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**SUSTAINABLE FINANCING AND ROLE OF GREEN BONDS**- Shreya Khandelwal<sup>1</sup>**Abstract**

Sustainable financing is already shaping how businesses and society function at large and the trend will continue more rigorously for coming years. The paradigm shift encompasses the commitment of a firm to support projects which play significant role in moving towards a more sustainable future. The paper discusses how finance sector is becoming a harbinger of change in the process of making economies more sustainable. It progresses to explain what green bonds as a sustainable financial instrument mean. Then, the procedural requirements to issue green bonds in India along with the present status on issue of green bonds have been enumerated. Some of the hurdles that parties involved in issuance of green bonds have to face in Indian context have been discussed in brief. The next part discusses various opportunities that are present in the Indian market which could give sustainable financing the push it requires in order to be successful in true sense. Finally, the paper concludes with remarks on effectiveness of Green bonds in today's world and the seeds of sustainable financing being planted, the immense benefits of which would be reaped in years to come.

**Introduction**

Sustainable finance can be termed as investment decisions which take into consideration environment, social and governance (ESG) factors while investing in financial sector which would lead to enhanced long –term investments in sustainable projects and economic activities. Environment factors could include use of resources which are sustainable or helps in mitigating climate crisis. Social factors include consumer protection, preservation of human and animal rights along with diverse hiring norms. Governance factors are related to employee relations, management and compensation practices of private and public organizations. The financial

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sector possesses tremendous power in funding and creating awareness about sustainability issues by providing for research and development in sources of alternate energy or promoting businesses which abide by sustainable and fair practices. Large institutional investors are increasingly incorporating ESG framework in their capital allocation criteria. The shift towards sustainable financing has become more than socially responsible investing and now includes ownership and asset management. This has severe implications for companies and investors alike.

There are a good number of ways in which finance sector can act as a catalyst for furthering sustainability. This can be through monetary and fiscal policies, concerns of investors regarding unsustainable business practices resulting in stranded assets, concerns of investors about climate policies and risks associated with climate impact, greater transparency on how unsustainable economic activities are being funded and enhanced understanding of how ESG aspects affect the financial performance of assets. However, the focus of this paper is on environment factor of the ESG and how green bonds fit in the sustainable framework of capital.

Many initiatives have been taken in the country with the goal of ensuring that the finance sector contributes aggressively in achieving sustainability. The Reserve Bank of India for instance, has been actively taking steps to support and promote green finance projects. RBI in its Report on Trend and Progress of Banking in India (2018-19) mentioned the risk that climate change poses on financial assets and at the same time the need to fasten green finance to ensure environment friendly development. In 2015, it included small renewable energy sector under its Priority Sector Lending (PSL) scheme. Firms involved in renewable energy sector are eligible for loans upto 30 Crore (increased from 15 Crore since September 4, 2020) whereas loans upto 10 Lakh are available to household under this scheme<sup>2</sup> for investing in renewable energy.<sup>2</sup>

### **Green Bonds as Sustainable Financial Tool**

A variety of financial instruments are being introduced to support activities which are sustainable and aim at satisfying the needs of the investors along with improving adaptation and risk management. The International Capital Market Association (ICMA) has identified four

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<sup>2</sup>RBI, *Green Finance in India: Progress and Challenges*, RBI Bulletin January 2021, 61(2021) [https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/04AR\\_2101202185D9B6905ADD465CB7DD280B88266F77.PDF](https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/04AR_2101202185D9B6905ADD465CB7DD280B88266F77.PDF).

types of bonds which come under the preview of sustainable financing.<sup>3</sup> These are: Green bonds, Social Bonds, Sustainability Bonds and Sustainability linked Bonds (SLBs). The funds raised from the green bonds can be used to finance projects involving renewable energy, energy efficiency, pollution prevention and control, sustainable management of natural resources and land, clean transportation and biodiversity conservation.

