FICCI

Report on
FICCI Conference on
Green Bonds

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Background

India needs as much as USD 160 billion to meet its target of installing 175 GW of renewable energy capacity by 2022 including 100 GW of solar, 60GW of wind, 10 GW of bio-energy and 5 GW of small hydro power capacity (source: MNRE 2015). However, securing affordable, long-term and adequate funding has been a challenge for developers of clean-energy projects in India.

The last few years though have seen the emergence of a robust Green Bond market which is focused on providing efficient financing solutions for projects in the areas of sustainable development, climate-mitigation, adaptation, and other environment-friendly areas. A Green Bond is a regular fixed-income financial instrument for raising capital through the debt capital market with the key differentiator being the framework for utilization of the proceeds of such bonds. A key distinction between a 'Green' Bond and a regular bond is that the issuer states that it is raising capital to fund 'green' projects that benefits the environment such as renewable energy, energy efficiency and low carbon projects.

The Green Bond market is developing into a class of alternate investment spurred by the growing realization that urgent steps have to be taken to address a range of rising environmental issues. Creating solutions to these challenges will require new ideas and investment capital.

The Green Bond market is currently built on the Green Bond Principles (GBP). The GBP were developed with guidance from issuers, investors and environmental groups to serve as voluntary guidelines covering the recommended process for the development and issuance of Green Bonds. The transparency and disclosure recommended by the GBP are intended to provide the informational basis for the market to increase capital allocation to environmentally beneficial purposes. A group of banks co-authored the GBP and currently serve on its Executive Committee, while the International Capital Market Association (ICMA) serves as secretariat for the GBP. A consortium of over 100 issuers, investors, opinion providers, and banks are GBP members and observers.

Potential Green Project categories recognized, but not limited to, by the GBP include: renewable energy, energy efficiency (i.e. efficient buildings), sustainable waste management, sustainable land use (i.e. sustainable forestry and agriculture), biodiversity conservation, clean transportation, clean water and drinking water.

Green Bonds can be structured in four different ways:

- **Green Use of Proceeds Bond:** This structuring provides a standard recourse-to-the-issuer debt obligation for which the proceeds shall be moved to a sub-portfolio or otherwise tracked by the issuer and attested to by a formal internal process that will be linked to the issuer's lending and investment operations for projects. The majority of Green Bonds are use of proceeds Green Bonds.
- **Green Use of Proceeds Revenue Bond:** These bonds offer a non-recourse-to-the-issuer debt obligation in which the credit exposure is to the pledged cash flows of the revenue streams, fees, taxes etc., and the use of proceeds of the bond goes to related or unrelated Green Project(s).
- **Green Project Bond:** This is a project bond for a single or multiple Green Project(s) for which the investor has direct exposure to the risk of the project(s) with or without potential recourse to the issuer.
- **Green Securitized Bond:** This type of a bond is collateralized by one or more specific projects, including covered bonds, Asset Backed Securities (ABS), and other structures. The first source of repayment is generally the cash flows of the assets.

Box 1: Four pillars of the Green Bonds Principles

Following are the four pillars of the Green Bonds Principles according to ICMA.

- Use of Proceeds require on the part of the issuer to declare the eligible green project categories (including investments made through financial intermediaries) in the Use of Proceeds section of the security's legal documentation. In all designated categories, it entails providing clear environmental benefits that can be described, quantified, and assessed, wherever feasible.
- Process for Project Evaluation and Selection requires that the issuer of a Green Bond should outline the decision-making process it follows to determine the eligibility of projects using Green Bond proceeds. Along with this, establishing impact objectives from the projects selected shall also be worked out if possible.
- Management of Proceeds accounts for the ability to trace bond proceeds to project spend. On going management of proceeds is a key component in the Green Bond Principles. It requires moving proceeds to a sub-portfolio or otherwise tracking and attesting proceeds by a formal internal process.
- Reporting states that the Green Bond issuers should report on the use of proceeds and the temporary investment of unallocated proceeds at least annually to their investors. The issuers should report at least annually on the specific investments made from the Green Bond proceeds (in addition to disclosure of Use of Proceeds and the eligible investments for unallocated proceeds) along with reporting on quantitative and/or qualitative performance indicators metrics, where feasible, to measure the impact of the investments.

