



Green

Bond-ing

with the Sustainable
Development Goals

[kpmg.co.za](https://www.kpmg.co.za)



Green Bond-ing with the Sustainable Development Goals

In this article, we highlight the latest trends in the green bond market, possible opportunities of SDGs integration into the green bond assessment framework and impact valuation of green projects financed using proceeds from the bond.



The “story” of Green Bond

Every successful revolution has its own story – it usually starts with noble intentions of brave, forward-thinking individuals, communities, organisations and governments, to bring positive change to the society.

The evolution of the green bond¹ is no different – what initially begun as a traditional framework for raising capital to fund ‘green’ activities with an environmental benefit, to an instrumental “game changer” to spark a sustainability revolution in the market. The first green bond was issued by the World Bank in 2008. The World Bank was approached by a group of Swedish pension funds, which were looking for avenues to make climate-friendly investments – built upon a structured framework that supports identification and measurement of how their investments would achieve the intended outcome and impact. It was the first to define the criteria for projects eligible for a green bond².

The issuance of the first green bond marked a significant milestone in the global sustainable development journey – strengthening the business case for environmental sustainability, particularly in shifting investors’ focus and providing a refreshed perspective – in considering green investment opportunities for profitable returns.

This further led to the development of the Green Bond Principles (GBP) – by the International Capital Markets Association (ICMA), as the basis for market participants to use as a guideline in evaluating & selecting projects, managing and reporting on the use of proceeds.

The green bond market has diversified across a widespread of market places, issued in various forms and structures. Investors are gradually shifting their focus to impact investing, and this has triggered the need for a higher quality of green bond performance assessment and disclosures, particularly in alignment with the United Nations Sustainable Development Goals (SDGs).

¹ The Green Bond, in the context of the article, refers to any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible green projects, as defined by the Green Bond Principles.

² The World Bank (2018) *Green Bond Impact Report 2018*

A “rainbow” of Labelled Bonds – why pick Green Bond?

Over the recent years, the international bond market has expanded beyond green bonds. The growing global awareness and sense of urgency, to address the 17 United Nations Sustainable Development Goals (SDGs) catalysed the rise of a wide range of labelled bonds in the market for the environmental & socially conscious investors.

For example, the sustainability bond has gained traction amongst investors, particularly with the interest in blended projects that promotes social development and climate finance. The SDG bond is fairly new in the bond market – is the popular choice for investors who are keen on the mainstream adoption of SDG-linked policies & strategies ³.

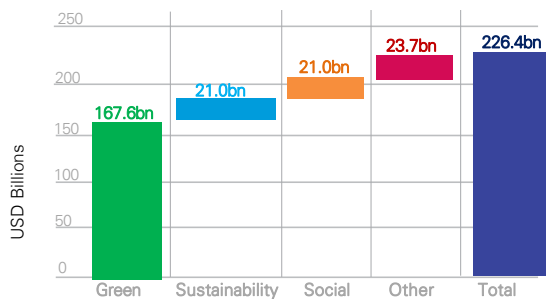
In 2018, statistics showed that green bond is at the forefront of the global wider labelled environmental and social bond market – and represents 74% of the global issuance volume.

This is partly attributed to a growing body of evidence, based on research studies and findings on potential impacts of climate-related financial risks & opportunities.

Another key development is that investor analysts have begun undertaking a more forward-looking perspective by incorporating environmental considerations, into credit analysis.

The Moody’s ⁴ report have identified 11 sectors with \$2.2 trillion in rated debt with elevated credit exposure to environmental risks. The coal mining and terminals, and unregulated utilities and power companies are on top of the list. Stringent regulatory frameworks for carbon emissions have deepened the impact on various industrial sectors ⁴.

2018 Issuance - Including Sustainability and Social Bonds



Source: Green Bonds – The State of the Market 2018, Climate Bond Initiative (CBI)

Green bond is viewed as an imperative financial instrument to achieving the SDGs, particularly in the area of climate change related risks. There is a gradual shift in how green bond is used in the market – from financing of climate-change mitigation measures to financing of climate-change adaptation and resilience projects. Projects related to managing incidences of extreme weather conditions have particularly gained traction ⁵.

Stock exchanges have been playing a pivotal role in raising the profile of green bonds in the international space and fostering market integrity through listing requirements and national green bond policies and guidelines.