Green bonds as financial instruments are mostly structured in the similar way as classic investment grade bonds. A traditional bond is a debt instrument in which the issuer of the bond pays the bondholder the principle amount at a specified date and interest payment is made throughout the duration of the bond. Most of the bonds are fixed income bonds which mean that the interest is provided to the bondholder at fixed intervals but the amount of interest can vary. The key difference between a regular bond and a green bond is that a “use of proceeds” clause is included in the green bonds by the issuer which states that the purpose of these bonds is green investments.<sup>4</sup> It implies that the issuer agrees to use the funds raised from green bonds to finance or refinance projects or assets that have been defined as green and not treat these as general working capital. However, green bond investors do not bear the risk arising from specific projects or assets funded by green bonds but have access to the entire balance sheet of the issuer.<sup>5</sup>

The incentives for investing in green bonds are similar to those of any other asset class. For investors, there is financial incentive to buy green bonds if they have lower risk, and/or better returns, or/and more benefits arising from diversification than other non-labelled bonds or other types of assets they could potentially invest in.<sup>6</sup> Issuers on the other hand have a direct financial motivation to issue green bonds as against non-labelled bonds if the former decreases their capital cost and/or helps in providing better access to capital or decrease risk of capital availability.

Another possible financial incentive available for investors is linked with the size of institutional investors. It can be argued that since large institutional investors have greater exposure to the economy, they have financial incentives to promote long term sustainability in

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<sup>3</sup>Payal Agarwal, *Sustainable Finance and ESG Bonds*, TAXMANN, 3 (2021), <http://www-taxmann-com.nujs.remotlog.com/research/search?searchData=Sustainable%20Finance%20and%20ESG%20Bonds>.

<sup>4</sup>Aaron Maltis and Bjorn Nykvist, *Understanding the Role of Green Bonds in Advancing Sustainability*, JOURNAL OF SUSTAINABLE FINANCE & INVESTMENT, 1 (2020), <https://www.tandfonline.com/doi/full/10.1080/20430795.2020.1724864#:~:text=Green%20bonds%20are%20an%20important,funds%2C%20and%20sovereign%20wealth%20funds>.

<sup>5</sup>Climate Bonds Initiative, *Green Bonds: The State of the Market 2018*, (2019) [file:///Users/aaron.maltis/Downloads/cbi\\_gbm\\_final\\_032019\\_web%20\(2\).pdf](file:///Users/aaron.maltis/Downloads/cbi_gbm_final_032019_web%20(2).pdf).

<sup>6</sup>Aaron, *supra* note 3, at 5.

the economy and correcting the negative externalities and market failures that hamper the efficiency of the economy in long run.<sup>7</sup> If the view of investors engaging in different forms of sustainable finance is considered, then it can play an important role in bringing the shift in investments to assets which are accepted to be consistent with long term sustainability and farther from “brown” assets which are considered to undermine economic sustainability in the long run.<sup>8</sup> At the same time, Green bonds can assist in enhancing the reputation of the issuer company, as it shows its commitment towards sustainability and development of environment. As the funds raised from green bonds are earmarked for company’s investment in green projects, the issuing company has additional access to investors who would not have invested in regular bonds.<sup>9</sup>

## Green Bonds in India

### A. Statutory Requirements

Green Bonds in India are governed by the "Disclosure Requirements for Issuance and Listing of Green Debt Securities" issued by SEBI on May 30, 2017 along with general requirements under the SEBI (Issue and Listing of Debt Securities) Regulations, 2008. As per the circular of the SEBI, the issuer of the green bonds is required to make disclosure in the offer document about the environmental goals which are sought to be achieved by issuing such securities.<sup>10</sup> Along with the disclosure regarding the environment objectives, the issuer company is also required to disclose how the proceeds collected from the bonds issue would be used. An independent third party reviewer may also be appointed by the issuer for matters relating to project evaluation, selection criteria etc. The issuer is also required to make additional disclosures along with financial reports and annual reports. The additional disclosures include details of unutilized funds, qualitative performance indicators, list of projects and how funds have been allocated and disbursed to each of the them. Further, the issuer of Green Bonds has to “maintain decision making process for determining the continuing eligibility of the project(s).”<sup>11</sup>

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<sup>7</sup>Hawley, James P., and Andrew T. Williams, *The Universal Owner’s Role in Sustainable Economic Development*, CORPORATE ENVIRONMENTAL STRATEGY, (2002).

