Securitisation as an enabler of green asset finance in India

Briefing paper for *7th Securitisation Summit 2018*

India's USD4.5tn sustainable development opportunity

India's population and economic growth is driving a vast need to develop a more productive, inclusive and climate-resilient economy. Creating low-carbon, resilient infrastructure is key. It is estimated that USD4.5tn is needed by 2040 to meet the Government's ambitious targets for renewable energy and urban sustainability.

The majority of infrastructure financing is presently provided by the banking sector. Lending capacity is limited for long-dated assets such as infrastructure financing. Credit exposure limits to the power and utility sectors and priority lending requirements also play a role. Banks' ability to increase lending is also constrained by re-capitalisation pressures as they deal with a history of bad debts.

Securitisation and the direct assignment of loans offer useful means for lenders to re-finance their loan books and help them manage sector and industry lending limits. Microfinance institutions and small lenders can use re-financing to replenish lending capacity. Banks can develop origination programmes for long-term assets if they feel confident that they can refinance long-term loans in the bond market.

Securitisation can mobilise capital at scale from institutional investors

Securitisation has great potential to mobilise institutional capital at scale. However, India's securitisation market remains underutilised as a refinancing mechanism despite a large domestic investor base and demand from abroad.

Market growth has been hampered by regulatory hurdles such as lack of clarity for different structures, tax inefficiencies and barriers to foreign investor participation.

The introduction of a distribution tax on securitisations caused a shift in transaction volumes to direct assignment of whole loans and loan portfolios to investors.

The regulatory hurdles have been largely addressed in the 2016 Finance Act and reforms to allow wider participation of foreign institutional investors. Most significantly, the Act introduced distribution tax relief for securitisation investments.

As a result, the market is now experiencing a shift from direct assignments to back to ABS. The higher rate of annual volume growth in H1 2017 compared to 2016 attests to the significant positive impact of the new Finance Act.

Regulation of India's securitisation market

RBI guidelines for securitisation (2006)

SEBI norms for listing asset-backed securities (2008)

Securitisation Distribution Tax (2013)

Finance Act (2016)

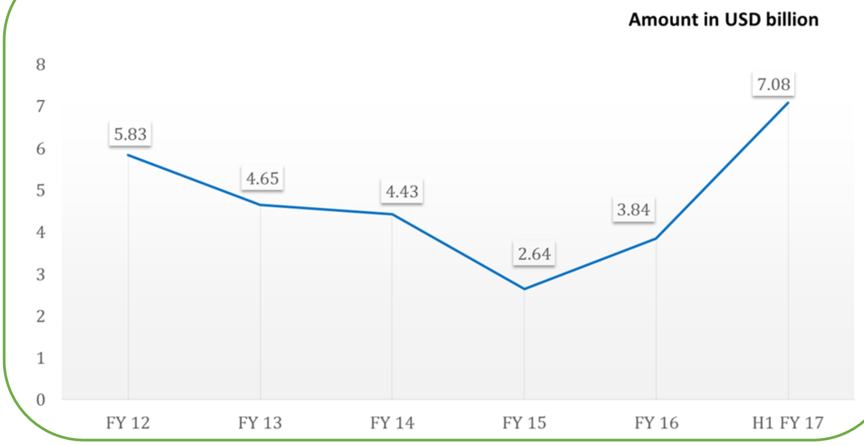
Mortgages and vehicle loans currently account for more than 80% of Indian securitisations. Small business loans, tractor loans, trade receivables and microfinance loans are the next most popular asset classes. And the market is showing increasing variety. For instance, lease receivables securitisations are likely to be introduced to the market soon.

Green ABS

A securitisation can be defined as 'green' when the underlying cash flows relate to low-carbon assets or where the proceeds from the deal are earmarked to invest in low-carbon assets. *Green* ABS can help improve access to capital, potentially at lower cost, for low-carbon and climate-resilient investments.

***Securitisation** refers to the process of transforming a pool of financial assets (for example, mortgages or lease receivables) into tradable financial instruments (debt securities). Securitisations are also referred to as **asset-backed securities (ABS)** because the pool of financial assets secures (or backs) the debt securities. The collateral, i.e. the pool of assets, is ring-fenced from any other assets and investors' returns on the securities are drawn from the cash flows of the underlying assets.*

Annual volume of the Indian securitisation market



Loans to low-carbon, small-scale projects can be aggregated and then securitised. This would improve access to capital for two reasons.

