass • Energy efficiency in public buildings • Energy efficient household products (lighting, cook stoves) • Climate-proofing energy infrastructure • Exploration of allocation of royalties from extractives to a fund to support low-carbon and climate-resilient development	• Low-emitting sources such as bio-fuels and LPG/LNG • Transition from fossil-fuelled to electric railway • Mass rapid transit (bus and light rail) in Nairobi • Improvement in heavy duty and passenger vehicle efficiency • Climate-proofing transport infrastructure	• Promotion of low-carbon and green commodities • Climate proofing of transport and storage facilities • Climate resilient trans-boundary trade
Tourism	**Manufacturing**	**Water and Sanitation**	**Disaster risk management**	**Research & Innovation**
• Energy efficiency such as solar water heating and lighting and efficient transport • Research on the potential vulnerabilities of wildlife to tourism • National sustainable tourism strategy, land-use policies, sustainable ecosystem management of the National Parks and opportunities for sustainable livelihoods for communities.	• Promotion of new technologies in energy-intensive industries • Energy efficiency • Industrial-scale cogeneration using biogas • Development of green industrial zones • Climate-proofing of industrial facilities	• Integration of climate risks in water modelling • Enhanced water storage capacity • Promotion of energy efficient technologies in water supply projects • Conservation of water towers • Improved water management and water conservation	• Monitoring systems • Multi-year food and cash mechanisms • Water management • Climate-proofing of infrastructure • Livelihoods diversification	• Incentives for private sector to undertake research • Mechanisms to encourage uptake of clean techs • Educate public sector institutions on climate change

[18] including, for example, drought tolerant high value and alternative crops; water harvesting for crop production; efficient irrigation systems; index-based weather insurance; conservation agriculture: agroforestry; soil management; animal breeding; and integrated farming systems including aquaculture;

Annex D: Green bonds – Issuance Models

Access to finance has been identified as one of the key challenges to achieving the transition to the green economy. Green bonds are a tool to mobilise private capital towards financing the transition, tapping into the demand for low-carbon and climate-resilient investments. Green bonds can also be a source of funding to complement other sources, such as bank funding or the issuer's own resources.

1. Corporate Issuance – Specific Projects

Companies raising capital to finance their own green projects must identify the green projects or ensemble of green projects to be financed or refinanced.

Issuance process
The company seeking to raise capital may establish one or more Special Purpose Vehicle/s (SPV) to host the green projects and the issuance green bonds for their respective financing. It is necessary to specify the requirements and procedures adopted for the issuance and post-issuance for each SPV.

2. Corporate Issuance – Green Investment Programme

Companies may choose to issue green bonds to finance a programme of green investments without specifying the respective projects at the moment of issuance. In this case, the Issuer indicates only the categories of projects to which the proceeds will be allocated (e.g. energy efficiency, renewable energy generation, etc.) and specification can be made post-issuance.

Issuance process
As the green projects will not be specified at the time of the Bond issuance, the eligibility definition can be based on the following:

- Social and Environmental Policy of the Issuer, validated by the Senior Management
- Strategy defined by the Issuer to implement the policy
- Environmental goals and/or objectives of the Issuer
- Action plan to meet the strategies and goals
- Reference guidelines to issue green bonds (e.g. Green Bond Principles and Taxonomy of Climate Bonds Standards)

3. Corporate Issuance – Exclusively Green Business (pure play)

Where a company with exclusively green business (pure play) raises green bonds, the proceeds can be used for general purposes without specifying any of the projects that will be financed with the proceeds. However, if the company starts new activities or enters into new businesses, it is recommended that the company specifies which projects will be financed.

Issuance process
The most recent update of the Green Bond Principle (GBP) recommend this type of company follow the guidelines valid for all green bond issuers, so that there will be not be any different levels of transparency regarding the use of the proceeds, environmental performance indicators and report to investors and the market.

Annex D: Green bonds – Issuance Models (continued)

4. Financial Institutions

Financial Institutions (commercial, development banks, etc.) play a distinctive role in the green bond market, since they can act as Issuers, Underwriters and Investors. Financial institutions can issue bonds to finance or refinance their own green projects or finance their clients' green project portfolios (through green loans or green financing)

Issuance process

It is imperative for the credibility of the issuance that the social and environmental responsibility policies and practices established by the financial institution are consistent with:

- The evaluation of the eligibility criteria for selecting the green loan portfolio
- The decision-making process adopted by the financial institution to select and evaluate the green project that will receive the finance

5. Development Banks or Multilateral Entities

Development banks can leverage the growth of the green bond market in several ways, regardless of the issuance model. They may act in the following ways:

- Promotion of the market being first movers and currently the largest issuers
- Enhancement of the Issuer credit profile by giving guarantees, which can significantly increase the rating and attract more conservative investors
- Advisory to the issuers in the process of structuring and issuance of green bonds. The International Finance Corporation (IFC), for instance, encourages Issuers to define the eligibility criteria for their green projects based on their guidelines for Green Bonds and on their performance standards, which include a certification programme for sustainable buildings (EDGE tool) developed by the IFC.

