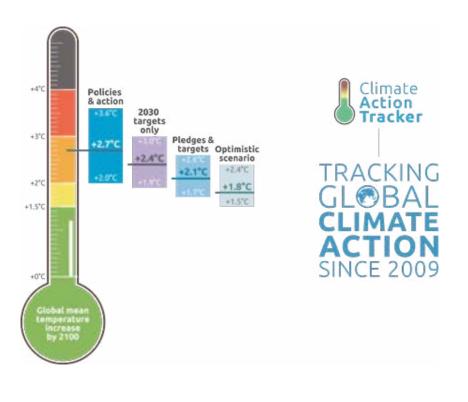
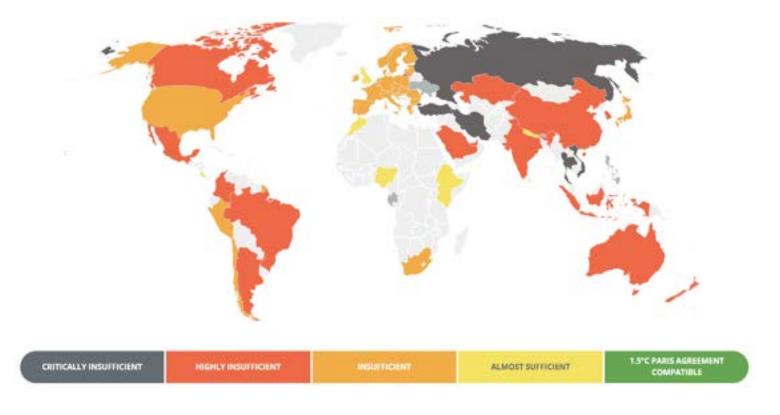


International trends

International efforts, such as the Paris Agreement, aim to reduce greenhouse gas emissions. Dozens of countries made new commitments during COP26 in November 2021, however, experts, activists, and citizens remain concerned that these pledges are not ambitious enough.

Based on the commitments made in Glasgow, <u>analysts from Climate Action Tracker</u> estimate there's a roughly 70% chance that the world can anticipate warming between 1.9°C and 3.0°C by the end of the century – though this analysis excludes net-zero commitments due to their lack of specificity.





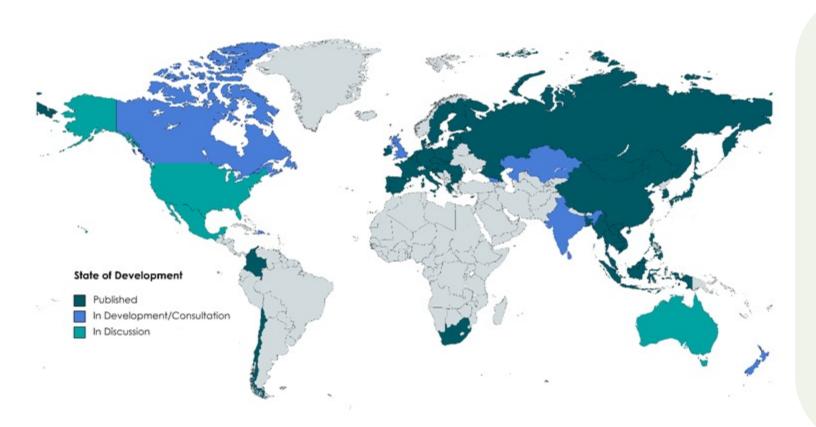
Source: Climate Action Tracker



Numerous taxonomies are in development around the world

All of these taxonomies are still work in progress. More sectors are added, more detail is published, new non-climate mitigation environmental themes are being added.

These newer taxonomies typically use the Chinese or EU taxonomy as their points of departure. However, in many cases it is still too early in the development of the taxonomy to be able to comment on the precise way in which the taxonomy will develop.



South Africa's Green Finance Taxonomy

In 2020, under the leadership of National Treasury, the National Business Initiative (NBI) and Carbon Trust began working to develop a first national Green Finance Taxonomy for South Africa. It was kicked off by the launch of a Project briefing report as well as a public consultation phase of six workshops covering key stakeholders. The purpose of the Working Group is to develop a taxonomy for green, social and sustainable finance initiatives for the South Africa financial services industry, as recommended by National Treasury's **Financing a Sustainable Economy Technical Paper**.