1. **Securitisation enables tapping into capital from institutional investors** through bond markets. The scale of investment needed for low-carbon infrastructure is expected to be greater than banks can finance with their balance sheets. The depth of the capital pool allows for continued financing regardless of exposure limits present within the banking sector.
2. **Capital raised through the sale of asset-backed securities by the loan originators can then be used to create a fresh portfolio of loans.** A well-established green securitisation market should incentivise banks to lend to more green assets and to issue more green ABS.

Accessing the bond market can potentially lower the cost of capital. The creation of tradeable debt securities adds investors who may not be able to invest in loans. The 'green' label can also expand the investor universe by attracting institutions with ESG and 'green' mandates. Strong investor interest can create competition, which has the potential to put downward pressure on debt pricing.

This can be particularly significant for capital-intensive green infrastructure projects, which often lock in financing arrangements for sizeable debt volumes over the long term.

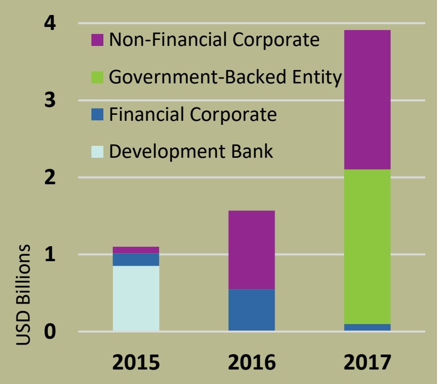
Tagging financial transactions as 'green' enables these low carbon infrastructure investments to be linked to India's broader climate agenda and to tap into the growing demand from investors motivated by sustainable development goals.

India's green bond market is growing

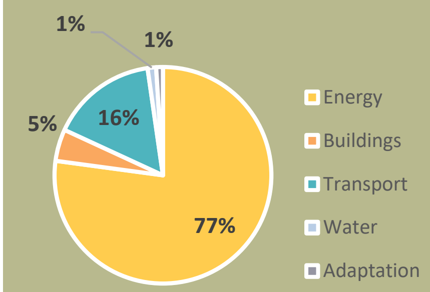
Green bond market volume reached almost USD4bn in 2017. Investments in renewable energy dominated allocations.

It is best practice for green bond issuance to obtain an external review of the green credentials of the portfolio and proposed allocation of proceeds. In India, **around 60% bonds are certified under the international Climate Bonds Standard**, a Fair Trade-like scheme for green bonds, which establishes their alignment with the Paris Agreement on limiting global warming to 2 degrees Celsius.

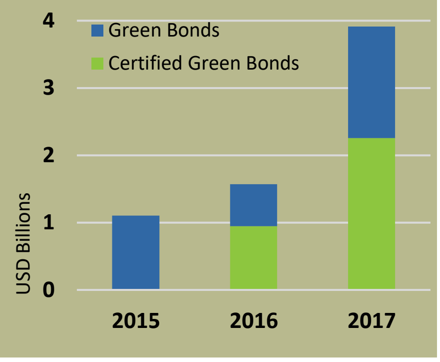
Indian green bond issuance is rising



Energy dominates allocations



Wide use of Certification



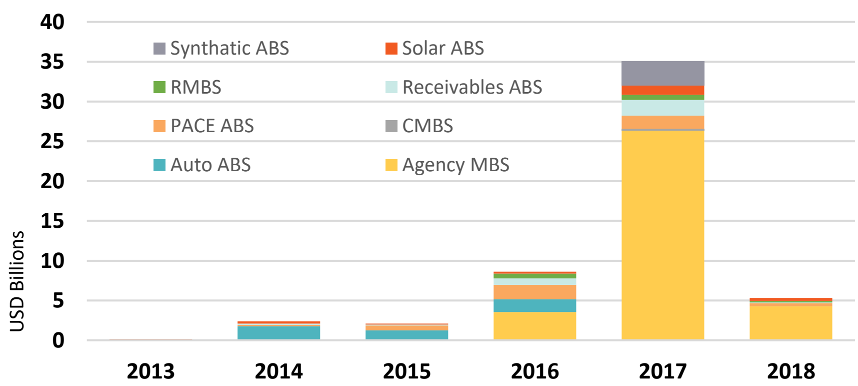
Globally, the majority of green bonds have been unsecured senior notes. A small but growing portion of the market is in asset-backed securities. These deals can provide a broader spectrum of risk, thereby expanding the investor universe.