Supranational organizations such as the European Investment Bank and the World Bank have traditionally been the most prolific issuers of Green Bonds. The first Green Bond issued in 2007 sparked little interest, however, since then, the market has grown exponentially. From a combined total of USD 19 billion in 2007-2013, the global Green Bond market significantly expanded in 2014 with USD 38 billion of issuance.

As per Climate Bond Initiative (a group that tracks Green Bond market) and other bodies, this growing market is forecasted to continue to expand at a rapid pace in the coming years. For the investor, particularly funds which have socially responsible investment priorities and/or investments earmarked for such purposes, these types of instruments are particularly attractive towards fulfilling their investment mandates.

Today the bulk of the issuances are in foreign currency such as USD and EUR. However as Asia, particularly India and China, gear up for the Green Bond market, the market could start seeing some local currency bond issuances. We have already seen some signs of this shift towards a localized Green Bond product in India.

The first USD issuance out of India by Exim Bank has already set the tone of things to come, and as Green Bonds get increasingly embedded in capital markets as a means to finance a low-carbon economy, more focus on this product in the Indian capital market is expected. Interestingly enough, a wider set of issuers has continued to emerge out of India this year, with both Yes Bank and CLP Wind Farms issuing local currency Green Bonds, and most recently IDBI Bank.

Potential Impact of Green Bonds Issuance in India

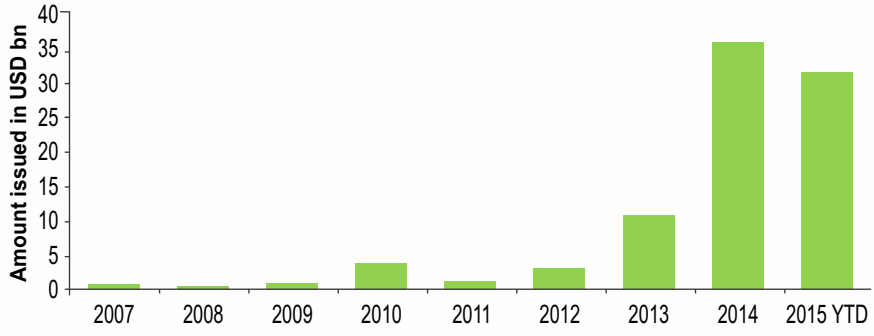
With the issuance of Green Bonds by Indian corporates, there is a significant positive multiplier effect due to investor diversification, increased capital inflow, and access to finance at various stages of the project lifecycle. The benefits include:

Increased capital access: With Green Bonds being tradable instruments, there is improved liquidity; hence exit for investors during any point of time post investment is possible, allowing for flexibility in managing liquidity requirements.

Financing across development stages: Green Bonds can facilitate access to capital for various development stages for the project life cycle starting from the green field stage to post commissioning stage to mezzanine equity funding.

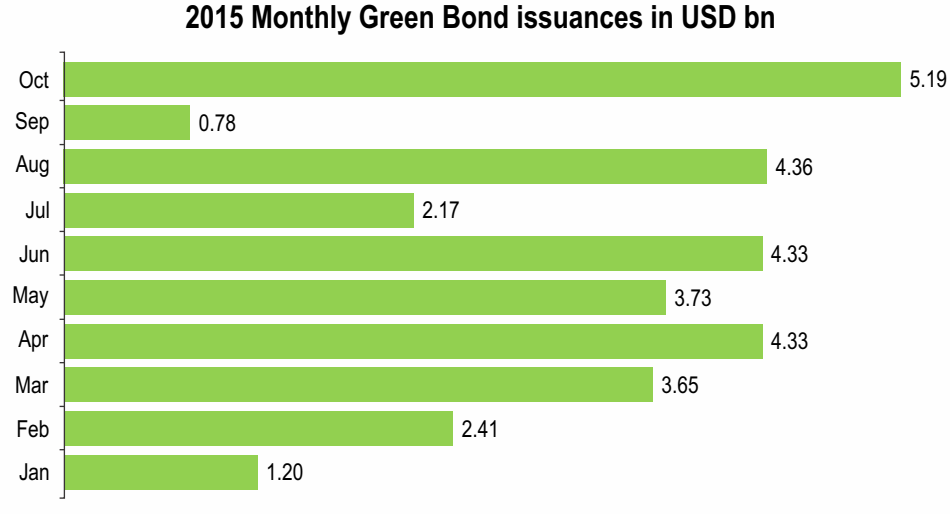
Global Green Bond Issuance: Globally, the issuance of Green Bonds has been growing exponentially since 2013, with fresh issuances in the last two years accounting for over 80 percent of the total issuances so far. The growth of Green