The taxonomy was released for public consultation in June 2021. It is based on the EU Taxonomy with similar thresholds in place to define substantial contribution and includes do no significant harm provisions.

Draft Green Finance Taxonomy available **here**.

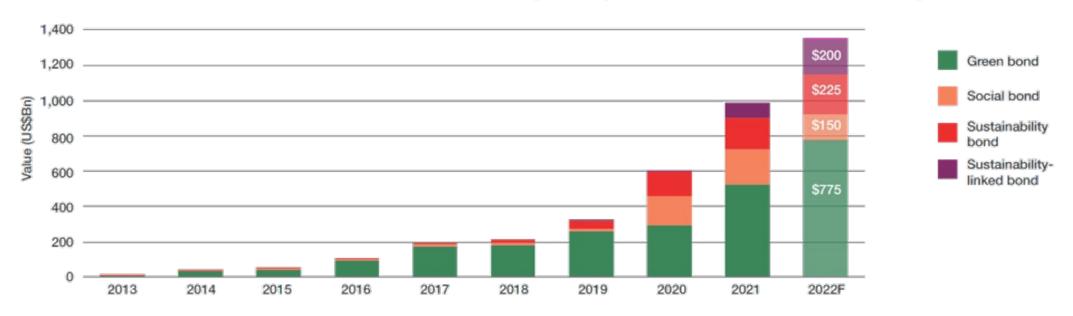


Global Sustainable Bonds Insight

Last year saw solid growth in the sustainable debt markets, supported by issuance related to the pandemic recovery and growing corporate interest in financing sustainability strategies with labelled bonds.

Total green, social, sustainability and sustainability-linked (GSSS) bond issuance reached \$1.03 trillion in 2021 – more than 69% higher than the \$606 billion in 2020, and more than triple the \$326 billion issued in 2019.

Sustainable bond issuance to hit \$1.35 trillion globally in 2022 for another record year

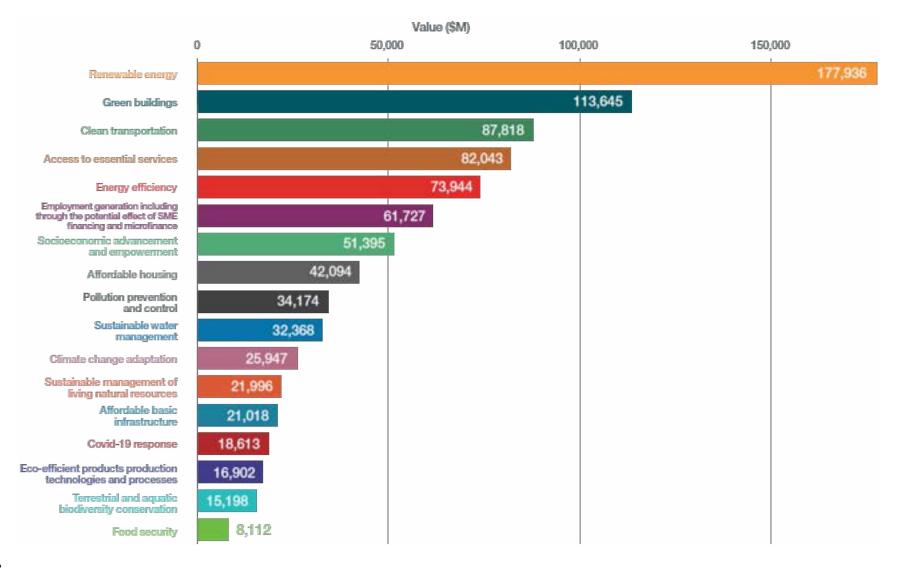


2022F represents Moody's 2022 issuance forecast. Historical data as of January 20. Sources: Moody's ESG Solutions and the Environmental Finance Bond Database

Source: Environmental Finance



Use of proceeds breakdown of bonds issued in 2021 by value



Source: Environmental Finance

Methodology: the value of each bond is dived up by the amount of Use of Proceeds it covers and allocated equally amongst them



Green finance in Africa

Africa is expected to be hardest hit by the adverse impacts of climate change.

