

IDSC

Policy perspective



Egyptian Sovereign Green Bonds





Chairman

Mr. Osama El-Gohary

Prime Minister Assistant & IDSC Chairman

Editor-in Chief

Dr. Khadiga Arafa

Manager of Department of Strategic Issues

Managing Editor

Dr. Esraa Ahmed Ismail Executive Director of Department of Strategic Issues

Graphic Designer

Ayman Elsherif Asmaa Salah

Reviewer

Ehab Gibreel

Editor

Nada El-Mogy



IDSC Policy Perspective

An online non-periodic publication issued by Cabinet's Information and Decision Support Center (IDSC). It covers the most prominent topics in the scene from all aspects to present a comprehensive vision regarding such topics relying on experts' perspectives.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the official policy or perspective of IDSC

IDSC's Commentary

Green bonds are fixed-income financial instruments issued to get funds for projects that are closely related to climate and environment. This distinguishes this kind of bonds from traditional counterpart. In fact, green bonds reflects investors' awareness on preservation of environment and its resources, which are considered a fundamental right for next generations.

There are a plethora of projects that green bonds can fund, most importantly renewable energy projects, clean transportation and sustainable management of water resources, persistent organic pollutants, solid wastes, lands, and earth resources, and other projects that aim at preserving environment resources and containing climate change impacts.

Egypt led the transformation towards green economy in the Middle East and North Africa (MENA). The Egyptian Ministry of Finance celebrated the issuance of the first sovereign green bonds in November 2020 worth \$ 750 million with a five-year term and a rate of 5.25%. This targets providing sustainable funds needed for eco-friendly projects in various fields such as housing, clean transportation, renewable energy, and pollution reduction. These bonds also targets projects working on coping with climate change, optimal use of energy resources, and sustainable management of water resources and wastewater.

In light of the foregoing, this issue of IDSC "Policy Perspectives" series seeks to discuss and analyze the concept and importance of green bonds. It also discusses and analyzes the main principles and pillars of this concept, and the size and characteristics of green bonds and sovereign green bonds at the international level. The issue also touched on Egyptian green bonds, and the framework developed by the state for this type of sovereign bond.

Egyptian Sovereign Green Bonds

Prof. Nagwa Samak

Vice Dean of Post Graduate Studies and Research, Faculty of Economic and Political Science, Cairo University



Growing environmental dangers and climate change threats, for example, have begun to affect the entire globe. The cost of extreme weather disasters as a result of climate change grew by 86% between 2016 and 2017⁽¹⁾. In 2010, two events arising from climate change produced economic and financial losses: heatwaves in Russia, which cost the country 1% of its GDP, and floods in Pakistan⁽²⁾. As a result, climate change and environmental threats have risen to the top of international organisations' priority lists. There have been rising calls to promote a type of finance known as "green finance" as a proactive method to fulfil SDGs connected to environmental sustainability as part of global efforts to transition to a sustainable low carbon economy.

Green finance aims at directing the credit to fund green industries and clean energy production and preserving the ecosystem from further degradation. In addition, it ensures that credit is provided to projects and technologies that are environmentally responsible, and thus achieving sustainable economic development. It is a growing global trend among financial institutions whether conventional or green stock exchanges, commercial, development or green banks.⁽³⁾

Green finance is not the responsibility of one entity, yet it depends on collective action from various players. The demand for green finance can be from households, Green finance is not the responsibility of one entity, yet it depends on collective action from various players, so it is a multi-layered process that involves banks, institutional investors, and international financial institutions.

companies, production facilities, or even governmental authorities. Green finance is a multi-layered process that involves banks, institutional investors, and international financial institutions.⁽⁴⁾

The European Investment Bank and the World Bank issued their first green-themed bonds in 2007-08. Since then, there has been increased investor interest in all sorts of environmental assets. Green bonds could be a significant source of funding for the transition to a low-carbon economy.⁽⁵⁾

The next part will be organized as follows:

- Definition of green bonds and its importance.
- · Green bonds principles.
- Size and characteristics of green bonds and sovereign green bonds at a worldwide level.
- Egyptian sovereign green bonds and its framework.
- · Conclusion.