6. Aggregation - How can the challenge of small-scale projects be overcome?

As green investment is a relatively new development in Kenya, there are many examples of smaller scale projects and limited pools of green assets within financial institutions and corporates, which may impede the issuance of a green bond from a single issuer.

One potential solution to this challenge is pooling assets into a pooled fund or a Special Purpose Vehicle that will allow for more efficient access to capital for smaller disbursed green assets.

Annex E: Sample CBI Green Bond Report

Note: Examples of issuers' annual Green Bond reports can typically be found on the issuer's website. Herein is a sample report for a CBI certified bond.

[Letterhead of issuing entity, including contact information]

[Date of the statement]
Climate Bonds Standard Board
c/o Climate Bonds Initiative
72 Muswell Hill Place
London, N10 3RR
United Kingdom

Dear CBI,

Re: Annual Report for the Certified Climate Bond [unique name of the bond]

This statement and the attached report are provided in accordance with clause 7 of the Application and Agreement for Climate Bonds Certification between CBI and ***[legal name of issuing entity]*** dated ***[date of the Certification Agreement].***

I confirm that as of [the last day of the relevant financial year]; [legal name of issuing entity] was, to the best of my knowledge, in conformance with the Certification requirements of the Climate Bonds Standard.

Attached is a report which provides an annual update on the projects which, as of [the last day of the relevant financial year], were associated with the [unique name of the bond] and are eligible under the Climate Bonds Standard.

I confirm that I am an authorized officer of [legal name of issuing entity] and I am authorized to sign this statement.

Signed on behalf of [legal name of issuing entity] by: …….
(Signature)

Name:
Title:
Date:

Annex E: Sample CBI Green Bond Report (continued)

The following are optional, and suggested for inclusion if possible.

1. Introductory Text for the green bond from this issuer

- How does the green bond (s) fit with the issuer's broader sustainability strategy?
- Is this bond part of a larger Programme? If so, how much has been issued in the programme so far?

2. Use of proceeds

- For bonds that finance a mix of proceeds, show a pie chart of distribution of proceeds amongst them
- Other interesting splits of the use of proceeds information… range of performance among a portfolio of buildings.

3. Process for selection

- Is there an internal Green Bond Framework which prescribes the process for selection?
- Has the process changed since the issuance / previous report?

4. Management of proceeds

- How much has been allocated so far?
- Has the allocation changed since the last report?
- What is being done with unallocated proceeds?

5. Reporting

- Where is the reporting available for the public (non bold holders)?
- Is there a broader report which includes green bond information? E.g. company annual reporting
- Timeline for issuance of the bond, first report, annual reporting, allocation of proceeds.

6. See assets list and impact information in the table below.

Annual Report on Nominated Projects & Assets associated with the ***[unique name of the bond]*** issued on ***[date of issuance]*** by ***[legal name of issuing entity]***

Proceeds from the ***[unique name of the bond]*** have been allocated or re-allocated to the Nominated Projects & Assets listed below. ***[Delete rows which are note relevant to the individual bond]***

Project / Asset	Investment Area	Eligibility and Impact Indicators	Value [currency]
List of projects/assets or groups of projects/assets	Wind	[Eligibility: Automatic eligibility based on asset characteristics] [Suggested impact indicators: MW of capacity] [Best practice: GHG emissions reduction]	New or existing assets. Finance or re-finance.
List of projects/assets or groups of projects/assets	Solar	[Eligibility: Automatic eligibility based on asset characteristics] [Suggested impact indicators: MW of capacity or number of installations] [Best practice: GHG emissions reduction]	

Annex E: Sample CBI Green Bond Report (continued)

Project / Asset	Investment Area	Eligibility and Impact Indicators	Value [currency]
List of projects/assets or groups of projects/assets	Geothermal	[Eligibility: Based on carbon intensity of the assets (gCO2 per kWh output)] [Suggested impact indicators: MW of capacity] [Best practice: GHG emissions reduction]	
List of projects/assets or groups of projects/assets	Marine Renewable	[Eligibility: Based on Adaptation and Resilience Checklist] [Suggested impact indicators: MW of capacity] [Best practice: GHG emissions reduction]	
List of projects/assets or groups of projects/assets	Low Carbon Transport	[Eligibility: Automatic eligibility based on asset characteristics or based on carbon intensity of transport (gCO2 per passenger km or tonne km)] [Suggested impact indicators: Capacity of public transport assets, capacity of freight assets, or number of vehicles financed] [Best practice: GHG emissions reduction, cars not required due to public transport, number of passengers transported]	
List of projects/assets or groups of projects/assets	Low Carbon Buildings	[Eligibility: Based on carbon intensity of the assets (gCO2 per square meter) or meeting a low carbon proxy] [Suggested impact indicators: Amount of floor space available, number of residences financed, or expected improvement in performance] [Best practice: GHG emissions reduction]	
List of projects/assets or groups of projects/assets	Water Infrastructure	[Eligibility: Based on Adaptation and Resilience requirements] [Suggested impact indicators: reduced emissions compared to previous] [Best practice: other project dependent indicators]	
… [add additional rows as necessary]			
		Total	

