



UNDERSTANDING THE AFRICAN  

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**GREEN BOND MARKET**

**ALCBFUND** 

## 1. THE GREEN BOND MARKET

The labelled Green Bond market has multiplied more than fivefold in size from 2013 to 2017, when it reached USD 156 billion in new issuances. The market grew by 92% from 2015 to 2017. These figures exclude bonds that do not meet international green definitions, such as reduced-emissions coal or hydro and grid connection projects which, if included, would represent a material amount of bond issuances as well.

Issuer type and geography have also greatly expanded in recent years, with Emerging Markets such as India, China and now some African nations joining the fray. A DFI dominated market until a couple of years ago, there is now a strong corporate presence, and growing municipal issuance market outside of the United States (where it is already well developed) including the 2017 Cape Town issuance, and growing sovereign interest (France, Nigeria, Indonesia, Poland to name a few).

The value proposition of Green Bonds driving the rapid increase in participation is multi-faceted, as the “greenness” of Green Bonds adds value in several ways.

## 2. GUIDELINES AND MARKET STANDARDS

The Green Bond market is not formally regulated, relying instead on compliance by issuers with voluntary guidelines and standards such as the Green Bond Principles (GBP) and the Climate Bond

## GREEN BONDS: BENEFITS



### RISK MITIGATION

- Regulatory: e.g. mandatory reporting of carbon footprint of portfolio;
- Financial: e.g. use of stranded assets; reduced environmental disasters;
- Reputational: e.g. for companies with defined carbon goals, meeting ESG targets.



### INVESTOR/CAPITAL ACCESS

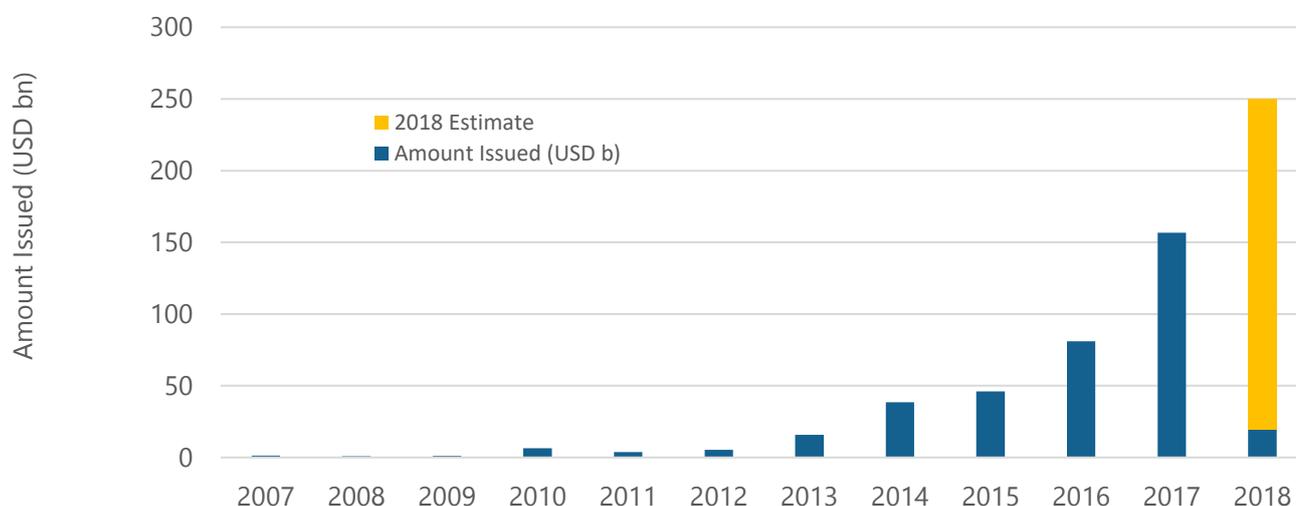
By issuing green bonds issuers have been able to vastly diversify their investor pool, reaching asset owners who might not otherwise have invested in a traditional bond issued by the same firm.



### PRICE PREMIUM

There is some evidence that there is a small Green Bond “price premium” in the secondary market, while some issuances have priced tighter than general bonds by the same issuer. However, the effect remains small and investors are reluctant to assign an explicit value to “greenness”. Market participants believe this will grow as interest rates pick-up.