The Definition of Green Bonds and its Importance

Green bonds are fixed-income securities whose earnings will be used to fund initiatives or activities that help mitigate or adapt to climate change, as well as other environmental sustainability goals. Corporate, supranational, federal, municipal, and project notes, as well as asset-backed securities (ABS) and mortgage-backed securities (MBS), are all examples of green bonds.⁽⁶⁾

The International Capital Markets Corporation (ICMA) defines examples of Green Project categories, which are given in no particular order such as renewable sources of energy, pollution reduction, conservation of terrestrial and marine biodiversity, management of live natural resources and land usage in an environmentally sustainable manner, transportation that is free of pollution, water and wastewater management that is sustainable, adaptation to climate change, items that are ecologically friendly and green buildings that are certified or meet regional, national, or worldwide criteria. In addition, several institutions offer unbiased analysis, counselling, and assistance on the quality of various green solutions and environmental practices ⁽⁷⁾. Several worldwide and national initiatives are currently underway to develop taxonomies and offer mapping between them to ensure comparability with green project categories such as the Chinese Catalogue and the European Union Taxonomy. This could provide additional information to Green Bond issuers on what is considered green and eligible by investors. The following figure shows different forms of green projects categories:



Source: https://www2.deloitte.com/lt/en/pages/legal/articles/Green-Bonds-Issuance-and-Support-Offering.html

The Importance of Issuing the Green Bonds and its Motives:

The Importance of Issuing the Green Bonds:

• The Way to Achieve SDGs

Climate reduction and adaptation are essential to achieve the United Nations' Sustainable Development Goals. Climate Bonds have highlighted six of the seventeen Sustainable Development Goals (SDGs) where boosting green investment and development in green bond markets provides direct benefits, particularly in developing countries, based on climate-related initiatives. Green bonds have the greatest impact on the following six SDGs: 6, 7, 9, 11, 13, and 15 from green bond investment (8). The World Bank had issued over 185 bonds in 23 currencies, totaling around \$ 16 billion in Green Bonds since 2008 till the mid of 2021 that allows to invest in climate solutions (9).

• The Way to Achieve Paris Pact

Green bonds help in achieving the 2°C objective for the Paris Agreement; Paris Pact is the first international agreement to say unequivocally that the world must

pursue a decarbonization strategy. Achieving this strategy

need a significant investment. According to the International Energy Agency (IEA), decarbonizing the electricity industry would require an additional expenditure of US\$ 9 trillion

require an additional expenditure of US\$ 9 trillion between 2016 and 2050. Furthermore, an extra investment of \$ 3 trillion is necessary for the period 2016–2050 in order to meet energy efficiency objectives in the construction, industry, and transportation sectors. Using market dynamics and introducing private funds are effective means of acquiring funding.

As a result, putting out a plan for domestic and international private funds is important for such investment prospects. (10)

Green bonds help in achieving the 2°C objective for the Paris Agreement, as the Paris Pact is the first international agreement to say unequivocally that the world must pursue a decarbonization strategy.

• The Way to Recover from Consequences of Covid-19 Epidemic

The ongoing COVID-19 epidemic and its consequences will have a massive influence on the world economy. The recovery will be spearheaded by the government. Governments around the world are expected to spend over EUR 10 trillion over the next two years to recover from the Covid-19 pandemic. Many different policy areas, with sustainable finance have a significant role to play in contributing to a long-term and resilient recovery following the COVID-19 pandemic crisis (11). Some large economies, such as the Nordic nations and Germany, have indicated that green and social initiatives would be prioritised (12).

