Key messages

- Africa is expected to be hardest hit by the adverse impacts of climate change in the absence of a significant scale-up of investment in mitigation, adaptation and other relevant initiatives.

- Green bonds – a green-labelled financial instrument, the proceeds of which are expected to (re)finance projects and assets with clear environmental benefits – are one innovative channel to raise capital for Africa. The issuance of green bonds has been gaining traction in Africa in recent years.

- The African market is dominated by a small number of states and entities with a cumulative issuance of less than 1% of global volumes over 2012-2019.

- Multilateral development institutions have contributed significantly in growing the African market but many inherent challenges remain.

- Prospects for growth are high given that a growing number of states and other actors are either planning to issue green bonds or are developing their own national guidelines.

Africa contributes around 4% of global CO₂ emissions but is among the most vulnerable to the negative impacts of climate change (Ritchie and Roser 2019; Hsiang and Meng 2014; Kudamatsu et al. 2012). These adverse impacts, which will be felt across many areas, from agriculture to healthcare, are likely to be severe because many African states lack, or have low levels of, adaptation capacity, due in part to low levels of investment (LSEG Africa Advisory Group 2018).

Significant financial resources are required to adapt to and mitigate climate change risks and meet other critical development targets across sectors and states, such as those attached to the Sustainable Development Goals (SDGs), but the level of currently-available public finance is inadequate. However, the infrastructure gaps that need to be closed present an opportunity for governments and private sector actors to integrate sustainability into the design and execution of development projects, which would facilitate inclusive, sustainable growth, and significantly reduce poverty and widening socio-economic inequality (Duru and Nyong 2016; Banga 2019).

There is a growing consensus among relevant stakeholders that green finance should be a priority in Africa, as it is in other regions of the developing world. One financial instrument that could help to mobilize capital for significant climate action and sustainable development is the issuance of green bonds.
This brief highlights the findings of a recent report on “Scoping the Sustainable Finance Landscape in Africa: The Case of Green Bonds”. It summarizes the key developments in Africa’s green bonds market and discusses the key stakeholders driving the developments, the story behind the data and the use of proceeds. It also examines the market’s potential for growth, the challenges and opportunities involved in this and how it might be further developed.

**Major stakeholders, trends and outlook**

There has been significant growth in the green finance sector in Africa and there is increased interest among a small number of stakeholders in green bonds. Since the first African green bond was issued in South Africa – the first issuance from an emerging market – bond issues from five further states have added to the list of market participants. South Africa, Morocco and Nigeria are leading this drive. They are at an advanced stage, having developed national frameworks, and are taking some bold initiatives to develop the green bonds market.

In addition to municipalities, the role of corporate issuers, financial institutions and agencies is also even more significant than state/governmental issuances in Africa, with international financial and development institutions, such as the African Development Bank (AfDB), among the strongest stakeholders.

Compared to trends in other regions, Africa’s market for green bonds is nascent and underdeveloped. As of October 2019, green bonds in excess of US$2 billion had been issued in Africa (Table 1; Figure 1), a figure which excludes supranational entities. Thus far, 17 bonds have been issued in six states across the continent; of these, approximately 35% (US$422 million) were climate certified.

Despite marginal growth over 2012-2019, the outlook for the green bonds market in Africa is promising. It is likely that many more states or entities within countries will consider, or are already considering, issuing green bonds to fund climate-related initiatives, given the urgent need to take action on mitigation and adaptation.

**Rules and guidelines development**

While international frameworks such as the GBP are considered the “gold standard”, regulators and stock exchanges around the world still perceive national guidelines and regulations, which take into account specific contexts and circumstances, as important for growing and developing domestic markets for green bonds (Sustainable Banking Network (SBN) 2018). The Sustainable Banking Network (SBN) acknowledges these frameworks as important pillars in developing domestic markets and they are included in the assessment milestones for its members.