## GLOBAL GREEN BOND ISSUANCES



Standards (CBS). Both offer guidance on suitable use of proceeds for a green bond issuance, the process for project selection and evaluation, management of proceeds and reporting. Across the market, currently, the emphasis is on the use of proceeds: this being the main qualifier for defining a bond “Green”. However, there is an increasing pressure from investors on improving reporting and increasing transparency.

The move towards more transparent reporting is being led by a group of 11 DFIs which have agreed on a standard reporting format for Energy Efficiency and Renewable Energy projects financed through Green Bond issuances. However, a number of corporates also provide extensive reporting on impact and disbursement to projects, though the format and content are highly idiosyncratic.

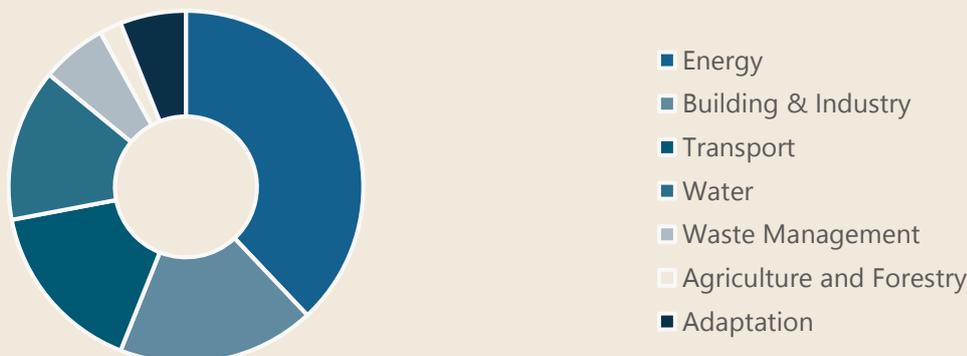
The renewable energy and energy efficiency sectors are by far the most advanced in terms of available guidelines and reporting. These are the easiest technologies to assess for environmental impact and easy to justify as receivers of Green Bond proceeds, as a result these also constitute the majority of Green Bond-financed projects today.

The issuance and verification process as it stands today relies heavily on voluntary adherence to standards, reporting and use of a second opinion provider:

- The current “gold standard” for the green bond market is adherence to the Green Bond Principles or the Climate Bond Standards (closely aligned). Compliance with these can be certified or verified through a second opinion, provided by a

- Issuers are encouraged by the GBPs to create a Framework for their Green Bond issuances, in which they define the eligible types of projects the bonds will finance. A firm’s Green Bond framework will cover all of its issuances, and includes the firm’s processes for project selection, and commits the firm to ring-fencing of Green funds. At each issuance, in theory, the specific projects to which the funds will be allocated should be indicated: these are “commitments”. In reality, a significant proportion of issuers do not point to specific projects for financing *ex-ante*, but rather disclose the receivers of the financing at a lag to issuance, in the relevant annual Green Bond reports;
- The validation of a Green Bond at the moment is heavily skewed towards a qualitative assessment of use of proceeds: GBP and CBS outline eligible technologies and activities for the issuance of a green bond (to greater or lesser degrees of detail), and outline the reporting requirements around the use of proceeds – including the creation of a “Green Bond Framework” by the issuer ahead of the bond issuance;
- A third party (CICERO, Sustainalytics, Vigeo, etc.) will assess the issuer’s Green Bond Framework, reporting process and the identified use of proceeds, and issue a statement/certification that gives investors confidence that the bond complies with the GBP/CBS guidelines, alternatively “verification” of disbursement and allocation of funds is carried out by firms such as KPMG and EY, or for technologies where explicit guidance is available CBI will certify the issuance against its own CBS standards;

### THE GREEN BOND MARKET BY USE OF PROCEEDS SECTOR



Source: Green Bonds Highlights 2016, Climate Bonds Initiative

- No hard impact restrictions or regulations currently apply to the market.

It is important to note that currently entities can issue bonds without obtaining a second opinion, or even creating a framework or producing reports.

The transparency and detail around the issuance is very much voluntary. However, the degree of detail and compliance with standards does impact the

credibility of the issuance as green, and as such the investor base it attracts.