- These impacts will be exacerbated if significant investments in mitigation and adaptation, as well as other relevant measures remain insufficient.
- The challenge is acute for a continent that produces less than 4% of greenhouse (GHG) emissions globally and yet receives only 3% of global climate finance, despite being the most vulnerable region.
- On the global stage, 'adaptation' and 'resilience' are yet to achieve parity compared to 'mitigation', which receives 93% of global climate finance.
- There is growing consensus that green finance should be a priority in Africa, as it is in other regions of the developing world. This type of funding is necessary for investments in "green" infrastructure projects across sectors in order to stimulate and boost inclusive, sustainable growth, and to significantly reduce poverty and the widening socio-economic inequality on the continent.

Financial institutions in Africa are becoming more active in facilitating green finance.

- Emerging economies face many challenges in meeting environmental objectives, with implementation often lagging policies and regulation. Lack of finance is often a major barrier to implementation.
- There is untapped potential for emerging market governments to deploy investor demand for green finance in the current crisis and leverage creditor support to implement their sustainability plans.
- New approaches are needed which provide emerging economies with the fiscal firepower to respond to the COVID-19 downturn and to steer their economies on a pathway of poverty reduction and economic development through resource-efficient and low-carbon growth.
- Since the first African green bond was issued in South Africa the first issuance from an emerging market – bond issues have started to spread across the continent, especially from Morocco and Nigeria.



Challenges for green finance in Africa

Obstacles

One of the key challenges for a first-time sovereign green bond issuer is its commitment to developing green framework legislation. Green frameworks play a key role in encouraging green finance within a jurisdiction through transparency and commitment and send an important signal to markets globally.

Green as a priority

- Lack of prioritisation of green by project sponsors
- Lack of prioritisation of green by public officials (enabling environment)

Project attributes

- Poor project preparation
- Lack of confidence in project sponsor's ability to execute

Investor preference

- Lack of prioritisation of green by investors
- · Lack of confidence in project's ability to generate sufficient revenues

Priorities

Several African countries will need to look at scaling down their exposure to the fossil fuel industry if they are to meet their commitments. At the same time, growth will need to be achieved in other sectors to replace the revenues no longer being earned from fossil fuels. Real sustainable alternatives to fossil fuelbased power production will need to be developed, financed and implemented to meet low-carbon energy demands.

Governments will need to make public policy shifts in favor of a greener and more climate-resilient economy. Government involvement is also vital for encouraging the green finance market through the creation of fiscal policy that makes holding green assets more attractive.

African nations should continue to develop green bond frameworks and identify a pipeline of eligible green projects that could be financed under each framework. It may be easier to begin on a small scale with a municipal issuance, rather than lead at the sovereign level. Sub- and quasi-sovereign issuers have been comparatively prolific and diverse in terms of geography, economic development and project type, further demonstrating the versatility of green bonds and their ability to be tailored to local circumstances.

Consistency, availability and standardisation of data metrics, as well as an overreliance on voluntary reporting, remain significant challenges across the EMs. For the continued growth of green finance markets, product offerings need to be transparent and comparable.

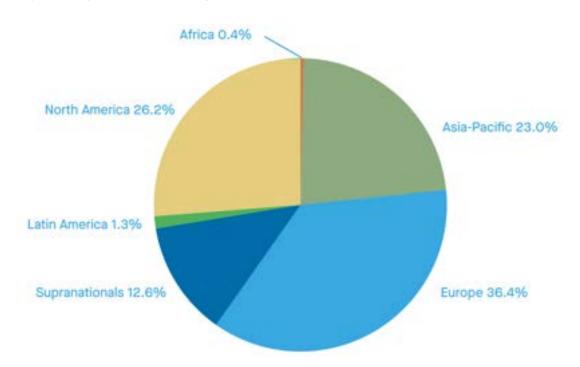


Africa's green bond market trails behind other regions

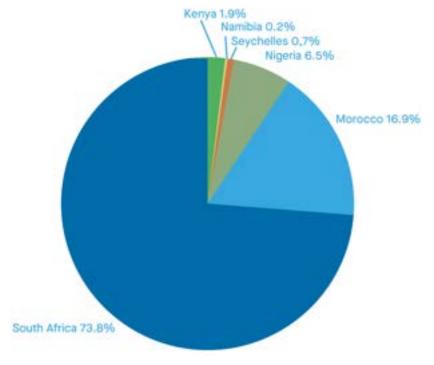
In spite of green bonds' potential, the African private and public sectors have lagged behind other emerging markets in their issuance of these innovative bonds.