Green Bonds Issuers' Motives:

- The demand for Sustainable products is increasing.
- There is a growing need for ethical corporate operations.
- Increasing the number of investors takes place by recruiting new, environmentally conscious investors.
- The capacity to fund green initiatives without sacrificing liquidity or credit risk is important, as direct solo investment would.
- There should be aspects of brand improvement and marketing.
- The Model of financing is both cost-effective and easy.
- Investment and environmental goals are being combined.
- As with any fixed asset obligation, there is low volatility and a consistent return.
- Potential pricing advantage generated by rising order book momentum as a result of a growing number of green investors. (13)



Green Bond Principles (GBP)

The green bond principles of the International Capital Market Association (ICMA) are generally acknowledged and used in the establishment of national green bond guidelines or standards around the world. The Green Bond Principles (GBP) are a set of voluntary procedural principles that encourage transparency and disclosure; moreover, they promote integrity in the growth of the Green Bond market by defining the issuance process.

The GBP is made up of four main components:

Utilization of Proceeds

The use of the bond proceeds for Green Projects is the core of a Green Bond, and it should be properly explained in the legal documents for the security. The issuer will review and, when possible, quantify all certified Green Projects to ensure that they generate clear environmental benefits.

• Project Evaluation and Selection Process

The issuer of a Green Bond should clearly communicate to investors the environmental sustainability objectives, the process by which the issuer determines how the projects fit into eligible Green Projects categories, and the related eligibility criteria, including, if applicable, exclusion criteria or any other process used to identify and manage potential. Issuers should keep track of this data and disclose it.

• Proceeds Management

The issuer should credit the Green Bond's net proceeds, or an amount equal to them, to a sub-account, shift it to a sub-portfolio, or otherwise track it in an appropriate manner, and attest to it in a formal internal process related to the issuer's lending and investment activities for Green Projects.

As long as the Green Bond is outstanding, the remaining monitored net proceeds should be adjusted on a regular basis to reflect allocations to qualified Green Projects. Investors should be informed about the sorts of temporary placements that the issuer intends to make using the remaining unallocated net proceeds.

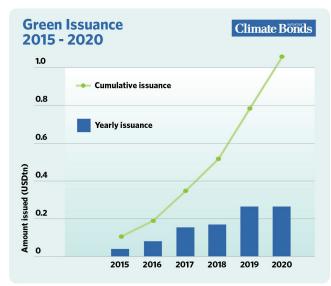
· Information gathering and reporting

Issuers shall make and keep current information on the use of proceeds available to the public on a yearly basis until full allocation in the material shortages. An overview of the projects and their costs as well as the expected impact should be included in the annual report. (14)

Green Bond Market's Size and Characteristics

Since 2011, the annual issuance of green bonds has increased, with a noteworthy increase beginning in 2015. At the end of 2015, the green bond market had just a total amount of %104 billion. After five years, the market exceeded \$1 trillion record; the total market size in 2020 shows a 60% annual growth rate from 2015. Green bond issuance began to revive in the second half of the year, reaching a new high of \$ 269.5 billion at the conclusion of the year, just slightly higher than the final total of \$ 266.5 billion set during Climate Bonds 2019, a \$171.4 billion increase over the previous year. (15)

The Sovereign Green Bond has also emerged, as states and other institutions assist more issuance in emerging countries to speed up business sector issuance. The following figure shows the growth of green issuance from 2015-2020:



sector issuer types grew in volume in 2020, while private sector volumes stayed flat or shrank.

In general, public

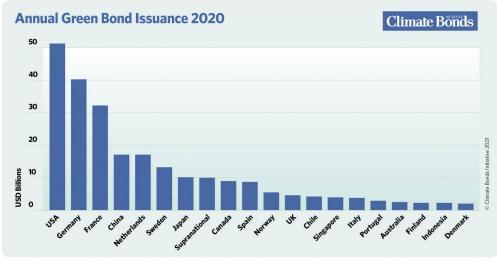
Source: https://www.climatebonds.net/2021/01/record-2695bn-green-issuance-

In the year 2020, 9 sovereign issuers relaunched or issued their first green bonds representing a 40% increase in this issuer category compared to 2019. Because of their size and profile, sovereign green bonds are important because they assist to catalyze green bonds market development and make the green bond market more accessible to other types of issuers. (16)

The number of countries issuing green bonds grew from 11 in 2019 to 23 in 2020, which makes the market more diversity.