As a result of the additional, though voluntary, requirements for issuing Green Bonds, the issuance costs also increase. Such costs arise explicitly in the form of third parties for the provision of a second opinion, and implicitly in the form of additional internal processes and administrative costs.

## GREEN BOND PRINCIPLES (ICMA)

The Green Bond Principles (GBP) are voluntary guidelines for the issuance of green bonds, they cover use of proceeds, reporting, and process and are housed by ICMA. The GBPs encourage transparency and disclosure, by clarifying the approach for issuance of a Green Bond, including outlining the process for project selection and the creation of a Green Bond Framework by issuers.

**Use of Proceeds:** Green Projects should provide clear environmental benefits and be described on the bond's legal documentation. When the proceeds are used for refinancing purposes, the share of refinancing vs. financing should be stated, as well as which investments or projects will be refinanced. It is expected that the use of proceeds is defined ex-ante with the expectation that these will be reported on further down the line by issuers. The GBP outline the following eligible project categories:

CATEGORIES	PROJECT EXAMPLES
<b>Renewable energy</b>	Production, transmission, appliances and products
<b>Energy efficiency</b>	New and refurbished buildings, energy storage, district heating, smart grids, appliances and products
<b>Pollution prevention and control</b>	Waste water treatment, greenhouse gas control, soil remediation, recycling and waste to energy, value added products from waste and remanufacturing, and associated environmental monitoring analysis
<b>Sustainable management of living natural resources</b>	Sustainable agriculture, fishery, aquaculture, forestry and climate smart farm inputs (e.g. biological crop protection or drip-irrigation)
<b>Terrestrial and aquatic biodiversity conservation</b>	Protection of coastal, marine and watershed environments
<b>Clean transportation</b>	Electric, hybrid, public, rail, non-motorized, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions
<b>Sustainable water management</b>	Sustainable infrastructure for clean and/or drinking water, sustainable urban drainage systems and river training and other forms of flooding mitigation
<b>Climate change adaptation</b>	Information support systems, such as climate observation and early warning systems
<b>Eco-efficient products, production technologies and processes</b>	Development and introduction of environmentally friendlier, eco labelled or certified products, resource efficient packaging and distribution

## Process for Project Evaluation and Selection

Within their Framework, the issuer should outline a clear process for determining how the projects supported fit the categories defined by the GBP, and define the associated environmental sustainability objectives. The GBP encourage the use of a third party to provide a “second opinion” on the framework’s compliance with the Principles.

## Management of Proceeds

The proceeds from Green Bonds should be ring-fenced from proceeds from other bonds. Additionally, the issuer should provide information on the intended types of temporary placement for the balance of unallocated proceeds. To increase transparency, the GBP encourage the use of a third party to verify the internal tracking method and allocation of funds.

## Reporting

Issuers are advised to keep updated information on the use of proceeds, which should be renewed annually.

The GBP also defines four types of Green Bonds:

1

**Green Use of Proceeds Bond:** standard recourse-to-the-issuer debt obligation

2

**Green Use of Proceeds Revenue Bond:** a non-recourse-to-the-issuer debt obligation

3

**Green Use of Proceeds Project Bond:** for a single or multiple Green Projects for which the investor has direct exposure to the risk

4

**Green Use of Proceeds Securitised Bond:** collateralised by one or more specific Green Projects

## CLIMATE BOND STANDARDS

The Climate Bond Standards (CBS) were produced by the Climate Bonds Initiative and are used for the Climate Bonds Standard & Certification Scheme, currently the only certification available for Green Bonds, created by the same institution. The CBS are similar to the GBP, but with more in depth information regarding the types of projects and technologies eligible for Green Bond financing, as well as recommendations in reporting and impact (currently only available in detail for Renewable Energy, Efficiency and Transport).

The CBS requirements are divided into pre-issuance and post-issuance requirements. Pre-issuance requirements include:

- Documentation on the bond’s environmental objectives and investment sectors,
- The determination of eligibility criteria for projects and assets to be funded, and
- Tracking and management of allocated and unallocated proceeds.

Post-issuance, the CBS focus on on-going reporting of the actual use of proceeds and eligibility of these under the relevant project categories.

