GREEN FINANCE – A SUSTAINABLE OPPORTUNITY

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Abstract

Concept of green finance can be regarded as innovative in the field of finance; as it describes a broad range of funding for environment oriented technologies, projects, industries or businesses. The principal objective of this paper is to study the recent trends and future opportunities in green finance emerging in India. Green finance helps in balancing the ecological depreciation due to assimilation of carbon gases in atmosphere. Green finance is a core part of low carbon green growth because it connects the financial industry, environmental improvement and economic growth and all these are essential for country like India to sustain in long run. Since, the topic has been studied through macro- level approach, exploratory method has been used for the study.

KEY WORDS: Green finance, Financial industry, Economic Growth.

Introduction

GREEN FINANCE refers to any financial instrument or investment – including equity, debt, grant, purchase and sale or risk management tool (for example: investment guarantee, insurance product or commodity, credit or interest rate derivative, etc.) issued under contract to a firm, facility, person, project or agency, public or private, in exchange for the delivery of positive environmental externalities that are real, verified and additional to business as usual, whereby such positive externalities result in the creation of transferrable property rights recognized within international, regional, national and sub-national legal frameworks.

A group of growing cities have demonstrated that energy efficiency conserves natural resources, strengthens resilience to meteorological disruptions, and leads to substantial savings in fossil fuel. The promise of green building programs while others have justified increased funding for climate solutions in the hopes that its market will generate “green jobs” Co-operations across the governments at various levels are most important. The national government can support the cities by increasing the funding which suites the energy saving and also locally administrated. The different mandates, expertise, and the multijurisdictional fluidity of most environmental problems, collaboration amongst neighboring municipalities, regions, and the national government, is of paramount importance. By suggesting new policies to the local authorities for the issuance of emission permits and/or for monitoring, reporting and verification of emissions. Perhaps the most common obstacle to the growth of the “green city”, especially during the current economic crisis, is the lack of funding for environmentally friendly infrastructure. Urban climate change policies will have consequences for city’s budgets for which new solutions are required. The sustainable local development can be made through the Green taxes so that more incentives can be provided and also to perform the existing program in an innovative manner. The government can be fiscally

sound and innovative programmes and also environmentally good the in the practice of purchasing the green procurement.

Need of the hour

Going green" is no longer jargon but an imperative of the times we live in. All stakeholders—the government, companies/ banks, individuals—must collectively own the responsibility to conserve the environment for our future generations. According to the World Bank, 70% of the global greenhouse gas emissions comes from infrastructure development, construction, power plants and transport system operations. The World Health Organization projects that the number of deaths attributable to the harmful effects of emissions from key infrastructure industries will rise from the current 150,000 per year to 250,000 by 2030. Therefore, the challenge before developing economies is: how to modernize societies, build quality infrastructure and provide efficient transportation services while minimizing the damage to the environment.

India is no exception. The Narendra Modi government has rightfully put infrastructure development on mission mode, in the firm belief that good infrastructure will be a force multiplier for job creation and higher economic activity. The country needs about $4.5 trillion in infrastructure funding by 2040. Of this, nearly $200 billion will be required to generate 175GW renewable energy by 2022; $7.7 billion for intra-city metro rail networks; $667 billion for electric vehicles programme; and affordable green housing will need about $1 trillion.

While these numbers are daunting, they appear minuscule in the global context. A study by the Global Commission on the Economy and Climate has projected global infrastructure investments worth $90 trillion over the next 15 years to mitigate climate change risks. As climate change has a drastic cause and effect relationship with agriculture and rural development activities, it has been recognized that activities like forestry, agriculture and other land use activities, viz., dairy, soil conservation, energy use practices, use of renewable energy, etc. have tremendous potential for reducing emission of Green House Gases. Climate change and agriculture are interrelated and climate change may have significant effects on crop production and food availability. It is speculated that by 2050, there would not be any glacier in the world. The melting of ice would result in frequent floods and significant rise in sea level etc. It is estimated that transitioning to a low-carbon and climate resilient economy and more broadly "greening growth" over the next 20 years will require significant investment and consequently private sources of capital on a much larger scale than previously - particularly given the current state of government finances. Government policies are therefore needed to support the commercialization of new technologies and to correct market failures through carbon. In addition, governments and/or multinational agencies can use so-called "Public Financing Mechanisms" to provide cover for risks which are new to pension funds or cannot be covered in existing markets.

Green Finance – An Opportunity

Investments required to achieve these ambitious targets cannot be met by traditional sources of financing. India's annual budgetary allocation towards renewable energy has been largely insufficient. Banks and other traditional lenders primarily focus on fossil fuel-based energy projects.