In addition, the number of countries issuing green bonds grew from 11 in 2019 to 23 in 2020, which makes the market more diversity. Moreover, 62 percent of the 2020 green bond volume had a tenor of up to ten years, with nearly 40 % having a maturity of 5-10 years, the highest individual bracket. Financial and businesses issued half of the 5 to 10 year bonds. The longer-dated (+10) papers came primarily from a governmental entity, as predicted. Government-backed organizations, sovereigns, and utilities classified as nonfinancial organisation were among the major issuers. (17)

The following figure shows the Annual Green Bond Issuance in the Top 20 Countries:



Source: https://www.climatebonds.net/2021/01/record-2695bn-green-issuance-2020-late-surge-sees-pandemic-year-pip-2019-total-3bn

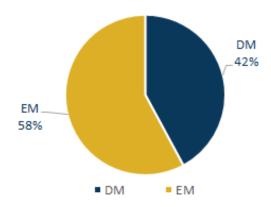
The chart shows that the United States, Germany, and France issued the most green bonds in 2020. On the region perspective, the developed markets accounted 80% of total green volume, compared to 73% in 2019. Four Emerging markets (EM) contributed 16% down from 22% the year before, while supranational organisations contributed 4% down from 5% in 2019. The total EM figure has been impacted as Chinese issuers have changed their attention to social bond issuance. In 2020, Europe was the greatest source of green debt, accounting for \$156 billion, or 48% of the total. The government was in charge of the European issuance. (18)

The United States,
Germany, and
France issued the
most green bonds
in 2020, and in this
regard, the developed
markets accounted 80%
of total green volume,
compared to 73%
in 2019.

Sovereign Green, Social, and Sustainability (GSS) Bond

In 2021, the Climate Bonds Initiative (Climate Bonds) released its first Sovereign Green, Social, and Sustainability (GSS) Bond Survey, which included data from 19 sovereign issuers. GSS includes debt with social and sustainable themes and the standard green bond universe. Hereafter, we analysis characteristics of the (GSS) themed bond market up to the end of 2020.⁽¹⁹⁾

Participants of Sovereign Green, Social, and Sustainability Bond

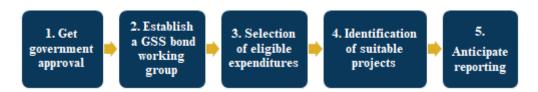


Source: https://www.climatebonds.net/files/reports/cbi sd sotm 2020 04d.pdf

The figure refers to the fact that those 8 issuers from developed countries, 7 of them (France -Belgium- Ireland- Netherlands - Hong Kong - Sweden- Germany) issued green bonds and Luxembourg issued Sustainability bonds. Nine of the Emergent markets (Poland - Egypt - Fiji - Nigeria -Indonesia- Lithuania- Seychelles- Chile -Hungary) issued green bonds and Kingdom of Thailand and Mexico issued Sustainability bonds. Poland as one of the EM surprised the market with the world's first sovereign green bond at the end of 2016, setting a precedent for other countries to follow

Mechanism for Issuing GSS Bonds

The following figure represents the framework for issuance GSS bonds



Source: Harrison, C., and Muething, L., January 2021

The framework for issuance GSS bonds consisted of 5 steps:

• Get government approval

Ministers are the ones who create bonds. A number of ministers were mentioned by developed markets as playing a major contribution. The Ministry of Finance (MoF) was cited as the most influential contributor to the decision in EM countries. The Debt Management Office (DMO) was ranked second in the EM category and third in the developed market category.

• Establish a GSS bond working group

To assist them in making decisions, many countries organised a green finance working group. These groups were also crucial in the development of the GSS framework, with fifteen respondents in the poll claiming to have been involved. Twelve looked at their portfolio plan, while six more adopted a green finance plan, but in different ways.

• Select eligible expenditures

The appropriate areas of spending for the sovereign GSS bond are generally connected with national goals. The ICMA GBP was mentioned by ten out of the 19 participants. Both China and the EU have implemented required green definitional frameworks, marking a significant step forward in this area. Issuers can, and often do, acquire opinion of a third-party certification, or other forms of evaluations of their framework to validate its authenticity.