*Criticism of the GBP and CBS have been primarily around the lack of stringency for reporting on realised impact of the investments and on actual use of proceeds.*

### 3. THE GREEN BOND MARKET IN AFRICA

The African Green Bond market is significantly underdeveloped. Until 2017 most issuances in Africa had been from DFIs: the African Development Bank, IFC and EIB, as well as some foreign development banks issuing in Rand and targeting the Japanese Uridashi market with only four local issuances: two in Morocco and two in South Africa, including a private placement. In 2017, however, African markets hit “Go” on Green issuances, with Cape Town issuing a benchmark Green Bond for South Africa in Spring 2017, and Nigeria coming to market with a small but significant issuance in December.

Despite the uptick in activity, and a degree of competitiveness across countries to become the Green bond hub of Africa, there are yet to be any corporate green issuances on the continent south of the Sahara.

The market remains limited however and this lag in uptake is likely largely due to the nascent stage of African capital markets (although to a lesser degree in South Africa). However, the associated explicit and implicit costs of issuing a Green Bond could also prove a hurdle if the upside of the effort is not fully understood or not sufficient; this is particularly true of smaller issuance sizes.

South Africa saw the first two issuances in SSA, though both fell slightly short of market expectation on transparency and disclosure. Its third issuance, Cape Town municipality, however, was vastly oversubscribed and aligned with international investors’ expectations. The JSE has also now launched a Green Bond segment on the Johannesburg Stock Exchange, with associated guidelines for listing, to encourage local issuances.

Nigeria and Kenya are also making progress towards catalysing their own Green Bond markets through policy and sovereign issuances. Nigeria published its own Green Bond guidelines in 2016 and recently

issued the first tranche of a NGN 150 billion Naira Green Bond programme in December 2017, the first Sovereign Green Bond to be issued in Africa. Kenya, meanwhile, has been working on publishing its own guidelines and creating a stock exchange segment, and has launched a three-year Green Bond programme (supported by FSDA, FMO and IFC) focusing on building the market capability in Kenya and East Africa more broadly.

As shown in this section, the current issuance landscape is highly heterogeneous, with none of the bonds yet fully<sup>1</sup> representing the market “gold standard”:

- Listed;
- Framework available and easily accessible;
- Second opinion available and easily accessible;
- Post-issuance reporting available and easily accessible.

Each outstanding issuance ticks one or more, but not all of these boxes. This is to be expected of a market that is just starting to develop, however experience from more sophisticated Green Bond markets has shown that trail-blazing top of the class issuances initiate a virtuous circle of improved transparency and reporting driven by investor demand.

Supporting the development of the African Green Bond market at this early stage could be an opportunity to set the bar for process and disclosure standards. In catalysing market development, the uptake of internationally recognised standards should be encouraged and will lend credibility to issuances – thus attracting a wider investor pool. This, however, should be balanced with the current level of market sophistication.

#### 3.1 The Nigerian Green Bond Market

The government of Nigeria issued a USD 29.7mm sovereign Green Bond in December 2017, the first sovereign green issuance in Africa. The size of the

<sup>1</sup> Recognising that with both the Cape Town and Nigerian issuances annual reporting would not yet have been released

issuance was smaller than expected, however it was relatively well received by the Green bond community.

Ahead of the issuance, the Federal Ministry of Environment published the Nigerian Green Bond Guidelines (GBGs). These are relatively broadly aligned with the Green Bond Principles but highlight the Ministry's desire to use Green Bonds to achieve the country's Nationally Determined Contributions to reducing emissions (NDCs). An outline of the GBGs is given in the next page.

### 3.2 Kenyan Green Bond Market

The Green Bond effort in Kenya is being driven by the Kenyan Bankers' Association (KBA) and the Nairobi Stock Exchange (NSE) with the support of a number of DFIs as well as the Kenyan government and the Climate Bonds initiative. The group is driving the creation of relevant policy and a dedicated three-year Green Bond programme. The first issuances are expected to come from local financial institutions, likely supporting renewable energy. The KBA is also looking to create a pooled green bond facility, the first of its kind, which aims to allow Tier 2 and 3 banks to access the market.

The NSE and KBA will also shortly publish guidelines for Green Issuances listed on the Green Segment of the NSE, these may include fiscal incentives. In addition, more recently, CBI and the Kenya Green Buildings Council announced an initiative to increase Green Buildings construction in Kenya and financing of these through Green Bonds.