<sup>8</sup>Aaron, *supra* note 3, at 5.

<sup>9</sup>Gaurav N. Pingle, *SEBI's new initiative: Listing of stock exchanges, green bonds' issuance & amendment to takeover code*, TAXXMAN, 3(2015), <http://www-taxmann.com.nujs.remotlog.com/research/search?searchData=Listing%20of%20stock%20exchanges,%20green%20bonds%27%20issuance%20%26%20amendment%20to%20takeover%20code>.

<sup>10</sup>*SEBI Unveils releases Disclosure Norms for Issuance & Listing of Green Bonds*, TAXXMAN, 4 (2017), <http://wwwtaxmann.com.nujs.remotlog.com/research/search?searchData=SEBI%20Unveils%20releases%20Disclosure%20Norms%20for%20Issuance%20%26%20Listing%20of%20Green%20Bonds>.

<sup>11</sup>*Id.*

## B. Green bonds Issued in India

Indian issuers who want to issue green bonds in overseas bond markets have to comply with the globally accepted green bond framework. ReNew Power green bond for instance which has been listed on India INX has been certified under the Climate Bond Initiative.<sup>12</sup> Bonds issued by Indian Companies to global markets are treated as external commercial borrowings or debt. Such overseas bonds have to comply with the Foreign Exchange Management Act, 1999 and in particular Master Directions on External Commercial Borrowings, Trade Credits and Secured Obligations dated March 26, 2019 and Foreign Exchange Management (Borrowing and Lending) Regulations, 2018 (**ECB Regulations**).

World Bank has issued green bonds towards several projects in India from time to time. Based on the Green Bond Impact report (2019) by the World Bank, it is estimated that the outstanding amount of Green Bond proceeds allocated to support the financing of such projects in India is US\$640mn, as on June 30, 2019.<sup>13</sup> India is comparatively new to green bonds, it is however the second largest emerging market for green bonds.<sup>14</sup> The table below shows the growth in issuance of sustainable debt against total amount of money raised in past few years.

Calendar Year	Total Amount Raised#	Sustainable Debt Raised (India)	Sustainable Debt Raised (Global)
2015	15.26	0.85	39.77
2016	20.52	0.81	66.58
2017	21.12	3.17	126.82
2018	25.46	0.70	165.38
2019	18.38	3.01	240.84
2020	25.26	0.95	542.71
2021*	7.39	4.65	558.59

\*As of July 15, 2021. Sustainable debt includes a mix of ESG bonds and Sustainability-linked bond issuances. #Total offshore debt Issuances by Indian firms.

<sup>12</sup>*Id.*

<sup>13</sup>RBI, *supra* note 1, at 67.

<sup>14</sup>*Role of Green Bonds in India's Climate Change Goals*, (2021), [https://www.acuitylaw.co.in/publication-and-news/role-of-green-bonds-in-indias-climate-change-goals?utm\\_source=Mondaq&utm\\_medium=syndication&utm\\_campaign=LinkedIn-integration](https://www.acuitylaw.co.in/publication-and-news/role-of-green-bonds-in-indias-climate-change-goals?utm_source=Mondaq&utm_medium=syndication&utm_campaign=LinkedIn-integration).

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India INX, which is a subsidiary of BSE started its Green trading and listing platform known as GSM Green which has been established as per ICMA's Green Bond Principles and Climate Bonds Initiative.<sup>15</sup> India INX aims at facilitating fund raising for green financial projects and encourages ESG standards through GSM Green Platform. Green Bonds worth USD 1750 million have been listed on GSM Green of India INX as on March 31, 2021.<sup>16</sup> The total amount raised through green bonds at BSE in Financial Year 2019-2020 was INR 18.03 billion as against INR 8.65 Billion in FY 2018-19.<sup>17</sup> India INX is the first introducer of Green Securities Platform for issuance of green bonds. Since 2015, green bonds worth INR 5717 Crores (about USD 800 Million) have been mobilized by BSE debt platform. This also included bonds raised by Municipal Corporations.<sup>18</sup>