Within Africa, the distribution of the funds raised by green bond issuance has been overwhelmingly concentrated in South Africa.

Composition of total green bond issuances by region (2007-2018)



Composition of green bond issuances by country (2007-2018)



Source: Sustainable Banking Network (2018)



Barriers to the development of the green bonds market in Africa

Green bonds are a useful tool for mobilising additional capital to finance sustainability challenges in Africa but uptake has been low for a number of reasons.

Frameworks

- There is a general lack of clear understanding of what "green"
 constitutes. This may be linked to the lack of convergence in frameworks,
 guidelines or rules and of a shared understanding. In addition, the processes
 and criteria for issuing green bonds are not uniform across Africa. Even where
 guidelines exist, many are not aligned with or fail to meet international
 standards.
- The lack of clear guidelines on the developing African green bond market is likely to deter many potential investors and issuers from entering the market. There is also a reputational risk for domestic and international institutional investors where policy inconsistencies or doubts about the use of proceeds contribute to issuers' failure to protect investments against greenwashing.
- South Africa is the only African state with a sustainable finance taxonomy in development.

Capital Markets

- The African capital markets are still underdeveloped and characterised by a small number of listings.
- Government debt offerings, usually in local currency short-term securities or bonds, dominate, but are still at an early stage of development.
- Corporate bond issues and equity listings are thin in volume and value.
- Market failure has been attributed to:
 - · Institutional weaknesses;
 - · Low appetite for venture capitalism;
 - Lack of awareness of the potential of capital markets;
 - Macroeconomic instability;
 - · Low level of economic and financial integration.

Supporting Regulation

- There is also either a lack of insufficient supporting regulation to enable the market to take off at a reasonable pace and continue to thrive.
- Despite the impressive economic growth recorded by many African states in recent years, several vulnerabilities remain within the financial sector.
- A resilient and robust economy and financial sector performance supported by robust regulatory policies are necessary conditions for absorbing shocks and mitigating risks while also supporting complementary initiatives such as the green bonds market.

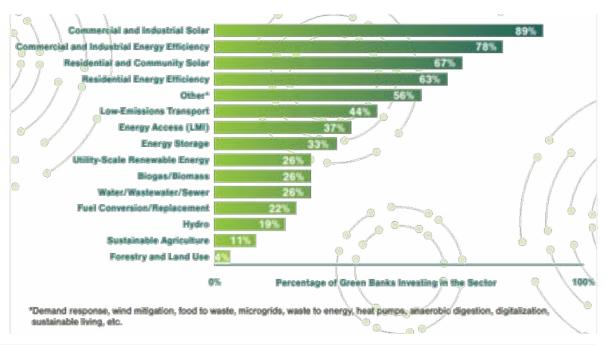


Opportunities for green finance in Africa

Enabling environments

- Africa countries have the potential to achieve their sustainability objectives through innovative funding of climate-change projects, including green bonds.
- African nations are among the most vulnerable to impacts of climate change and, therefore, many have a need for climate change adaptation and "sustainable infrastructure" such as public transport, water services or clean energy.
- There is no shortage of potential green projects. In power generation alone, Africa's potential for renewable energy dwarfs levels achieved so far on the continent. Further investment in sustainable energy infrastructure could unlock this vast potential.
- Financial institutions in Africa are becoming more active in facilitating green finance. The AfDB has played a major role in sustainable investment in Africa and is promoting green projects in national development planning.
- Ambitious targets and limited public resources support the need for a large portion of projects that could be funded through green financing initiatives, tapping into a broad base of investors looking for exposure to green assets. Green financing mechanisms are a perfect fit for nations that must now balance the need for infrastructure projects with raising large amounts of capital to meet national targets and international commitments.
- The lack of electrical infrastructure in many parts of Africa presents an opportunity for African countries to be at the cutting edge of sustainable development, not only in the power sector. Lack of legacy infrastructure based on fossil fuels allows countries to adopt international best practices, tailored to unique African conditions. This should allow African countries to develop without the same level of environmental harm as developed Western economies experienced at the height of their use of fossil fuels.