Through the programme, the DFIs are also supporting the creation of local entities able to support market development through the provision of framework development expertise and assurances such as second opinions.

Whilst no formal announcement of a sovereign issuance has been made, there has been mention that one might follow private sector pioneers.

### 3.3 South African Green Bond Market

The JSE has published the guidelines for listing on its newly launched Green Bond Segment in early autumn 2017 - these are aligned with the Green Bond Principles and broadly require some form of third party assurance as to the Bond's compliance with the GBPs or CBS. The City of Cape Town Green Bond, issued in July 2017 and viewed as a major success in the Green Bond space, was the first to list on this segment of the JSE.

It is expected that a number of financial institutions will come to market, with some renewable energy transactions, as well as a local property developer in the process of issuing a green bond to refinance a number of LEED rated buildings. However, the corporate landscape remains extremely thin on Green Bonds with little credit diversity among issuers.

## NIGERIA: GREEN BOND GUIDELINES AND NATIONALLY DETERMINED CONTRIBUTIONS

The Federal Ministry of Environment (FMEnv) of the Government of Nigeria has published their own guidelines for issuing Green Bonds in the Nigerian market, and it directly references their NDCs. The FMEnv sees Green Bonds as both a means to finance the NDCs and a way of increasing non-governmental participation in the local capital market. To this end, and to stimulate issuances, they have drawn up specific Green Bond guidelines for issuance locally.

The Guidelines are broadly aligned with the Green Bond Principles in their structure, however the eligible categories for projects are significantly more prescriptive. A summary of the guidance is given below.

### A. Use of Proceeds

These are split into mitigation and adaptation activities, and linking these “with key targets in the NDCs” is seen as important.

#### i. Mitigation

THEME	EQUIVALENT NDC TARGET	PROJECT TYPE
<b>Energy efficiency</b>	2% per year energy efficiency (30% by 2030), Efficient gas generators	Investments in equipment, systems and services which result in more efficient use of energy
<b>Resource Efficiency</b>	Work towards ending gas flaring by 2030 Improve electricity grid	Investments to improve industry processes that enhance energy conversion
<b>Renewable Energy</b>	Work towards Off-grid solar PV of 13GW (13,000MW)	Investments in equipment, systems and services which enable renewable energy
<b>Clean Technology</b>	Transport shift – car to bus	Investments in manufacturing of components that support renewables

#### ii. Adaptation

THEME	EQUIVALENT NDC TARGET	PROJECT TYPE
<b>Sustainable Forest Management</b>	Climate smart agriculture and reforestation	Investments in initiatives that benefit sustainable agriculture, fishery, aquaculture, forestry and climate smart farm inputs such as biological crop protection or drip-irrigation

### B. Project Eligibility

*This section is similar to the Process for Project Evaluation and Selection in the GBPs.*

The issuer must outline:

- a process to determine how the projects fit within the eligible Green Projects categories,
- the related eligibility criteria; and
- the environmental sustainability objectives and association with the NDCs

### C. Management of Proceeds

Proceeds are to be ring-fenced or otherwise tracked for the bond’s maturity, and their use reported on. The use of auditors or third parties to verify the internal tracking method is encouraged.

### D. Reporting

Issuers are invited to keep up to date records of proceeds allocation, and of the projects’ impact, including where applicable: annual energy savings, annual GHG reductions, amount of RE produced, capacity of the project. This can be done at portfolio % level where necessary rather than project specific level.

## 4. ISSUERS

The Green Bond market in Africa is nascent. A number of multilateral institutions such as the IFC, the AfDB and the EIB have issued green bonds in South African Rand. They are not, however, relevant for the purpose of this document. Green Bonds issued in Africa by non-DFIs have focused primarily on “blue chip” credits:

Issuer	Size (USDm)	Issue date	Maturity	Issue type	Country of domicile	Second Opinion	Framework	Main Investors
City of Cape Town, South Africa	84.0	7/2017	7/2027	Listed	South Africa	No	Yes	Stanlib Asset Management, Sanlam, Prescient Management
Federal Gov. of Nigeria	2	12/2017	12/2022	Listed	Nigeria	No	Yes	U/K
City of Johannesburg South Africa	136.9	6/2014	6/2024	Listed	South Africa	No	No	Stanlib Asset Management, Old Mutual PLC, Sanlam LTD
Nedbank	297.2	8/2012	8/2017	Retail Bond	South Africa	No	No	Retail
BMCE Bank	50.1	11/2016	11/2021	Unlisted	Morocco	No	Yes	U/K
Moroccan Agency for Solar Energy (MASEN)	115.2	11/2016	11/2034	Private placement	Morocco	Yes	Yes	Al Barid Bank, Attijariwafa Bank, La Caisse Marocaine des Retraites

