



# GREEN BONDS, SUSTAINABLE FINANCE, AND CLIMATE CHANGE

**A KEY TO FINANCING ENVIRONMENTALLY SUSTAINABLE  
PROJECTS IN ZAMBIA**

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## Introduction: What are Green Bonds?

Green bonds are a type of fixed-income security designed to raise capital for projects that have positive environmental or climate benefits (Luo, Wang, & Zhu, 2021). With the increasing awareness of climate change, green bonds have emerged as an innovative and effective way to finance projects that aim to reduce greenhouse gas emissions, promote sustainable energy, and support the transition to a low-carbon economy (Climate Bonds Initiative, 2021). This review examines the potential of green bonds in Zambia, a country that is highly vulnerable to the impacts of climate change, and seeks to unlock challenges and opportunities associated with sustainable financing and climate change in Zambia.







## Background

Zambia is a landlocked country within Southern Africa with a population of approximately 19 million people (Zambia Statistics Agency, 2022), with numerous protected areas and national parks that are home to a variety of wildlife species and ecological resources. However, the country is also highly vulnerable to the impacts of climate change. **Zambia's economy is highly dependent on agriculture, which is not only the leading cause of deforestation in the country but also highly sensitive to changes in climate.** Droughts, floods, and extreme weather events have become more frequent and severe in recent years, affecting crop yields and livestock production. This has led to food insecurity and reduced incomes for farmers, exacerbating poverty in rural areas. **Climate change also affects other sectors, such as energy, water, and transport, with implications for economic growth and human development** (World Bank, 2018).

## How can Zambians and Investors Gain Access to Green Bonds?

Zambians and investors can gain access to green bonds through various options. One way is by investing in funds that specialize in green bonds, such as the Liontrust Sustainable Future Corporate Bond Fund and the Mirova Global Green Bond Fund. Another way is by directly investing in green bonds issued by various companies or the Government. In Zambia, the Securities and Exchange Commission (SEC) has developed guidelines for the issuance of green bonds, which provides a framework for companies seeking to issue such bonds. The Zambian Government has also

expressed interest in issuing green bonds to finance sustainable development projects (Mwaba, 2021).



## Green Bonds as a Driver of Economic Transformation in Zambia

Green bonds have gained popularity globally in recent years due to increased concern about climate change and the need to transition to a low-carbon economy. In Zambia, green bonds can play a key role in driving the country's economic transformation while addressing environmental challenges. The country's economy is heavily dependent on copper mining, which accounts for over 70% of export earnings (World Bank, 2018). However, the mining sector is associated with significant environmental impacts, including land degradation, water pollution, and greenhouse gas emissions (Luo, Wang, & Zhu, 2021). Green bonds can help finance projects that aim to reduce these negative impacts while supporting sustainable economic growth.

**Zambia has already made significant strides in the development of renewable energy projects, particularly in the areas of solar and hydropower.** In 2019, the country launched a 54 MW solar power plant, and has several other renewable energy projects in the pipeline (International Finance Corporation [IFC], 2021). Green bonds can help finance the development of these projects, providing a stable source of long-term financing and attracting international investors who are interested in supporting sustainable development in emerging markets.

Furthermore, green bonds can support the growth of other sectors of the economy, such as agriculture and tourism, which are also vulnerable to the effects of climate change. **For instance, green bonds can finance the development of climate-resilient agricultural practices, such as sustainable land management, crop diversification, and irrigation systems, which can increase productivity and reduce the impacts of extreme weather events (IFC, 2021). Similarly, green bonds can help finance the conservation and restoration of natural habitats, such as national parks and wildlife reserves, which are critical for the country's tourism industry (World Bank, 2018).**

## Challenges for Green Bonds in Zambia

While green bonds present many opportunities for financing sustainable development in Zambia, there are also several challenges that must be addressed to unlock their full potential such as:



**Regulatory Harmonisation:** Zambia's recently launched the Capital Markets Master Plan, which is expected to create a framework for the development of a sustainable green bond market (Capital Markets Master Plan, 2022). However, the implementation of the plan may face several challenges. One of the main challenges is the need for regulatory harmonization. Zambia has multiple regulatory bodies overseeing different aspects of the financial system, which can create overlap and inconsistencies (IFC, 2021). The master plan will need to address these issues to ensure that the regulatory framework for green bonds is clear and consistent



**Limited Availability of Suitable Projects:** Another challenge is the limited availability and scope of suitable projects for green bond financing. While Zambia has significant potential for renewable energy projects, there is a lack of viable projects that meet the requirements for green bond financing. **Projects must meet specific environmental and social**

**criteria to be eligible for green bond financing, and there is a need to identify and develop a pipeline of suitable projects that can attract investors (IFC, 2021).**



**Capacity and Expertise Building:** In addition, there is a need to **build capacity and expertise in green bond issuance and investment in Zambia**. This includes developing skills and knowledge among issuers, investors, and regulators, as well as creating platforms for information sharing and collaboration. There is also a **need to establish metrics and standards for measuring the environmental and social impact of green bond investments**, which can help to build investor confidence and support the growth of the market (Capital Markets Master Plan, 2022).