Bonds market in the last few years can partly be attributed to an overarching trend towards including Environmental, Social and Governance (ESG) issues in the decision process for investments by institutional investors.



Source: Climate Bonds

With climate change issues pushing investors towards clean projects, Green Bond volumes this year are expected to beat last year's USD 38bn. In 2015 YTD, more than USD 32bn of Green Bond has been issued.



Source: Climate Bonds

The Conference on Green Bonds

In order to assist Indian issuers and investors to explore opportunities in the Green Bond space, a "Conference on Green Bonds" was organized by FICCI, with support from HSBC on September 8, 2015 at FICCI, Federation House, New Delhi. This conference brought together a range of stakeholders including representatives from financing institutions, capital market investors, issuers, regulators and policymakers. The conference provided a platform to discuss the global Green Bonds market scenario, the evolving themes around the Green Bond Principles and the potential role of Green Bonds in financing sustainable and climate-friendly projects in India.

Inaugural Session

The Conference began with the presentation of a Green Certificate to Mr. Upendra Tripathy, Secretary, Ministry of New and Renewable Energy by Dr. Arbind Prasad, Director General, FICCI. Ms. Rita Roy Choudhury, Senior Director & Head, Environment, Climate Change, Renewable Energy & Water Division, FICCI, mentioned that the discussion on 'Green Bonds' was started under the aegis of the UNEP India Inquiry on Designing a Sustainable Financial System for India and further added that this conference will cement the discussion on the policy interventions needed for Green Bonds.

Dr. Arbind Prasad in his opening remarks talked about Green Bonds being an attractive investment proposition with an opportunity to support climate-related projects and suggested the establishment of a framework to develop the financial system. Mr. Stuart Milne, Group General Manager & CEO, HSBC India, in his remarks suggested ways to increase acceptability among investors through standardization and transparency, incentives for issuers and investors and the ability of the policy makers to device systems such as priority sector lending for green projects to hasten the pace of development of Green Bonds and provide scalability.

Mr. Upendra Tripathy enumerated the various initiatives taken by the Government of India for funding of renewable projects such as the 25-year power purchase agreement, the establishment of escrow account, concessional excise and customs duties and setting up of a green energy corridor for evacuation of power, priority sector lending for renewable energy projects up to Rs 15 crore, home loans clubbed for rooftop projects etc. He further urged the lending agencies, including banks, financial institutions and NBFCs to take ethical responsibility for funding green projects by issuing dedicated Green Bonds.

The inaugural session ended with a vote of thanks by Mr. Tarun Balram, Managing Director & Head of Capital Financing, HSBC India.

The following sections capture the deliberations held during the sessions on Green Financing, Issuers and Investors Perspectives on Green Bonds and conclude with a list of recommendations.

Green Financing - Importance for India and Policy Initiatives

A panelist highlighted that the political support has never been stronger towards a new global climate agreement as it is now. To deliver climate smart financing at the required scale and pace, and to achieve business objectives and obligations, financial institutions have a huge opportunity to deepen existing efforts to integrate climate change considerations systematically and explicitly across all levels. Building consensus on a set of principles for main streaming climate change considerations within financial institutions will enable institutions capture new opportunities as well as mitigate risks. Green Bonds can act as one of the key financial instruments that can provide project developers particularly in renewable energy space with access to scalable, long-term, low-cost debt capital from institutional investors.