Since very few green bonds have been issued in Africa, framework development is also at an infant stage. Morocco, South Africa and Nigeria have played significant roles in developing the green bonds market through various initiatives and the development of national frameworks. Egypt and Ghana are at the early stages of becoming SBN members and have made commitments to push their respective banking sectors to adopt sustainable (green) banking principles (SBN 2019).

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1. The GBPs were initially drafted in 2014 and were updated in 2015. They comprise a number of non-binding voluntary guidelines for green bond issuers, to which the International Capital Market Association (ICMA) ascribes. The four core components are: standard green use of proceeds bonds, green revenue bonds, green project bonds and green securitized bonds (see https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/).

2. Climate certified means verified green bonds that conform to the Climate Bonds Standard. This Standard "contains rigorous scientific criteria which are consistent with the 2 degrees Celsius warming limit declared in the 2015 Paris Agreement". For more details see https://www.climatebonds.net/certification. The CBI runs the only international certification scheme for green bonds (see the Climate Bonds Standard and Certification Scheme, https://www.climatebonds.net/standard).
Table 1. Africa’s cumulative Green Bond issues

<table>
<thead>
<tr>
<th>Country</th>
<th>Green bonds</th>
<th>Amount (US$ mln)</th>
<th>First issuance</th>
<th>Certified climate bonds (#)</th>
<th>Certified climate bond amount (US$ mln)</th>
<th>Use of proceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>1</td>
<td>41</td>
<td>Sep. 2019</td>
<td>✓ (1)</td>
<td>41</td>
<td>Buildings</td>
</tr>
<tr>
<td>Namibia</td>
<td>1</td>
<td>5</td>
<td>Dec. 2018</td>
<td></td>
<td></td>
<td>Energy, buildings, transport, water, waste, land use, adaptation and resilience</td>
</tr>
<tr>
<td>Seychelles</td>
<td>1</td>
<td>15</td>
<td>Oct. 2018</td>
<td></td>
<td></td>
<td>Land use and marine resources</td>
</tr>
<tr>
<td>Nigeria</td>
<td>4</td>
<td>136</td>
<td>Dec. 2017</td>
<td>✓ (2)</td>
<td>71</td>
<td>Energy, transport, water, land use</td>
</tr>
<tr>
<td>Morocco</td>
<td>4</td>
<td>356</td>
<td>Nov. 2016</td>
<td>Yes - 1</td>
<td>117</td>
<td>Energy and buildings</td>
</tr>
<tr>
<td>South Africa</td>
<td>6</td>
<td>1,554</td>
<td>Apr. 2012</td>
<td>Yes - 2</td>
<td>193</td>
<td>Energy, buildings, transport, water, waste</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>2,107</strong></td>
<td></td>
<td><strong>6</strong></td>
<td><strong>422</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Climate Bonds Initiative, October 2019

Country cases

Developments in the green bonds market across six countries in Africa are summarized as follows:

South Africa
- First African state and emerging market economy to issue a green bond in 2012.
- Leading issuer of green bonds on the continent in terms of number of issuances and value.
- Johannesburg Stock Exchange (JSE) - first in Africa to launch a dedicated segment for green bonds with accompanying green listing rules to promote green bond issuances.3
- Only African country developing a green taxonomy.
- Municipal bonds have been issued by the cities of Cape Town and Johannesburg.

Morocco
- Targets of generating 42% of its energy needs from renewable sources by 2020 and 50% by 2030.
- With IFC support, the Moroccan Capital Market Authority (AMMC) is developing guidelines consistent with green bond issuing principles.
- Hosted the 22nd Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 22) in 2016.
- Following COP 22, the Moroccan Agency for Sustainable Energy issued the State’s first green bond in November 2016 to finance utility-scale solar power facilities.4
- Through the so-called Marrakesh Pledge – a side event at COP 22 – the AMMC launched a continental initiative to build an African partnership to scale-up sustainable finance, involving 26 regulators and stock exchanges as signatories.