Existing Green Banks' Technologies and Sectors of Focus



To facilitate further green investment and financing, more work needs to be done to explore the challenges and opportunities for: Sovereign Wealth Funds/Natural Resource Funds to promote green investments; the role of other funds and mechanisms to support sustainable development such as national environment/climate funds; and the role of fiscal incentives for green finance instruments.



Case Study: South Africa COP26 Deal

At COP26, it was framed as compulsory for developing countries to transition away from fossil fuels and promote the development of less carbon-intensive economies. In this light, climate change financing can be seen as part adaptation, part mitigation and part economic development.

This new approach to financing is most evident in the agreement between America, France, Germany, the United Kingdom, the European Union and South Africa. In what could be a decarbonisation model for many developing countries, South Africa has agreed to use the US\$8.5 billion provided to move its electricity sector off of coal while simultaneously protecting the tens of thousands of jobs dependent on the industry.

South Africa uses coal for more than 80% of its power generation and is estimated to be the 13th largest carbon emitter in the world, despite being the 33rd largest economy. An aggressive move away from coal could demonstrate to other middle-income countries that decarbonisation and economic growth are not mutually exclusive and can in fact be self-reinforcing.

The partnership aims to save 1-1.5 gigatonnes of emissions over the next 20 years by accelerating South Africa's shift away from coal and towards low-emission sources of energy.





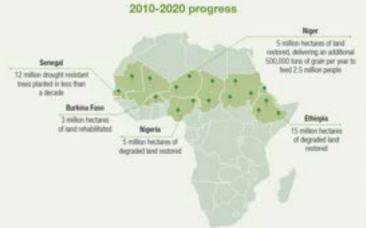
Case Study: The Green Growth Wall

Climate change has meant more extreme weather conditions, including higher temperatures and fluctuating rainfall resulting in more frequent droughts in the Sahel, a region that is home to 250 million people.

Started in 2007, the **Great Green Wall** is Africa's flagship initiative to combat climate change across the Sahara and the Sahel. The 8,000km long and 15km wide mosaic of trees, grasslands, vegetation, and plants from Senegal to Djibouti, will help boost food security, improve health, create millions of jobs and income opportunities for the communities, and provide the foundation for a greater likelihood of peace in the region, which is the guarantor of continued sustainable development.

In January 2021, the Great Green Wall received \$14 billion in additional funding pledged over the next ten years - \$6.5 billion from the Africa Development Bank, \$5 billion from the World Bank and \$2.5 billion from the French government – to advance the landmark initiative.

A shield against climate change



Expected development results by 2030

- Restore 100 million hectares of degraded land
- 1 Sequester 250 million tons of carbon
- 1 Create 10 million green jobs in rural areas



Source: UNICCO Great Green Well

Conclusions

- As many African states seek to close significant infrastructure gaps and explore opportunities to scale-up investments in mitigation and adaptation as well as meet other critical social needs, green bonds have been presented by the international community as an innovative financial instrument capable of delivering long-term capital to resolve sustainability-related problems on the continent.
- More effort is required to attract significant investor commitments, especially from abroad. This will require concrete policies and initiatives by governments and regulators working in concern with relevant stakeholders to boost demand and deepen the underdeveloped capital markets across the continent.
- Africa also presents many opportunities for developing and issuing green bonds domestically. If the right structures are put in place, there are significant domestic investors willing to play their part in attracting international investors.
- 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 maintain investor confidence.
- Given the increasing consciousness of stakeholders namely government, agencies, municipalities, multinational development banks, and corporations to funding capacity of green financial products and with a multitude a new issuances in the pipeline, the outlook on the nascent green bond market is positive.