An incentivized market model conceptualised for an Indian context was proposed by one of the speakers. The proposed model can have three facets: the front end- that looks into how to mobilize international capital connected with domestic standard needs so that the gap can be bridged between international and domestic needs; the middle part- that takes care of the framework taking into consideration the government standardization and the supporting governance structure; the back end-that looks into the transparency aspect.

One of the speakers explained that the current international Green Bond market is today based on a voluntary set of guidelines - The Green Bond Principles - which

have been developed by the ICMA Executive Committee. Despite the strong growth of the Green Bond market, issuance volume in 2014 of around USD 40bn, which is still a far cry from the USD 1 trillion needed annually to bridge the global financing gap of a 2 degrees world. The panel discussed about the importance of government support for the development of Green Bond market in the country. Government support is extremely critical to build a sizeable Green Bond market in the country. Standardization of the issuance process and documentation, clearly laid out criteria on green attributes of projects and some specific tailored standards to suit the specific attributes of the Indian capital markets will specifically help support the development of Green Bonds in India. Another speaker mentioned the importance of reporting and transparency in the Green Bond market. The importance of identifying ways to lower the cost of raising financing in this market along with regulatory and policy agenda to turbocharge the market was also elaborated by the panel.

Various initiatives like - strengthening the functioning of existing institution such as IREDA to become the green development financing institution, exemption in withholding tax, increasing renewable energy sector limit under Priority Sector Lending (PSL) category etc., were suggested to be taken by the Government of India in order to develop the Green Bond market in India.

Issuers Perspectives on Green Bonds

A panel member stated that issuance of Green Bonds globally has witnessed exponential growth over the last few years. This growth has been led by a new class of issuers-corporates, commercial banks and municipalities. There is a tremendous opportunity for developers and financial institutions to access the market directly, thereby opening doors for the sector to access a larger pool of capital directly instead of depending on traditional sources of funding/financing such as deposits, domestic markets, donor agencies, etc.

The panel members discussed on new methods to raise debt & equity, the rules and regulations surrounding them and the incentive structure for issuers. Some of the panel members shared their experiences in the Green Bond market including the problems encountered by the issuers. Panelists highlighted that the biggest challenge for Indian entities to participate in Green Bond issuances in foreign currencies is the high hedging cost and low sovereign credit ratings. The Government can provide exchange risk hedging facility through its reserves to address the issue with high hedging cost. Similarly, risk mitigation products like the partial credit guarantees and risk guarantees for entities issuing Green Bonds would enable issuing entities to overcome or come at par with the sovereign ratings cap.

A panel member illustrated that the Exim Bank came out with a dollar denominated Green Bond issue in March 2015. The key driving factors that stimulated this first dollar denominated green issuance out of India included: rapid growth in Green Bond market globally, investor diversification, need for an asset portfolio with green tint, setting a benchmark for others to follow and also showcasing the Government of India's commitment on renewable energy to the world.

Developing a robust Green Bond market would require a variety of reforms and steps to be taken like standardization of power purchase agreement (PPA) and contracts; improving the health of discoms; establishing an incentivized tax code; diversification of investor base by relaxing norms for investors to purchase such bonds and lastly addressing the regulatory challenges to accelerate market based solutions.

Investors Perspectives on Green Bonds

A panelist gave a brief overview of the investors perspectives and highlighted that the interest of the investors in Green Bonds is rising, with new issues meeting steady demand. Green Bonds may help investors target portfolio objectives even as they help issuers target sustainability (and business) goals. However, Green Bonds pose several investment risks as well. While some institutional investors are promoting climate-friendly business practices, others are diversifying their investment portfolio to hedge the risks associated with climate change. Green Bonds can help investors on both fronts. The panelist stated that the long-term competiveness of green assets, higher liquidity associated with the bond market, and low operational risk offer institutional investors an attractive basket of investment through the use of Green Bonds.

Another panelist added that Green Bonds can give issuers access to a broader range of investors than regular bonds or other asset classes. They can attract new set of investors who have a focus on environmental, social and governance performance.