The green bonds that have been issued since 2015 have maturity of five years or above but less than 10 years. However, issuers such as Yes Bank Ltd. (2015), Indian Renewable Energy Development Agency Ltd. (2017, 2019), Rural Electrification Corporation Limited or REC Ltd. (2017), Power Finance Corporation Ltd. (2017), Indian Railway Finance Corporation Ltd Adani Renewable Energy Ltd. (2019) have issued green bonds with the maturity of 10 or more years. ReNew Power Pvt. Ltd. has issued green bonds with maturity period of less than 5 years in 2019.<sup>19</sup>

### C. Problems of Indian green bond market

One of the hurdles in issuance of green bonds in India is the high cost of issuing these bonds. The issuing cost of the green bonds is normally higher than other government or corporate bonds. Green bonds are generally issued by private sector companies having good financial condition or public corporations. The cost of issuance is lower for public sector companies even when the bonds are listed on India INX. Indian Railway Finance Corporation issued green bonds on India INX at coupon rate of 3.85% and State Bank of India at rate of 4.50% only. On the other hand, private sector companies like Adani Green energy and ReNew Power group had to issue green bonds at the rate of 6.5%.<sup>20</sup> If the issuing cost remains high, it would not be

<sup>15</sup>BSE, Annual Report 2020-21, 126 (2021), [https://www.bseindia.com/downloads1/Annual%20Report%202020-21\\_20210729093311.pdf](https://www.bseindia.com/downloads1/Annual%20Report%202020-21_20210729093311.pdf).

<sup>16</sup>*Id.*

<sup>17</sup>*Id.* at 65.

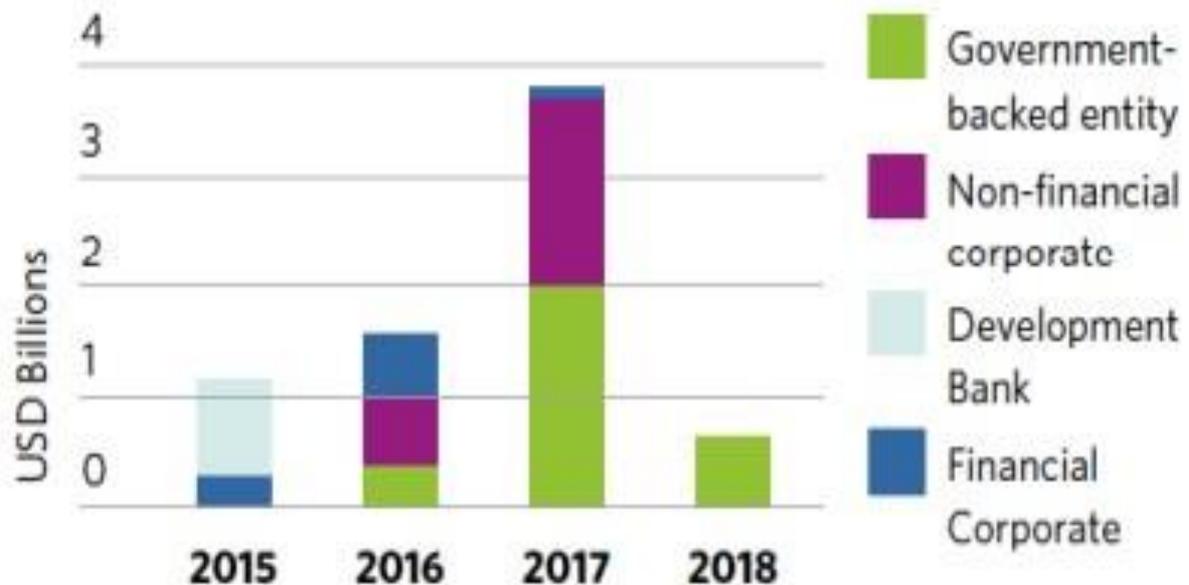
<sup>18</sup>BSE, *supra* note 14.