• Identify suitable projects

Budget tagging can help in figuring out which expenses are appropriate to include. Expenditures may also need to fulfil size requirements and have quantifiable consequences. To avoid alternative sources of funds being awarded to them, some expenditures must be explicitly designated.

• Plan ahead for reporting.

To develop a pattern of disclosure to investors and parliament, the frequency and kind of post-issuance reporting must be determined.

Egyptian Sovereign Green Bonds

In February 2016, Egypt's government, as a global partner in the execution of the nited Nations' Sustainable Development Goals, released Egypt's Vision 2030, which highlights the three dimensions of sustainable such as the economic, the social, and the environmental. "Achieve an integrated and sustainable ecosystem" is the vision's fifth goal⁽²⁰⁾. In July 2018, Egypt's Financial Regulatory Authority (FRA) authorised the legal framework for issuing green bonds, with the goal of providing financial tools to fund environmentally friendly development such projects in new and renewable energy, building, and transportation. Capital Market Law No. 95 of 1992, as well as its executive regulation (ER) and relevant directives issued by the FRA's board of directors, oversee green bonds (BoD)⁽²¹⁾. The rules were created with the help of the IFC and are based on the Green Bond Principles of the International Capital Market Association (ICMA) ⁽²²⁾. GBG are intended to provide additional guidance on the application of the GBP to enhance transparency, consistency and uniformity of green bonds approved by (FRA). The following table summarizes the main point of the guide for more details see GBG ⁽²³⁾.

Who can issue green bonds	Issuance steps		
Must be an Egyptian issuer	Approval from regulator		
Foreigners but the eligible project must locate in Egypt.	Working with investment bank or advisor		
	Get credit rating		
	Market and price the green bond		
	Evaluating and selecting the green project		
	Tracking and reporting the regulator on the use of proceeds		
	and external review report on the process of the project annually until full allocation		

Source: international financial corporation IFC, financial regulatory authority (FRA) Green bond guidelines.

The Egyptian Financial Regulatory Authority (FRA) has created the first Regional Center for Sustainable Finance in the Middle East and Africa (MEA). That assists to complete the institutional and organizational structure of the green finance. The center will strengthen Egypt's economy's presence on the global green economy map. Its goal is to promote a green economy culture within the non-banking financial sectors.⁽²⁴⁾

Egypt issued the first sovereign green bonds in the Middle East and North Africa (MENA) area, worth \$750 million and listed on the London Stock Exchange. The five-year bonds, which were auctioned at a 5.25 percent interest and were five times oversubscribed, will be used to finance green projects. (25)

Egypt's green bond is part of the country's innovative debt management strategy that aims to diversify its investor base, while shifting to longer-term borrowing. The Ministry of Finance is implementing a plan to offer bonds in the international markets to finance part of the needs of the fiscal year 2021/2022 in accordance

Egypt's green bond is part of the country's innovative debt management strategy that aims to diversify its investor base, while shifting to longerterm borrowing.

with what is approved by the Council of Ministers, where the Council of Ministers, in its 95th session (on 6/10/2020), approved this plan, which included the following:

Offering bonds in international markets in the range of 7 billion US dollars, varying between issuance in US dollars, euros and one of the Asian currencies, provided that the estimation of the volume of issuance of each currency is according to the volume of foreign investors' expected requests for each issue and market conditions at the time of the offering during the year, as well as according to the recommendations of banks Investment (the Offering Managers) promoting the issue. (26)

The Mechanism for the Egyptian Issuance

With the help of the World Bank, the ministry of finance has created a system for labelling and tracking green finance. What counts as green activities and what does not can be a controversial issue. Based on the worldwide experience framework and standers, the preparation of the green bond issue project took more than nine months. The following table shows the mechanism for the Egyptian issuance.