As in the case of Green Bonds, proceeds are raised for specific green projects, however repayment is tied to the issuer. Therefore, the risk of the project not performing largely stays with the issuer rather than the investor. Hence this can attract new investors who may otherwise avoid investing in green projects due to the higher perceived risk.

Development of the Green Bond market will help in the overall objective of the government and the Central Bank of deepening and developing the corporate bond market in India. The panel discussed the importance of requirement of various credit enhancement facilities like partial guarantees from highly rated

external agencies. One of the speakers highlighted the opportunities available in the onshore market as the arbitrage between the fixed and floating rate is close to 1.5%.

The problems faced by insurance companies while investing in bond market like the bond rating, the nature of companies that can be invested in, and exposure limit of special purpose vehicles was also discussed, and certain suggestions were discussed for improvement of the regulatory structure.

Amongst other investor categories, discussions on guidelines for Provident Fund sector in particular to encourage investment in renewable energy were made. Regulators are discussing this issue at the highest level at various forums for the developing of corporate bond market which will ultimately be good for developing Green Bond market. Secondly, various credit enhancement facilities such as partial guarantees as well as financial restructuring of the bonds can be used to increase the rating and allow it to reach the AA category.

Reduction in withholding tax and other tax and economic incentives are definitely required in order to get this market kick started. The panel also stressed on the importance of investors' awareness on the various aspects of Green Bond market along with recommending a more stringent focus on the regulatory aspect.

Key Recommendations from all sessions

- Need to support the development of standards for Green Bonds- requiring relevant bond issuance by entities to be certified and establishing a standard for annual monitoring and reporting compliance for these bonds, providing support to initiatives seeking to develop standards for Green Bonds, taking the Indian context into account. There is a need to establish proper reporting and monitoring framework along with addressing the transparency issues (around use of proceeds and what fits the Green definition) for the development of Green Bond market. In December 2014, FICCI set up the India Green Bonds Market Development Committee to address regulatory issues surrounding investment for Green Bonds. Also in February 2015 the Partnership to Advance Clean Energy (PACE-D) - a joint venture between India and the US - along with the Climate Bonds Initiative, held meetings with the Indian government to push the use of the green instruments.
- Indian public sector entities could issue Green Bonds to kick-start supply and to promote market liquidity. Government of India needs to also encourage private entities to issue Green Bonds, and various types of incentive structures can be provided both on the issuers and investors side. These could include incentives such as withholding tax exemption on "labelled" Green Bonds, increasing incentives for domestic fixed income investors such as banks, mutual funds and insurance companies for investing in these bonds.
- The Reserve bank of India has recently included the renewable energy sector as part of the priority sector. Banks operating in India are required by regulation to dedicate a certain portion of their overall lending book towards the priority sector. Designating renewable energy as a priority sector should help in the flow of bank credit to this sector. However the Central Bank has also imposed a limit of INR 15 crores per borrower and this limit in the context of funding requirements of a typical renewable energy project is very small, thereby reducing the effectiveness of this measure. Increase in the per borrower limit to a reasonable threshold will help in achieving the intended impact.
- The investment norms applicable to insurance companies, banks and pension funds in India are heavily skewed towards investment in government and public sector bonds. Insurance sector, though keen on investing the Green Bonds are unable to do so due to the following reasons.
- The organizations that float Green Bonds are based on a Special Purpose

Vehicle model, where each SPV holds one or more project and each SPV is set up as a private limited company. However as per the provisions of the Insurance Act 2013, insurance companies can only invest in public limited companies. The investee company need not be listed on the stock exchanges but they need to be incorporated as a public limited company.