<sup>19</sup>RBI, *supra* note 1, at 67.

<sup>20</sup>ACUTYLAW, *supra* note 13.

feasible for small and medium size private sector companies to take on green projects funded by green bonds.<sup>21</sup>

Government backed entities have the biggest contribution to the issuance of green bonds as compared to private corporate in India as is evident from the following graph



Issuer of Green Bond in India<sup>22</sup>

Further, there is dearth of credit guidelines or credit ratings for Green bonds and green projects in India much alike most of the jurisdictions. Additional barriers in development of green finance include “greenwashing” or bogus environmental compliance claims, multiplicity of definitions, non-alignment of short term interests of investors and long term green investments.<sup>23</sup> There is information asymmetry in capital markets and no information about the efficiency, liquidity or knowledge of involved parties is available.<sup>24</sup> The integrity of the green bond market is robust but the risks it carries are legitimate and require distinct attention of the stakeholders and market participants.

<sup>21</sup>ACUITYLAW, *supra* note 13.

<sup>22</sup>CBI, *Green bonds: The state of the market 2018*, (2018) [https://www.climatebonds.net/files/reports/cbi\\_gbm\\_final\\_032019\\_web.pdf](https://www.climatebonds.net/files/reports/cbi_gbm_final_032019_web.pdf).

<sup>23</sup>RBI, *supra* note 1, at 65.

<sup>24</sup>Julia Freytag, *Challenges for Green Finance in India*, 41, <https://www.diva-portal.org/smash/get/diva2:1532467/FULLTEXT01.pdf>.

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#### D. Opportunities of Sustainable Financing in Indian Context

Using of bonds to directly fund large scale low –carbon and climate –resilient (LCR) infrastructure is not new. However since 2007, a market of bonds particularly designated as “green” has surfaced. As mentioned above, a green bond is distinct from the regular bond by this designation which shows the commitment to use the funds mobilized exclusively for financing or re-financing “green” assets, projects or business activities.<sup>25</sup> Other Sustainable Finance Debt Instruments are also available in India such as Sovereign green bonds, Sub-sovereign green bonds, General obligation green bond, Green revenue bond, Green structured finance, Green securitization, Green convertible bond, Green project bond, Environmental impact bonds / pay-for-results green bonds, Private placement, Green loans, syndicated loans and credit lines, Mezzanine and subordinated debt.<sup>26</sup> The goal here is to manage environmental risks and take up opportunities that provide environmental benefits and a decent rate of financial return.

The first quarter of the Financial Year 2020 witnessed inflow of USD 36 billion into environmental, social and governance (ESG) in India. Covid 19 has further given a push to more financial funds being directed towards ESG products. If this trend continued, the ESG funds would outnumber the traditional funds by 2025 as per PwC.<sup>27</sup> This shows that India is a lucrative destination for sustainable capital where the investors are developing a taste for sustainability. But focused efforts are needed to be made to lure sustainable investments in Indian projects.

Further, it is suggested by estimates that India has a financial gap of USD 75-200 billion per year.<sup>28</sup> The financial gap can be recovered with the support of domestic and international capital if a strong sustainable finance policy framework is put in place. Three pillars on which the private sector could work upon with support of India-UK Sustainable Finance Working Group are: 1. *Long term decarbonisation and sustainability targets* 2. *Structured efforts to green the financial system to account for climate risk* 3. *Policy changes to incentivize capital towards*

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<sup>25</sup>OECD, *Green Bonds: Mobilising the Debt Capital Markets for a Low-Carbon Transition*, (2016), <https://www.oecd.org/environment/cc/Green%20bonds%20PP%20%5Bf3%5D%20%5Blr%5D.pdf>.

<sup>26</sup>FICCI, *Practical Actions to Finance India's Sustainable Recovery*, 68 (Jan. 2021), [https://ficci.in/spdocument/23424/Sustainable-Recovery\\_IUKSFWG\\_Report.pdf](https://ficci.in/spdocument/23424/Sustainable-Recovery_IUKSFWG_Report.pdf).