3 JSE is partnering with the UK stock exchange to develop a new index demanded by environment, social and governance (ESG)-inclined institutional investors to provide impetus to expand the country’s green finance offering.
4 A bond with an 18-year maturity schedule.
Nigeria
- Nationally Determined Contributions (NDCs) under the Paris Agreement commit to reducing carbon emissions by 20% (65% with international support) by 2030.
- The only state in Africa to issue a first Climate Bonds-certified sovereign green bond (US$30 million) in December 2017 to finance renewable energy (solar power, 80%) and afforestation projects (land use change, 19%).
- A second sovereign green bond was issued in 2019 for NGN 15 billion (c. US$41 million).5
- Access Bank Plc became the first financial institution to issue a certified corporate green bond in Africa in 2019, raising NGN 15 billion (c. US$41 million).6

Kenya
- A major destination for investment in renewable energy and a leader in the development of a green bonds market in the East African region.
- Launched a three-year green bond capacity building programme in 2017 (Green Bonds Programme Kenya).7
- Mobilized multiple stakeholders from the public and private sectors to develop a green bonds framework led by the Nairobi Securities Exchange with support from the Green Bonds Programme Kenya. Contributed to the development of revised listing rules in 2019.
- Acorn Projects Limited, a corporate entity, issued a five-year green bond worth KES 4.3 billion (c. US$41 million) to finance green and environmentally-friendly buildings for 5000 students in Nairobi.

Namibia
- The Bank of Windhoek (largest locally owned bank in Namibia) issued a three-year green bond in December 2018 – the first, and thus far, only Namibian issue.
- NAD 66 million (c. US$5 million) of the proceeds from the issue will fund eligible green projects and assets that fit renewable energy, pollution prevention and control, energy efficiency and clean transport criteria.

Seychelles
- With technical and transaction assistance from the World Bank, Seychelles became the first state to issue a sovereign blue bond (a bond technically classified as a green bond and include its recognized bond database), in October 2018.
- The bond issued has a value of US$15 million and a 10-year maturity. The proceeds will pay for marine protection, fisheries management and other projects to protect the ocean economy on which the Seychelles depends.

Opportunities for market growth
A growing number of investors are looking for opportunities to invest in green and SDG-aligned projects and initiatives; with many sectors in Africa in need of significant green investment, extensive possibilities exist for investors. Green bonds could help to avoid future environmental catastrophes, impact human development and be catalytic in facilitating this low-carbon economy transition in a just manner through responsible and sustainable investments. The following bullet points highlight some of the main opportunities for African states and investors to use their leverage to boost the growth and development of the green bonds market:

5 The bond was oversubscribed by 220%. The proceeds will help Nigeria to meet some of its commitments to the Paris Climate Agreement through investments in projects such as off-grid solar and wind farms, irrigation, afforestation and reforestation as well as ecological restoration.
6 About 80% of the proceeds will finance coastal flood defense projects and a new coastal urban development near Lagos. The remaining allocation will go into solar energy generation facilities.
7 According to its long-term national development plan and its NDCs in the 2015 Paris Climate Agreement, Kenya plans to reduce greenhouse gas (GHG) emissions by 30% of 2015 levels by 2030, relative to the business-as-usual (BAU) scenario of 143 MtCO2eq.
• **Greening infrastructure:** The huge infrastructure deficit across the continent presents many opportunities for integrating sustainability principles and standards into the design, execution and delivery of infrastructure projects across a number of sectors, particularly renewable energy.

• **Sustainable urban development:** Africa is projected to experience significant city and population growth in the coming decades. Green bonds could be used to encourage these cities to take the green growth path, with measures including more energy-efficient systems, clean mass rapid transport networks and climate-smart agriculture.

• **Integrating sustainability into projects:** Developing the green bonds market in Africa could help direct investment toward sectors and projects with environmental and indirect social benefits, leading to better overall risk management, heightened competitiveness and long-term financial stability for investors, as well as greater resilience to climate risks for communities.