In such a scenario, providing innovative thinking in climate finance is key to successful execution of big-ticket projects in India. Green financing strategies such as green bonds, catalytic and transformational financing, and impact investing can provide the much-needed panacea for an infrastructure-hungry country like ours. "Green projects" status should nevertheless be confirmed only to solar or wind energy. Sustainable land use, water and urban waste management, green buildings, clean transportation, pollution prevention and control systems, and energy efficiency projects are some of the areas that are globally eligible to receive green financing.

Today, green bonds help companies tap money from specialized funds focused on climate change. As of now, 120 institutional investors from nine countries have joined the Institutional Investors' Group on Climate Change. Also, over 1,500 institutions are signatories to the United Nations' Principles for Responsible Investments. Sovereign funds like GIC, Abu Dhabi Investment Authority, and multilateral agencies such as International Monetary Fund, International Finance Corp. and Asian Development Bank, among others, are proactively channeling funds to invest in green sustainable projects.

These global institutions believe in growing responsibly and, hence, are committing funds to mitigate the impact of climate change and avail business opportunities associated with the transition to a lower-carbon society and economy. According to the International Energy Association, to limit climate change to 2 degrees, CO2 emissions must fall by 70% in aggregate by 2050 in Asia. For this to fructify, emissions from the power industry, for example, should reduce by 85%.

Green Financing in India

Green financing, or financing for sustainable and renewable projects, has assumed huge significance globally and reputed investors do not extend their loans for a project if a portion of it is not certified as green. India is late in the game. Such standards and guidelines exist even in countries such as Bangladesh, Sri Lanka, Indonesia and Cambodia. Developed countries are way ahead in these aspects, while China has done some impressive work on green finance. China has managed to pursue a lot of serious investors to invest in the country, boosting its green credentials. While some banks and other institutions had raised green bonds recently, estimated at more than $2.5 billion, the definition of these bonds and the end-use varies with the issuer.

The financers want the RBI to standardize environmental, social and governance (ESG) practices across banking and finance to create a level playing field. ESG measures sustainability and ethical impact of an investment in a company. Even for domestic loans, the rate of interest would be

decided after taking into consideration the ESG score. The score also takes into account the impact on climate and how a change in environment would change the future of a project.

Given the rapid change in climatic conditions, the score is going to be a global standard and India is moving to develop its own yardsticks. In India, banks and non-banking financial companies have traditionally been the primary sources of green infrastructure funding. But they have a limited appetite for long-term debt due to asset-liability mismatch. Also, the current regulatory restrictions allow insurance companies and pension funds to invest only in AAA-rated bonds. This regulatory framework should change in order to provide a fillip for green bond issuances. To deepen the green bonds markets in India, the government should actively consider making them tax-free. Tapped astutely, the Smart Cities project can attract huge capital from these bonds.

India's green bonds market is still nascent. The country's first green bonds were issued as recently as 2015. Cumulatively, India has raised over $6 billion via green bonds, of which one third were issued in 2017. China was the top green bonds issuer in 2017 with a 22% share, followed by the US (13%) in the $120 billion global market. Green bond issuances are bullish in Asia expecting to cross $600 billion over the next five years. Demand for green financing continues to be high from international investors and it is in India's interest to develop a strong green financing ecosystem.

The millennial investors' will, over the years, becomes a critical influencer for mutual funds, pension funds, banks and corporates, demanding higher governance standards from an environmental viewpoint and pressuring companies to follow better environment, social and governance standards. A conducive and transparent regulatory environment can unlock the full potential of green financial strategies in India, helping the country achieve its Paris Climate Accord targets.

Green Finance – Early Initiatives

Recognition is growing of the pressing challenge of financing sustainable development, and the opportunity it offers for channeling financial capital to productive, profitable and more broadly beneficial uses.

India's green bond market: Benefits, risks and other features

Green Bonds help the issuer amplify funding sources and limit dependency on specific markets. Banks and non-banking finance companies have been the primary source of funding for renewable energy. However, banks have limited appetite for a major role as providers of long term debt for renewable energy projects as they are weighed down by the risk of an asset-liability mismatch. The long-term funds available with insurance and pension funds in India are not adequately channelized to meet the debt requirement of the renewable energy sector due to regulatory restrictions.

Thus, the existing traditional financing sources are not sufficient to support capacity addition, and given the huge financial requirement of the renewable energy sector, there is a dire need to identify alternate sources to supplement and widen the channels of renewable sector funding.

The introduction of Green Bonds will resolve the issue of funding, which is the reason for delay in these 'green' projects, in the evolving renewable energy sector. Green bonds are debt instruments that raise money to fund clean energy projects. Companies that raise money through these bonds have to invest it only in areas that are environment-friendly such as renewable energy, waste management, clean transport or sustainable land use.