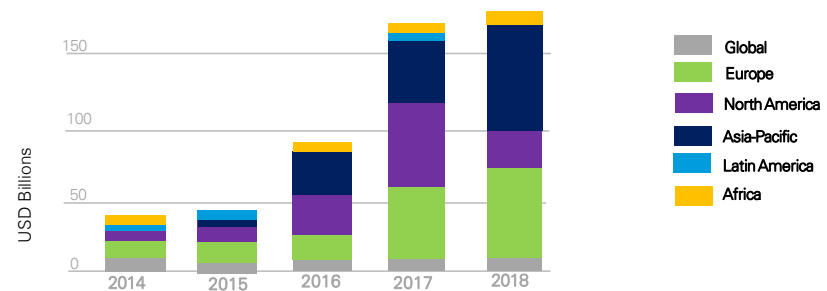
As an example, the Johannesburg Stock Exchange in South Africa launched a segment dedicated to green bond issuance in 2017. Sovereigns and government owned/linked establishments, which make up 26.5% of the global green bond market, are using green bond for financing projects aimed at driving their national sustainability agenda³.

Greening the Market

In 2018, the European Investment Bank (USD5.6bn), World Bank (USD2.4bn) and Asian Development Bank (USD1.7bn) emerged as the top three largest green bond issuers in the world.

Bolstered by capital markets regulations on green bond issuance, the Asia Pacific region, achieved the second largest issuance volume, after Europe. The region recorded the highest yearly growth rate of 35% - with China (USD31bn), Australia (USD4.2bn) and Japan (USD4.1bn) contributing to top three highest green bond issuance volume³.

2018 Global Green Bond Issuance



Source: Green Bonds – The State of the Market 2018, Climate Bond Initiative (CBI)

³ Climate Bond Initiative (2018). Green Bonds – The State of the Market

⁴ Moody’s Investors Service (2018). Heat map: 11 sectors with \$2.2 trillion debt have elevated environmental risk exposure

⁵ International Finance Corporation (IFC) & Amundi Asset Management (2018). Emerging Markets Green Bonds Report

The green bond market in China boomed, upon the release of national green bond guidelines by the government in 2015 – and has achieved a cumulative, total amount of issuance of USD108.6 billion, between 2012 and 2018.

This represents 78% of the cumulative total of green bond issuance in the emerging market across the period. South Africa (USD1.43 billion) was one of the top ten issuers, alongside other emerging countries such as Poland, Indonesia and Malaysia.

The use of the proceeds from the emerging market, are largely earmarked for renewable energy, green buildings and low-carbon transport. 96% of the cumulative issuer volume were attributed to financial institutions, corporates and government agencies⁵.

SDG Success Story from the City of Cape Town

One of South Africa's SDG-inspired, green bond success stories comes from the City of Cape Town, South Africa. Historically, some parts of the City are associated with extreme drought conditions, due to changing weather patterns – which in some instances had resulted in a critical water crisis.

As part of the City's sustainability goals, and in line with its climate change mitigation & adaptation program, one billion Rand worth of green bond was issued in 2017⁶, and the proceeds were fully utilised to finance & refinance water & sanitation related projects. The City issued the first green bond in the country.

A large amount of the proceeds (R 830.8 million) was allocated to the meter replacement and conservation programme. Moody's reported that the City has embarked on strategies for implementing measures that are more resilient to climate change-related risks. This includes efforts to reduce its carbon footprint, as part of its broader climate change mitigation and adaptation efforts.

Based on Moody's green bond assessment⁶, the City of Cape Town scored an "Excellent" rating for its governing processes and the manner in which the proceeds are being used, managed and reported. This includes having in place a comprehensive criteria for investment selection, targeted measurable impact of results and independent assurance on disclosure on the use of proceeds. KPMG conducted the independent review on the post-issuance processes related to allocation of the raised funds, tracking of project performance & conformance to Climate Bonds Standard V2.1 and reporting on the use of proceeds to relevant stakeholders.

What is the True Value of Green Bonds?

Impact valuation of projects financed with the proceeds from issuance of green bond, remains as a key challenge in the market. The ICMA, through the GBP Impact Reporting Working Group, have published guidelines with suggested metrics for reporting on environmental impact, according to the types of green projects (e.g. renewable energy and energy efficiency, water and wastewater management, clean transportations, etc.).

Over the coming years, we can expect investors demanding higher quality assessment of green bond performance and disclosures, which may add complexity to the valuation methodology. The Annual Impact Investor Survey 2019 reported that investors actively track or plan to track the financial performance of their investments with respect to the SDGs, because they find it a useful way of communicating impact externally or to integrate into the global development paradigm⁷.

The general guideline (high-level mapping) and examples of indicators for measuring the impact of green projects (based on Green Bond Principles project categories) in alignment with the relevant targets of the SDGs, are available as the baseline reference for market participants⁸.

A more complex challenge is quantifying (in monetary terms) the outcome of green projects, in terms of its impact to the wider ecosystem, specifically in relation to its contribution to achieving the SDG goals. As an example, for renewable energy projects financed with green bonds, investors will be keen to find out the impact of the projects in terms of quantity of carbon emission saved/avoided (e.g. relative to a set target) and the equivalent monetary value relative to the invested amount/issuance amount.