### Barriers to market development

Green bonds are a useful tool for mobilizing additional capital to finance sustainability challenges in Africa, but the uptake there has been low for several reasons. While various existing frameworks have made it possible for some African states to issue green bonds in recent years, many obstacles to increasing the pace of development of the African green bond market persist (Kidney 2019; Benhida and Mounsif 2019; LSEG Africa Advisory Group 2018).

• **Frameworks:** There is a lack of agreement on the definition of “green” and an absence of uniformity or alignment with international frameworks in the guidelines and rules governing different green bonds markets. This is likely to deter many potential investors.

• **Capacity:** A lack of capacity and technical expertise within regulatory agencies, stock exchanges and domestic banks constrains their ability to issue and develop green bonds. Even where there exists adequate capacity, Africa has no common framework for transparency practices when it comes to, for instance, reporting green bonds.

• **Supporting regulation:** Insufficient supporting regulation prevents the market from taking off and thriving. Despite recent economic growth in many African states, vulnerabilities remain within the financial sector, a barrier to the robust economy and sound regulatory policies needed to support a green bonds market.

• **Small size of issuances:** The size of green bond issues signals potential investment opportunities to investors, therefore driving growth. However, many “green” projects in Africa do not reach the sizes required to attract significant investment, and there is insufficient demand for green bonds among local investors and issuers.

• **Certification:** Independent second opinion assessment is often needed to verify that assets meet the international standards laid out in the Green Bonds Principles. However, there are no known qualified verifiers in Africa offering such services, meaning external private-sector reviewers must be used. This increases the cost of, and potentially deters, the issuing of green bonds.

• **Limited demonstration of benefits:** There is little evidence that green bond issues have mobilized the capital needed for sustainability-related investments. This lack of clear demonstration of costs and benefits could hinder the development of the market in Africa. Rigorous and robust empirical evidence is needed to convince stakeholders to scale-up take-up.

• **Lack of incentive structure:** According to recent studies there is a dearth of fiscal incentives attached to green bonds in Africa. While there is hope that others will soon join, Kenya is currently the only state which provides fiscal incentives for issuing infrastructure bonds (Kidney 2019; LSEG Africa Advisory Group 2018).
Policy recommendations and areas for future research

1. Develop the capacity of all stakeholders through, for example, training and investment in data and knowledge sharing. This can be facilitated by multilateral agencies and such collaboration can mobilize actors to issue green bonds in larger volumes and of greater values, deepening the green finance market in Africa.

2. Support for the green bond market, such as national guidelines, should reflect local market conditions and involve local stakeholders- no single framework can satisfy every context in Africa. They should be simple and robust to build the trust and policy credibility needed to attract investors.

3. The quality of the pipeline of projects must be identified. The current portfolio of eligible pipeline projects and assets is likely to be of insufficient quality or quantity to attract large-scale capital flows through green bond investments in Africa.

4. Fiscal incentives, such as tax breaks or credits for decarbonization, must be researched and trialled to assess whether they stimulate interest in and demand for green bonds in Africa.

5. In order to mobilize issuers, increase the market’s size and attract global players, good practices and challenges in current bond issues should be identified and used to raise awareness among stakeholders.

6. For the green finance market to thrive, a prudent mix of fiscal and monetary policy will be important in many African economies in order to stimulate and maintain investor confidence.

Conclusion

If scaling-up green bond markets in Africa appears promising from the perspective of issuers and investors, it is crucial that local conditions are truly reflected in the design and implementation of guidelines, and that there is alignment with national development priorities.

However, while green and other sustainability-related bonds are likely to be complementary to international and local resource mobilization efforts, they should not be viewed as a panacea for African states’ struggles with financing sustainable development on the continent. In order to advance the market, a better understanding is needed both of the perspectives of African states, regulators, stock exchanges and potential issuers on the role of green bonds, and of the needs and expectations of regional and international investors. Most importantly, outstanding issues around the lack of capacity, the need for supporting regulatory policies and the need for incentives to ramp up private sector participation must be addressed in order to deliver any impact from green bonds in Africa.