**Limited Awareness and Capacity among Market Participants:** Another challenge is the limited awareness and capacity among investors and issuers in Zambia. Many market participants in the country are not familiar with the concept of green bonds or how they can be used to finance sustainable projects. This lack of knowledge can make it difficult to attract investors and issuers to the market. There is a need for education and training to raise awareness and build capacity among market participants, including investors, issuers, and regulators (Capital Markets Master Plan, 2022).



**Infrastructure Limitations:** Finally, while Zambia has significant potential for renewable energy, there are also challenges related to the development of such projects. For example, there is a lack of adequate infrastructure for the distribution of electricity generated from renewable sources, particularly in rural areas. This can limit the potential impact of green bond-funded projects and create additional challenges for their development (UNDP, 2018).

PHOTO SOURCE: <https://www.znbc.co.zm/news/livingstone-sesheke-road-to-be-rehabilitated/>



# Opportunities for Green Bonds in Zambia

Despite the listed challenges, green bonds present significant opportunities for financing sustainable development in Zambia. According to a report by the United Nations Development Programme, green bonds can play a significant role in financing sustainable development in developing countries like Zambia (UNDP, 2018). Furthermore, Zambia's abundant natural resources and potential for renewable energy make it an ideal candidate for green bond financing (UNDP, 2021). Some of these opportunities include:



## **1: The Capital Markets Master Plan as a Framework for Green Bond Development:**

The launch of the Capital Markets Master Plan is expected to provide a more comprehensive framework for the development of the country's capital markets, including the green bond market (Capital Markets Master Plan, 2022). This is expected to create a conducive environment for issuers and investors and provide a clear regulatory framework for the issuance of green bonds



## **2: Access to a Larger Pool of Investors through the African Continental Free Trade Area:**

Moreover, by participating in the African Continental Free Trade Area, Zambia can access a larger pool of investors and expand the market for its green bonds (UNDP, 2021). Institutional investors and asset managers are increasingly incorporating environmental, social, and governance (ESG) factors into their investment decisions, and issuing green bonds can attract these investors who are looking to invest in sustainable projects that have positive environmental and social impacts (AfDB, 2019).

Therefore, the launch of the Capital Markets Master Plan, the African Continental Free Trade Area, and the increasing interest in sustainable finance all present opportunities for the development of a robust and sustainable green bond market in Zambia (AfDB, 2019; UNDP, 2020). By leveraging these opportunities, Zambia can attract long-term financing for sustainable projects and contribute to the global effort to mitigate the impacts of climate change (UNDP, 2021).

In other words, the launch of the Capital Markets Master Plan, the African Continental Free Trade Area, and the increasing interest in sustainable finance all present opportunities for the development of a robust and sustainable green bond market in Zambia. By leveraging these opportunities, Zambia can attract long-term financing for sustainable

projects and contribute to the global effort to mitigate the impacts of climate change.

## Best Practices in Other African Countries



Several African countries have successfully issued green bonds and established sustainable finance frameworks. For instance, in 2019, Nigeria issued its third sovereign green bond, which raised 15 billion Naira (\$41 million) for projects aimed at reducing carbon emissions and promoting sustainable development (Adepoju, 2019). The bond was oversubscribed, indicating strong investor demand for green bonds in the country.



Similarly, Kenya issued its first sovereign green bond in 2019, raising KES 4.3 billion (\$41 million) to finance projects in renewable energy, afforestation, and clean transportation. The bond was oversubscribed by 286%, indicating a high level of investor interest in sustainable finance in the country (Ochiel, 2019).



South Africa is also taking steps to promote sustainable finance and green bonds. In 2021, the Johannesburg Stock Exchange (JSE) launched a green bond segment to facilitate the listing and trading of green bonds in the country. The segment provides a platform for issuers to raise capital for projects that support sustainable development and environmental goals (JSE, 2021). The JSE also established a sustainability index in 2020, which tracks the performance of companies based on their environmental, social, and governance (ESG) practices. The index is aimed at promoting responsible investment and encouraging companies to adopt sustainable practices (JSE, 2020).

These examples demonstrate how green bonds have played an important role in financing sustainable development in African countries. However, it is important to note that each country has its unique challenges and opportunities, and there is no one-size-fits-all approach to sustainable finance. Nonetheless, the experiences of other African countries can provide valuable lessons and insights for Zambia as it seeks to establish a sustainable finance framework and promote the issuance of green bonds.



## Conclusion

Green bonds offer a promising opportunity for Zambia to finance sustainable development projects that can mitigate the impacts of climate change. While there are several challenges that must be addressed to unlock the full potential of green bonds in Zambia, including regulatory harmonization, the limited availability of suitable projects, building capacity and expertise in green bond issuance and investment, and limited awareness and capacity among investors and issuers, there are significant opportunities as well. These include abundant natural resources, the launch of the Capital Markets Master Plan, the African Continental Free Trade Area, and the increasing interest in sustainable finance. By leveraging these opportunities, Zambia can attract long-term financing for sustainable projects and support the transition to a low-carbon, resilient economy in the midst of tightened fiscal conditions.



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