*Sources: Bloomberg and Climate Bonds Initiative (as of 31/12/2017).*

### City of Cape Town Green Bond

The City of Cape Town issued a 1 billion Rand Green Bond in mid-2017 which was the first to be listed on the JSE's new segment. This was the third ever issuance in SA and the second municipal Green Bond (Johannesburg was the first), however it is broadly regarded as SA's first true Green Bond. The bond was five times oversubscribed and priced tight to the curve, demonstrating the investor demand for credible and defensible green issuances in markets with more appealing yields. The bond was awarded a GB1 rating by Moody's and was verified by KPMG against the CBS. The proceeds will be primarily used to improve Cape Town's water infrastructure and efficiency, as well as transport.

### Federal Government of Nigeria Green Bond

The Federal Government of Nigeria's sovereign Certified Climate Bond is the first ever Certified sovereign green bond, the first African sovereign green bond, and the first Nigerian green bond. The first tranche came to market in December 2017, with investor appetite falling below expectations but generally embraced by

the green bond community. The government has announced its intention to raise further funding in 2018, with the objective to raise a total of NGN 150 billion through its programme. The intended use of proceeds will see investment in reforestation, microgrid projects, electric commuter vehicles and “environmentally friendly” projects in the Niger River delta. The bond will also help catalyse diversification away from oil, a particularly relevant issue in the current price climate.

### **City of Johannesburg Municipal Green Bond**

The City of Johannesburg Green Bond programme was the first emerging market municipal issuance, and was 1.5 times oversubscribed. The proceeds will finance projects that reduce greenhouse emissions and contribute to a “resilient and sustainable city” (City of Johannesburg) such as the Biogas to Energy Project, the Solar Geyser Initiative. The bond has not been through an independent review and no Green Bond Framework is available for this issuance.

### **BMCE Bank Green Bond**

BMCE issued a USD50.5m Green Bond to finance renewable energy and energy efficiency projects in Morocco over the next 5 years. Interestingly, the BMCE has specified minimum energy savings and avoided emissions amounts for energy efficiency projects to be eligible under their framework. Though BMCE issued a Green Bond Framework, no second opinion is available.

### **MASEN Green Bond**

The issuance will be used to finance three solar energy projects in Morocco (Noor Laayoune, Noor Boujdour, and Noor Ouarzazate IV) and will benefit from a sovereign guarantee from the Kingdom of Morocco. A Green Bond Framework is available and Vigeo Eiris acted as the second opinion provider on the issuance, which has been certified under the Climate Bonds Standards<sup>2</sup>.

## **5. CONCLUSIONS**

The African Green Bond market is largely underdeveloped, with very few non-sovereign risk and non-supra issuances taking place. Even in South Africa, issuance is very low given the relative sophistication of the market: despite local and international investor appetite there have been only two non DFI issuances, a local retail bond and a municipal issuance<sup>3</sup>. Where other markets in Africa may be further from being obvious candidates for a corporate Green Bond issuance, South Africa has the potential to grow this sector quickly.

Providing anchor investment for Green Bond issuance in Africa, starting with South Africa, is consistent with the ALCB Fund’s mandate to promote capital market innovation and primary issuance. South Africa has the potential to pilot Green Bond transactions for the Continent, with investors such as Stanlib and Sanlam already articulating green investment strategies (and investing in SA Green Bonds). The Fund also has the potential to promote offshore investment in African Green Bonds. Although there is no universal rulebook for the issuance of Green Bond, and the adherence to “best in class” guidelines is not mandatory, the fund could play a significant role in guiding the market to a reasonable level of transparency.

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<sup>2</sup> Please note that some issues have been raised regarding the location of the projects funded by the MASEN Green Bond, as they are located in the politically disputed Western Sahara.

<sup>3</sup> This is indicative of wider weaknesses in the SA corporate and structured finance (securitization) bond market

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