[Drafting Notes for preparing this Report:
- *Eligibility Indicators must be provided or referenced in the Annual Report*
- *The sections lined "best practise" are optional, and recommended if possible and relevant to the asset.*
- *Where quantitative impact indicators are provided, the methods and the key underlying assumptions used in preparation of the indicators and metrics must be disclosed as part of this Annual Report, perhaps in an Annex.*
- *If a table is not appropriate for the relevant Projects & Assets, then a series of short statements can be provided which include the relevant information and indicators.]*

Annex F: Sample KPIs

Relevant impact indicators will be selected by the issuer. Relevant indicators will vary based on the sector and projects to be funded and can include energy capacity installed, electricity generated, greenhouse gas emission performance of buildings, numbers of passengers carried by public transport, number of electric vehicles manufactured, volume of wastewater treated.

The list below provides examples of possible KPIs.

Categories	Examples of indicators
Renewable Energy (RE)	
Annual generation of RE	MWh/GWh (electric) or GJ/TJ (other energy forms)
RE generation capacity of the project (new or existing)	MW/GW
Capacity of the RE project / plant to use power transmission systems	MW
RE consumption	% of total power consumption
Annual reduction of GHG emissions / avoided emissions	Tons of CO_2 equivalent
GHG absolute emissions (annual) of the project	Tons of CO_2 equivalent
Energy Efficiency	
Annual reduction of power consumption	MWh/GWh (electric) or GJ/TJ (other energy forms)
Annual reduction of GHG emissions (avoided emissions)	Tons of CO_2 equivalent
GHG absolute emissions (annual) of the project	Tons of CO_2 equivalent
Pollution prevention and control	
Waste generation reduction	Tons
Amount of recycled wastes	Tons
Contaminated areas recovered	Tons of soil / contaminants / pollutants treated
Contaminated areas recovered	square meters
Sustainable management of natural resources	
Annual reduction of GHG emissions (direct or indirect) /avoided emissions	Tons of CO_2 equivalent
Annual GHG balance (emissions and removals)	Tons of CO_2 equivalent
Annual increase in productivity	Tons / hectare
Reforested / restored area	Hectares or % of the area
Degraded area recovered	Hectares or % of the area
Increase in the adoption of integrated production systems	Hectares

Categories	Examples of indicators
Increment in the adoption of good agricultural practices (e.g. zero tillage)	Hectares or % of the area
Reduction in the application of pesticides	kg of active ingredients per hectare / year
Reduction in the use of chemical fertilizers	kg / hectare / year
Sustainable forest management	Hectares or production volume or % production
Biodiversity conservation	
Biodiversity monitoring	Number of individuals and species identified
Increase of the population of endangered species	Increase of the number of individuals of endangered species
Protected or restored habitats	Hectares
Deployment of Protected Areas (e.g. Conservation Unit or Indigenous People's Land)	Hectares
Forest / native vegetation restoration	Hectares
Clean transportation	
Absolute annual reduction of GHG emissions /avoided emissions	Tons of CO_2 equivalent
Reduction of GHG emissions / avoided emissions	Tons of CO_2 equivalent / km
Absolute annual reduction of pollutant emissions (non-GHG)	Tons of the pollutant
Reduction of pollutant emissions (non-GHG)	Tons of the pollutant / km
Sustainable management of water resources	
Reuse of water	cubic meters or % of total use
Annual reduction of water consumption	cubic meters
Annual reduction of water impoundment	cubic meters
Water and effluent treatment	cubic meters of water / effluent treated
Adaptation to climate change	
Use or development of more resistant varieties	Reduction of production losses (ton, % or $)
Reforestation for protection against floods	Hectares
Resilience infrastructure: construction / adaptation of dams and / or other structures	Benefited area Number of benefited individuals
Avoided deforestation	Tons of CO^2 equivalent
Products , production technologies , and eco-efficient processes	
Attested certification of sustainability	Annual certified production volume or % of the certified production
Reduction of the use of materials	Tons of raw materials / year

Contact info

Nairobi Securities Exchange

Tel: +254 20 2831000/+254 (020)2224200
Mobile: +254724 253 783/+254733222007
Email: info@nse.co.ke
Website: www.nse.co.ke