Get government approval	Establish a GSS bond working group	Selection of eligible expenditures	Identification of suitable projects	Anticipate reporting
√	1	1	✓	1
Ministry of Finance	Technical committee was formed under the chairmanship of the Ministry of Finance and with the membership of representatives of the relevant ministries, namely the ministries of (electricity and renewable energy), planning and economic development, environment, housing and urban communities, and transport	Technical committee defines projects. The proposed green bonds included renewable energy generation projects, modern irrigation systems projects, solid waste management, clean transportation, pollution reduction and control, adaptation to climate change, and sustainable management of water and sanitation, in light of Egypt's 2030 vision, which gives priority to green investment projects.	Technical committee and third-party evaluations where Egypt used the help of two institutions Vigeo Eiri — an ESG solutions company — were tasked with providing an independent verification of the framework. The company had the opinion that the framework is aligned with the four GBP 2018. And JPMorgan recently announced that Egypt has fulfilled all the requirements to be added to the watch list, in preparation for its inclusion in the index. Global bonds (expected in the next six months) to make Egypt the second country in Africa and the Middle East to join this index, with a weight of 1.85%	An external reviewer will assess the green investment on an annual basis, with a public report.

Source: The table is done by the researcher based on Achievements and projects of the Ministry of Finance during the years (2018-2021) and future projects.MOF.gov.eg

Benefits of the Issuance

Egypt gains from offering these bonds as a part of a larger Sustainable Development Strategy. This will enhance Egypt's standing among those wanting to support long-term aims and will help increase the flow of foreign investments in debt instruments, which will provide liquidity in the market and reduce the cost of financing a deficit budgeting.

Bonds allow the ministry of finance to collaborate with other ministries as well as international organisations. This is crucial since the transition from theoretical to actual climate goals execution and funding is impossible without the formation of such partnerships. Moreover, the government can contribute to relevant regulatory discussions by going through the procedure of issuing sovereign green bonds.

Wherever practical, sovereign issues should explore benchmark size to increase market liquidity and scale, as well as encourage more focused investor mandates.

Conclusion

The global green bond market has taken off in recent years. The market exceeded the cumulative \$1 trillion record. The total market size in 2020 shows a 60 percent annual growth rate from 2015. In general, public sector issuer types grew in volume in 2020, while private sector volumes stayed flat or shrank. In 2020, 9 sovereign issuers reopened or issued their first green bonds, amounting to a 40% increase in this issuer category over 2019. Sovereign green bonds are significant because of their size and profile, which help to catalyse green market development and make the green bond market more accessible to other types of issuers. Egypt led the Middle East and North Africa (MENA) countries and issued its first sovereign bonds worth \$750 million and listed on the London Stock Exchange. Based on the worldwide experience framework and standers, the preparation of the green bond issue project took more than nine months.

Egypt gains from offering green bonds as a part of a larger Sustainable Development Strategy. This will enhance Egypt's standing among those wanting to support long-term aims and will help increase the flow of foreign investments in debt instruments.

Egypt has established a robust green finance institutional and organisational system. The Financial Regulatory Authority of Egypt (FRA) approved the legal framework for issuing green bonds in July 2018, with the purpose of providing financial tools to fund environmentally friendly initiatives in new and renewable energy, construction, and transportation. (FRA) has established a Regional Center for Sustainable Development.

To move forward in the sovereign bond market at the local and international levels, a number of steps should be taken:

- To highlight the potential of green bonds and the types of projects they can support, sovereign bonds should direct resources towards vital national initiatives. This could also help with future bond issuing political support.
- Increased issuance volume in local markets can help to promote liquidity while
 also facilitating the development of the requisite market infrastructure and technical
 skills for the emergence of a green bond market. Sovereign bonds help local markets
 expand by attracting investors and proving investor demand, as well as setting precedent and enhancing visibility.
- Increasing the number of eligible projects in GBG and expanding them to include social and sustainable initiatives will provide more sources of eligible green bond expenditures for ministries and businesses.
- join the International Platform on Sustainable Finance (IPSF) which has 17 embers since its establishment in 2019. Members can exchange information to promote best practices, compare their different initiatives, and identify barriers and opportunities for sustainable finance, while respecting national and regional contexts.
- To meet the Paris Agreement's ambitions, the entire economy, not just a few industries, must transition to a net-zero-carbon route by 2050. The sovereign GSS market is a key component of supporting an economy-wide transition. To achieve this goal, the government entities should encourage issuing green bonds to fund long-term initiatives.
- Implement budgetary reporting guidelines to make it easier to identify qualified
 expenses. Budget tagging was used to identify whether expenses were appropriate
 for inclusion. In most situations, the government examines each budget line to see if
 it could be classed as green or not.
- Businesses, primarily energy and utility companies, employ Green Bonds to fund specific environmental projects. Green Bond issuers are required to earmark resources for specific, previously defined initiatives, allowing investors to know that their money is going to environmentally friendly projects.

References

- The European Commission (2019). Retrieved from: https://ec.europa.eu/info/sites/info/files/business_economy_euro/accounting_and_taxes/documents/19_0618-sustainable-finance-factsheet_en.pdf
- EBF The European Banking Federation (2017). Towards A Green Finance Framework: Opportunities
 and challenges for banks in the existing regulatory context. The European Banking Federation. Pages
 11-12. Retrieved from: https://www.ebf.eu/wp-content/uploads/2017/09/Geenfinance-complete.pdf
- Höhne, N., Khosla, S., Fekete, H., Gilbert, A. (2012): Mapping of Green Finance Delivered by IDFC Members in 2011, ECOFYS.
- 4. Berensmann, K.& Lindenberg, N. (2016). Green Finance: Actors, Challenges and Policy Recommendations. German Development Institute.
- 5. https://www.sebi.gov.in/sebi data/meetingfiles/1453349548574-a.pdf الهند
- 6. https://data.bloomberglp.com/bnef/sites/14/2017/08/BNEF RN Green-Bonds-2016.pdf
- International capital market association (ICMA) ,2018, Green Bond Principles http://www.icmagroup.org/
- 8. Climate Bonds Initiative, December 2019, Climate Bonds Standard Version 3.0
- 9. https://treasury.worldbank.org/en/about/unit/treasury/ibrd/ibrd-green-bonds
- 10. Ministry of the Environment,2017, Green Bond Guidelines, http://www.env.go.jp/en/policy/economy/gb/guidelines.html
- 11. The International Platform on Sustainable Finance,2020anual report. https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/international-platform-sustainable-finance-annual-report-2020_en.pdf
- 12. Harrison, C., and Muething, L., Sovereign Green, Social, and Sustainability Bond Survey, Climate Bonds Initiative, January 2021
- 13. https://www2.deloitte.com/lt/en/pages/legal/articles/Green-Bonds-Issuance-and-Support-Offering. html
- 14. Capital Markets Association website (www.icmagroup.org/greenbonds).
- 15. https://www.climatebonds.net/2021/01/record
- 16. https://www.climatebonds.net/files/reports/cbi sd sotm 2020 04d.pdf
- 17. Ibid.
- 18. Ibid.
- 19. Harrison, C., and Muething, L., Sovereign Green, Social, and Sustainability Bond Survey, Climate Bonds Initiative, January 2021 www.climatebonds.net
- 20. https://mped.gov.eg/EgyptVision?lang=en
- 21. Francesca Secondari Rana El Kahwagy ,2021, In-depth view into Egypt's green bonds regulation, https://iclg.com/alb/16014-in-depth-view-into-egypt-s-green-bonds-regulation
- 22. https://www.greenfinanceplatform.org/policies-and-regulations/egypt%E2%80%99s-financial-regulatory-authority-green-bond-guidelines
- 23. IFC, FRA, GREEN BOND GUIDLINES
- https://www.businesstodayegypt.com/Article/1/410/FRA-launches-Regional-Center-for-Sustain-able-Finance
- 25. https://api.mof.gov.eg/api/containers/files/download/37ba4f60-f38c-11eb-b7e2-85fcaa8ea18c.pdf
- 26. Ibid.