- In general, the regulatory prescribed as well as the internally formulated policies of insurance companies allow for investments in bonds rated AA or higher. Investment in such bonds are classified as "approved investments" and do not require any specific internal board approvals. Given markets are dynamic and board approvals take some time, fund managers therefore tend towards AA or higher rated instruments. While insurance companies can technically invest in bonds below AA rating as well - they can go all the way down to a A+ rating, such investments will be classified as unapproved and require specific board approvals for the same. Moreover only a very small portion of the overall corpus of insurance companies is allowed to be invested in unapproved category. In any case investments in bonds below A+ rating is not allowed.
- Third issue faced by the insurance companies is that the investment is capped at 10% of the capital employed of the issuing entity, where capital employed is defined as equity plus reserves plus issued bonds. Given most SPVs are usually very thinly capitalized as they are project finance vehicles, they do not have a substantial net worth which severely constrains the total quantum that can be invested by insurance companies into each issuance.
- Like for insurance companies, there are very strict investment guidelines for provident funds too, which effectively rule out provident funds as an investor class for Green Bond issuances. In general, provident funds can only invest in non-government private sector only if the instruments are highly rated. Specifically in the case of Employees Provident Fund Organization or EPFO, the minimum rating threshold is AAA. Also in the case of EPFO, there are additional guidelines around profit history, net worth, etc. Given the large corpus of funds managed by EPFO and other Provident Funds, getting them into the fold of potential Green Bond investors could be a game changer, which will require creating carve outs and exceptions in the regulatory guidelines for Green Bond investments.
- Likewise, for investments by the Pension Fund companies, the regulatory authority has put a floor on minimum rating at AA.
- Given rating floors for many long term investors' classes as specified above, credit enhancement to improve the stand alone ratings of Green Bonds becomes crucial. Enhancements like partial guarantees, full guarantees, liquidity facilities, etc. can help prop up the stand alone ratings and thereby make Green Bonds investible by long term investors such as insurance companies, provident funds and pension funds. It is very critical that the Government creates mechanisms to aid in the provisions of such partial guarantees by entities in the financial services sector (including Governmental agencies).

Annexure: Agenda

9.45 am - 10.15 am	**Registration**
10.15 am - 11.00 am	**Inaugural Session**
	▪ Opening Address by Dr Arbind Prasad, Director General, FICCI ▪ Introductory Address by Mr Stuart Milne, Group General Manager & Chief Executive Officer, HSBC India ▪ Inaugural Address by Mr Upendra Tripathy, Secretary, Ministry of New and Renewable Energy, GoI ▪ Vote of Thanks by Mr Tarun Balram, Managing Director & Head of Capital Financing, HSBC India
11.00 am - 12.15 pm	**Panel Discussion I: Green Financing - Importance for India and Policy Initiatives**
	Session Chair - Mr.Ulrik Ross, Managing Director and Global Head of Public Sector & Sustainable Financing, HSBC
	Theme presentation by Chair followed by panel discussion
	▪ Mr Sean Kidney, CEO, Climate Bond Initiative ▪ Mr K S Popli, CMD, IREDA ▪ Mr Rakesh Kumar, Director, Solar Energy Corporation of India (SECI) ▪ Mr Naveen Kumar Gupta, Manager - Investment Management, SEBI
12.15 pm - 02.00 pm	**Panel Discussion II: Green Bonds** ▪ **Issuers Perspectives**
	Chair - Mr Ardeshir Contractor, Managing Director, Kiran Energy and Co-chair, FICCI Solar Energy Task Force
	Panelists - ▪ Mr David Rasquinha, Deputy Managing Director, EXIM Bank ▪ Mr Pashupathy Gopalan, President - Sun Edison Asia Pacific ▪ Mr Shiva Rajaraman, CEO, L&T Infra Debt Fund Limited ▪ Mr Samir Ashta, Chief Financial Officer, CLP India ▪ Mr Shirish Navlekar, CFO & Director, Mytrah Energy Limited ▪ Mr Pranav Verma, Associate Director - Corporate Finance, YES Bank
	▪ **Investors Perspectives** **Chair - Mr Sridhar Narayan** Managing Director & Head of Sales, Global Markets, HSBC India **Panelists -** ▪ Mr P H Kutumbe, Executive Director - Investment Operations, Life Insurance Corporation (LIC) of India ▪ Ms. Sumeet Kaur Kapoor, General Manager, PFRDA ▪ Mr Gaetan Tiberghien, Principal Investment Officer, IFC ▪ Mr Suresh Darak, Head Capital Markets and Structured Financial Group, L&T Infrastructure Finance
02.00 pm - 02.15 pm	**Closing**
02.15 pm - 3:00 pm	**Lunch**



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