Keynote Address: Green Bond Workshop

Good Morning.

Ladies and Gentlemen,

Nemo dat quod non habet, literally means "no one gives what he doesn't have" is a legal rule, sometimes called the ***nemo dat* rule**. In Banking it loosely compares with rules about Negotiable Instruments which means "one cannot transfer more rights than he has" with which we are but too familiar. The same applies to exploitation of environment by current generations while they are not actual owners. They are but trustees of future generations. It is in this backdrop we need to discuss about today's theme, the Green Bonds.

In a 2013 study, World Bank found that the annual cost of environmental degradation in India amounted to about $560 billion (PPP adjusted), equivalent to 8.53% of India's GDP. In nearly every winter, we see major pollution related issues in our capital, New Delhi, which means we cannot anymore close our eyes to the pollution problem. Not just Delhi, as many as 10 Indian cities featured in the top 20 most polluted cities in the World as per a WHO report.

Most rich countries have followed the "grow now and clean up later" model during their growth spurts and now have significantly cleaner environmental levels than they had during their growth years. But as China's example shows, this may not be a viable option for a large, densely populated country like India – at the current rate our cities will become un-liveable well before we get rich. We need to find ways to escape the environmental Kuznet's Curve.

It is a well known fact that India needs to significantly upgrade its infrastructure. Just a few months back, Standard & Poor's called India's poor infrastructure the biggest hurdle in Government's Make in India initiative. But those who live here need no one else to tell them that the country is woefully short on roads, rail network, power

generation and distribution, ports, hospitals, etc. While building this infrastructure is not a choice but a social imperative, should we follow the models used in the last century, which when scaled for our requirements, will put tremendous strain on our environment over the next many decades? Or, can we do something to ensure that this huge infrastructure build up that is required, is done in a sustainable way, so that there is no additional strain on the environment?

The concept of homeostasis, or human-ecosystem equilibrium, needs to be the guiding principle in the development efforts of the future. The choice is between building a coal based power plant or a renewable energy plant. But it is not a straightforward call, as doing things in a sustainable way is more expensive, and in a country like India which has a significant shortage of financial resources, it becomes an even more knotty problem.

It's here that Green Bonds can play a significant role in reducing the cost of green projects, by providing cheaper sources of financing. And given the global commitments for sustainable development financing under the Paris agreement, for many EMs it could also mean access to capital that would not have been available for other types of infrastructure development. Here we need to be mindful of the "labelled and unlabeled green bond" terminology promoted by the Climate Bond Initiative (CBI). The issue with labelled green bonds still remains that there is not a single universally acceptable terminology that can be used to decide green bond issuances and green projects. Multilateral Development Banks (MDBs) could play a role in developing and agreeing to such a terminology.

The Paris Agreement on climate change, adopted by 194 parties at COP21 (Conference of Parties, 21st Annual Conference) in December 2015, has set a target of full de-carbonization of the global economy by the end of the 21st century. It also includes a commitment by developed countries to provide $100 bn worth of financing to emerging countries per year by 2020. India is one of the countries that have ratified the agreement and as part of its Intended Nationally Determined Contribution document (INDC), the government of India has committed to reduce the emission

intensity of the country's GDP. Towards this end, India is targeting to build a massive 175 Gigawatt (GW) of renewable energy capacity by 2022, and 275 GW by 2027, compared to the current capacity of 42.85 GW (Source: Draft National Electricity Policy, December 2016). A large amount of funding is required for building up this capacity.

As per International Energy Agency (IEA) estimates, annual global investments in low-carbon infrastructure will have to reach $780 billion by 2020 and $2.3 trillion by 2035. Globally, green bond issuances have been picking up: $11 bn in 2014, $36.6 bn in 2014, $66 bn in 2015, and $81 bn last year (2016). As per CBI estimates (2016 update), the universe of what they call "climate-aligned bonds" outstanding is $694 bn, with 3590 bonds and 780 issuers, with $118 bn being labelled green bonds. This is of course very small compared to the total global bond market size of more than $90 trillion (Source: BIS).

In terms of themes, low carbon transport has been the dominant theme in global green-aligned bond market with 67% of the issuances targeting the sector. In terms of maturity, given the long gestation period of most green projects, 70% of the bonds issued in this market have tenors of 10 years or more. So far labelled green bonds have been issued in 23 currencies including the Rupee, and though majority of issuance used to happen in EUR and USD, there has been a spurt in CNY issuance in recent years.

In 2016, as per Climate Bonds Initiative's India Update, Indian companies had issued labelled green bonds worth $2.7 bn till October 2016, making it the seventh largest green bond market in the world. India is also recognised as a global leader in external certification of green bonds with 5 out of 7 green bond issuers in 2016 getting a review or certification by an external body. This is the highest international ratio for 2016. Issuances by Indian companies have seen good demand from Asian as well as international investors.

Among the developing world as well, India has significant potential for growth in green energy. As per the NITI Aayog, India's long term solar power potential is 750 GW, and its announced wind power potential is 302 GW, with a possible potential of upto 1000 GW. 62% of the green bond issuance in India have been for renewable energy projects (Source: CBI), followed by low carbon transport and low carbon buildings.

This potential is already attracting major global investments, which should quickly raise India in the global Green Bond rankings. Japan's Softbank has committed to invest $20bn in the Indian solar energy sector, in conjunction with Taiwan's Foxconn and India's Bharti Enterprises. French energy company EDF, excited by the country's wind and solar energy potential, has recently announced its intention to invest $2 bn in Indian renewable energy projects.

Investments are coming not just from international investors; Indian companies are also looking to significantly increase their investments in the renewable energy space. The Adani Group last year opened the world's largest solar plant in the state of Tamil Nadu, while the Tata Group has announced that it would aim to generate 40% of its energy from renewable sources by 2025. These companies are likely to fund at least part of their funding requirements using Green Bonds.

Looking Ahead

As per India's contribution document (INDC), at least $2.5 trillion will be required for India's climate change mitigation targets by 2030. Along with the requirement of around $1 trillion every five years for infrastructure development, the demand for funding from all possible sources is likely to remain high. Government may be able to provide only 30-50% of this requirement, while the rest will have to come from the private sector, and especially from the Bond market.

Indian Government and the regulators have shown strong interest in the Green Bond market. In January 2016, Indian securities regulator SEBI had issued guidelines for

issuing green bonds, becoming one of the few countries to have done so. This is important as we don't want green bond investors, who are agreeing to lower yields for the benefit of the environment, to be cheated by dishonest issuers. We would hope that the Indian regulators continue to look forward to leading the world in helping develop the green bond market in the country.

Indian Government has allowed 100% FDI in renewable energy projects, and has set up a $2 bn equity fund (Clean Energy Equity Fund) with 3 state run firms to provide equity to renewable energy projects.

In addition, as suggested by fellow Bankers (Rana Kapoor, CEO, Yes Bank) recently, innovative mechanisms like securitisation, along with aggregation of the financing needs of smaller projects across the country, need to be promoted by the regulators and the market, so that small installations are also encouraged to go the green bond way.

The Government can actively explore issuing a sovereign green bond that would provide a reference rate for the Indian issuers. In September 2016, France became the first issuer of a sovereign green bond. In addition, we need to have a maybe 20 year plan to reduce the subsidies available to polluting fuels like petrol, diesel and kerosene, and provide more incentives to green energy, along with incentives for consumers to move to using green energy.

2020 is not far away, and our aims are high. We need to quickly take the initiative and become a leader in green projects and green financing. There is no time to waste.
We owe it to ourselves and our future generations.
Thanks and have wonderful Day of deliberations.
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