<sup>27</sup>*Id.* at 4.

<sup>28</sup>*Id.*

*sustainable projects*.<sup>29</sup> The Working Group has also discussed ten short term actions which would accelerate the inflow of sustainable finance in Indian markets. If these suggestions are followed, the financial gap could be minimized substantially.

The quantum of investment needs is well known, but a better understanding of how sufficient equity and debt capital should be mobilized to fund the change to a low –carbon and climate –resilient (LCR) economy is essential. LCR infrastructure projects are mainly financed by debt but the challenge before us is to shift away from emission-intensive investment. While doing so, we have to ensure that growth in LCR infrastructure is maintained even if restrictions placed by traditional sources persist. India is keen to reduce the emission intensity of its GDP by 33%-35% by 2030 compared to 2005 levels.<sup>30</sup> A target of 450 GW of installed capacity by 2030 was also announced as an extension to the renewable energy ambition. In such a scenario, Green bonds can be used as a process as well as a financing instrument where the markets and securities act as an intermediary for linking investors and investments. Government of India had announced its ambition of using 100% plug in electric vehicles (VH) by 2030. Sustainable financing can be done for this project which would require huge amounts of funds to be mobilized. Since the aim of the project is to cut down entirely on pollution emitting vehicles, it clearly comes under the criteria provided by SEBI to be recognized as green project. (Other sectors recognized by SEBI as green projects are – renewable and sustainable energy, sustainable management of water, climate change adaptation, energy efficiency, sustainable waste management, sustainable use of land and conservation of biodiversity)

The finance sector is increasingly becoming vital for enhancing the transition to climate neutrality and sustainability. This is because of the necessity to mobilize huge amounts of private capital to meet the investment requirements of achieving the climate goals set in the UN Sustainable Development Goals (SDGs) and Paris Agreement.<sup>31</sup> Another explanation could be the role of finance sector in efficiently allocating the capital. This makes the finance sector a significant arena for affecting what happens in economies all over the globe.

## Conclusion

The core issues for developing sustainable finance should be to build a uniform framework

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<sup>29</sup>*Id.* at 5.

<sup>30</sup>*Id.* at 12.

<sup>31</sup>Nairobi: United Nations Environment Programme, *The Financial System We Need: Aligning the Financial System with Sustainable Development*, (2015), [http://unepinquiry.org/wpcontent/uploads/2015/11/The\\_Financial\\_System\\_We\\_Need\\_EN.pdf](http://unepinquiry.org/wpcontent/uploads/2015/11/The_Financial_System_We_Need_EN.pdf).

which defines it and provides a common standard for evaluating the impact of these instruments which aim at mitigating climate, environmental and social changes. In India, green bonds are the most popular legalized means of raising sustainable finance. The rate at which the green bond market matures and develops depends on many factors including regulatory and policy factors as well as market conditions.

There has been debate on what additional value green bonds provide as they finance or re-finance projects that would have happened even if this financial instrument was not available. This debate is quite legit as green bonds are mostly typical investment corporate bonds and how the funds raised from their issuance are used does not have much impact on the capital allocation. But it should be remembered that green bonds have made a new infrastructure in the capital market which is guarded by what is considered as a green bond, the development in the framework of the company enabling greater transparency about how funds raised would be utilized, reporting to investors on the utilization of funds and the consequent environmental impacts. Moreover, it has provided for a dialog between the investors and the issuers on the matters of sustainable development which would otherwise not have happened. The bottom up growth of the green bond markets is because of the strong alignment of interests of both investors and issuers. Green bonds are introduced in such a fashion as to make it a low risk financial instrument and a familiar tool where both the investors and the issuers contribute to sustainable requirements at comparatively low cost. Although green bonds have a miniscule share in the bond market, they provide space for opportunities to grow from the funds so raised which would have larger impact in the capital market and other aspects of financial system. Green bonds may not play a significant role currently in changing the structure of capital market from unsustainable to sustainable investments but they surely have encouraged issuers to raise the “green ambitions” of particular projects and their organizations.

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