⁵ International Finance Corporation (IFC) & Amundi Asset Management (2018). *Emerging Markets Green Bonds Report*

⁶ Moody's Investors Service (2019). *City of Cape Town – Update to Green Bond Assessment*.

⁷ The World Bank (2018 Global Impact Investing Network (2019). *Annual Impact Investor Survey 2019 (9th edition)*

⁸ ICMA (2019). *Green, Social & Sustainability Bonds: A High-level Mapping to the Sustainable Development Goals*

The impact valuation methods may differ based on the types of green projects financed. Some green projects may have social co-benefits.

As an example, an integrated water resource management project addresses drought-related water scarcity issues and brings positive social impacts in terms of improving the overall health and well-being of communities through access to clean water.

A more practical method is to deploy a phased approach, by integrating the SDGs into various components of the green bond assessment framework. This may include mapping the portfolio of green projects to SDGs, and embedding SDGs in the establishing the criteria for project selections.

Impact measurement against SDGs can be tricky – this starts with establishing a baseline metrics for calculating performance (output) against targeted environmental results and progressively evolving into defining the material outcome/impact and integrating the relevant proxies or impact representing factors.

Issuers may define the period of implementation across the short, medium and long term, as their evaluation and reporting processes mature over time.

Conclusion

As the green bond market continues to develop, it provides public and private sector organisations with an important source of funding for activities that can bring significant benefits to the environment and society.

A robust framework defining what is considered 'green', requirements on how proceeds should be tracked, managed and reported on, and assurance requirements will continue to build credibility and support the exponential growth of the green bond market.

A standardised method of impact measurement/valuation of projects financed using proceeds from green bond, will allow investors to make a more holistic, outcome-oriented, comparable and complete assessment when making their investment decisions.

KPMG expects that guidance and requirements on these aspects may be tightened over the next few years and that standards or accepted practice should begin to crystallise.



How Can We Help You

KPMG South Africa offers a range of services to support you during the lifecycle of your green bond:

1. Design green bond criteria:



We can help you develop a green bond framework, 'green' criteria and specifications for the management of proceeds. Our professionals advise on project selection and evaluation, fund management processes and controls, and we benchmark your processes against industry best practice and evolving standards.

2. Monitoring and reporting:



Our specialists can help you develop performance indicators and project evaluation metrics to monitor and report on the financial and environmental/social outcomes of projects. We can support you in reporting to your company's internal and external stakeholders.

3. Third-party independent assurance:



To increase the credibility of the bond, our professionals can provide assurance on the issuer's processes and controls for selecting green projects in line with key frameworks and managing proceeds, as well as on the issuer's progress reports.

4. Impact valuation:



Our professionals can quantify the environmental value created by green bonds in financial terms using quantification methodologies (such as KPMG True Value Methodology). Quantifying the environmental/social value created enables the positive impact of the bond to be communicated to investors and other stakeholders in terms that are easily understood and comparable.

5. Review financing options:



Our professionals review and challenge your financing objectives and alternatives, enabling you to optimise the capital structure and make the most of debt market appetite. Our specialists can help determine a preferred funding route, and act as a sounding board for your management team.

6. Execution:



Our specialists advise on the presentation of your business's credit story and green credentials to potential investors, the issuance process of the debt, and liaison with stakeholders including credit rating agencies.

7. Ongoing stakeholder management:



We can help you assess the performance of a green bond through independent bond investor studies, giving you unbiased insight into bondholders' perspectives and into the profile of bondholders.

**Contact us
to find out
how we can
help you**





Neil Morris

Director
Climate Change & Sustainability
KPMG South Africa
M: +27 83 286 7194
E: neil.morris@kpmg.co.za



Paresh Lalla

Director
Climate Change & Sustainability
KPMG South Africa
M: +27 83 276 5373
E: paresh.lalla@kpmg.co.za



Naeem Khan

Manager
Climate Change & Sustainability
KPMG South Africa
M: +27 72 111 1071
E: naeem.khan@kpmg.co.za



Gunarani Ganasagaran

Senior Manager
Climate Change & Sustainability
KPMG South Africa
M: +27 71 313 6964
E: gunarani.ganasagaran@kpmg.co.za



Anja Cawood

Manager
Climate Change & Sustainability
KPMG South Africa
M: +27 60 997 5641
E: anja.cawood@kpmg.co.za

kpmg.com/socialmedia



kpmg.com/app



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2019 KPMG Services Proprietary Limited, a South African company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. Printed in South Africa. KPMG and the KPMG logo are registered trademarks of KPMG International Cooperative ("KPMG International"), a Swiss entity.