India has embarked on an ambitious target of building 175 gigawatt of renewable energy capacity by 2022, from just over 30 gigawatts now. This requires a massive US$200 billion in funding. This isn't easy. Higher interest rates and unattractive terms under which debt is available in India raise the cost of renewable energy by 24-32 per cent, compared to the US and Europe. India has big goals in terms of renewable energy installations, but a big hurdle has been financing and the cost of financing.

Budget allocations have been insufficient. Renewable energy is still part of the larger power/infrastructure funding basket in most banks, and with most financing going towards coal power projects, there is very little funding left for renewable energy. Currently, options for raising funds and investing in the renewable energy story in the public markets in India is very limited. That's why green bonds seem like a good option.

Benefits and risks associated with Green Bonds

Green Bonds help the issuer amplify funding sources and limit dependency on specific markets. Particularly, Green bonds have been quite popular with investors focused on sustainable and responsible investing and investors that come under the ESG criteria (Environmental, Social and Governance). The proceeds are raised for specific green projects, but repayment is tied to the issuer and not to success of the projects. This means the risk of the project not performing stays with the issuer rather than an investor. There is also a pricing advantage, inasmuch as, the green bonds bring domestic and foreign capital for renewable energy on better financing terms, including lower interest rates, and longer repayment schedules.

Globally, there have been debates about whether the projects targeted by green bond issuers are green enough. There have been controversies too. Reuters reported how activists were claiming that the proceeds of the French utility GDF Suez's US$3.4 billion green bond issue were being used to fund a dam project that hurts the Amazon rainforest in Brazil.

India's Green Bond market

India is emerging as a significant Green Bond market and was among the top issuers in the debut year (2015) itself. Green bond issues from India was to the tune of US$1.95 billion in the September quarter of 2017, making it the fifth largest issuer in terms of size in the world for the

quarter. The proceeds of these bonds are allocated to renewable energy projects, low carbon transportation, and to energy efficient projects and green buildings. Recent transactions have demonstrated the demand for and growth of Green Bonds in India. The first Green Bond issue in India was by Yes Bank Limited in 2015 for Rs.1000 crores followed by the Green Bond issue by CLP India for Rs.600 crores for its wind portfolio. Hero Future Energies raised Rs.300 crores, being India's first certified climate bond issue and Axis Bank Limited raised US$500 million, being the first internationally certified green bond issue.

Positive green sentiment

With the issue of Green Bonds by Indian corporate, there has been a positive effect on account of investor diversification, increased capital inflow from global investors who would invest in green ventures and access to finance at various stages of the project lifecycle. It also enhances issuer's reputation as it helps showcasing their commitment towards sustainable development. At the same time, the drawback of Green Bonds is that the risk of project performance stays on the issuer rather than the investor and investors are at times hesitant to buy bonds with rating lesser than AAA.

The Reserve Bank of India has included the renewable energy sector as part of the priority sector. As a result, banks must dedicate a certain portion of their overall lending book towards the priority sector, which will in turn help credit flow in this sector.

Formal push to the renewable sector

In 2015, the Securities and Exchange Board of India endorsed the Green Bond principles which provided a strong signaling impact to the market, when it was in its infancy in India. The Green Bond principles are internationally recognized standards, and SEBI endorsing it, was an important step by a regulator. SEBI has also issued guidelines on Green Bonds, including listing of Green Bonds on the Indian stock exchanges, thereby codifying the issue of Green Bonds and affording comfort of regulation to an investor.

The Green Bond Guidelines formalize the regulatory framework for Green Bonds with the aim of addressing critical financing needs of India's rapidly expanding clean energy market. These guidelines provide a big boost to the renewables sector by making investment in Green Bonds more attractive to investors. The above measures are expected to facilitate investment decisions of investors who have a mandate to focus on green investments and will also provide uniformity in disclosure. The global Green Bond market is growing rapidly and India is garnering international attention in the form of foreign investment to finance various ongoing projects.

To keep green bonds sustainable, we need an "investor pull" factor rather than a "regulator push" factor. The regulators can kick-start the market, but to sustain it, we will eventually need investors to have a natural demand for the product. Currently, on the demand side, the bulk of investors in Green Bonds are still conventional investors who buy purely on credit fundamentals as opposed to green fundamentals.

Clearly, this would require more investors to reserve a portion of their portfolios for such climate-friendly bonds. As the market matures, perhaps a better RWA (risk-weighted assets) impact for green bonds versus conventional bonds for bank investors could also have the effect of incentivizing such investments.

Conclusion

In order to move to a low-carbon and climate resilient economy, it is integral that there is an adequate source of investment and private capital to support the commercialization of new technologies. Mobilizing new sources of investments like green bonds, credit enhancements and blended finance would be key interventions that would alter the trajectory towards achieving Sustainable Development Growth in India.

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