In 2016, green ABS made up 10% of global green bond issuance. 2017 saw rapid growth, driven mainly by US government agency Fannie Mae, and ABS reached a 22% share in the global green bond mix.

Fannie Mae's green MBS is back of the agency's Multifamily Green Initiative programme which offers preferential terms to borrowers who provide certified buildings as mortgage collateral or borrower under the Green Rewards Program for energy and water performance upgrades.

US ABS issuance represents 86% of all green ABS issuance to date. Securitisation has been used also in France, China, the Netherlands, Australia and Brazil.

Global green ABS issuance by type



Opportunities to grow a green securitisation market in India

While most transactions in the Indian securitisation market have involved mortgages and vehicle loans, there is great potential for refinancing loans backed by renewable energy, energy efficiency and low-carbon transport.

Banks include renewable energy under lending to the "power and energy" sector. The large amount of credit extended to the fossil fuel based power sector has caused banks to sometimes come very close to their exposure limits. This restricts their ability to finance renewable energy and other green projects.

Securitisation can "expand" banks' lending capacity by "recycling" balance sheet capacity and opening up a refinancing route for long-term loans.

There are several structures which can be used to grow the Indian ABS market, some of which are fairly well entrenched:

1. **Single- or multiple-originator structure** (e.g. as used for microfinance for agriculture)
2. **Securitisation using a warehouse facility** (e.g. used for loans that can be standardised such as for electric vehicles and residential rooftop solar)
3. **Future flow securitisations** (e.g. with any concession contract such as renewable energy power purchase agreements, energy efficiency receivables, PPPs for Bus Rapid Transit and waste-to-energy)

The opportunity to grow *green* securitisation in India lies in both asset classes that are already being securitised as well as new asset classes that need increased funding.

Asset classes already being securitised
Mortgages to green buildings
Electric vehicle loans
Microfinance loans to agriculture

For loan types that are already being securitised, green assets will have to be identified amongst existing asset classes. Green tagging newly originated loans will help identify future securitisation assets.

Mortgages on green buildings

Certification of buildings is increasingly available and there are a variety of standards available or in development:

- More than 1,500 projects have been certified under the India Green Building Council's Green Building Rating System.
- Close to 200 projects have a LEED rating.
- 500, mainly residential, properties have a Green Rating for Integrated Habitat Assessment (GRIHA) rating.
- The IFC's Edge Tool has been used on only 10 projects to date but has good potential for low-cost housing.
- The Energy Conservation Building Code for commercial buildings is under development. It will be made mandatory for all new buildings.

The availability of these schemes and the data they gather can help tag mortgages as green. Home-improvement loans which include the installation of rooftop solar are supported but not easily available.

Electric vehicle loans

Between 2015 and 2017, the sale of EVs and hybrids saw an impressive seven-fold increase, rising from 10,321 vehicles in 2015 to 72,482 in 2017. In a matter of a few years, e-rickshaws have grown to an estimated 1.5m and are expected to double by 2021.[1] Battery-powered auto rickshaws are also gaining popularity. Leases can be tagged as 'green' and securitised using Auto ABS structures.

Agriculture microfinance

Microfinance is cash intensive. Demonetisation in late 2016 created asset quality pressure and curbed related ABS issuance volume in 2017. Still, agricultural credit has grown rapidly and is mainly disbursed by commercial banks followed by regional rural and cooperative banks.

The securitisation of microfinance loans is already established in India. The approach can applied to sustainable farming and land management loans to help meet the sector's financing needs.

New asset classes
Cash flows arising from solar and small-scale wind assets
Loans for energy efficiency upgrades
Mass transport financing / PPP receipts
Waste to energy contract receivables

Receivables from solar and energy efficiency services hold great potential to feature in securitisation deals given the Indian government's ambitious renewable energy goal of 175 GW of installed capacity by 2022. The tariff competitiveness for solar PV projects has improved over the last three years. More local capital has stepped in, in particular Indian commercial banks and non-bank financial companies. These institutions would be well placed to originate green securitisations.

Waste management needs upgrading

Waste management will need to evolve from "collect and dump" to "collect, segregate, process and recycle". Waste to energy facilities can be part of the solution and will require funding.

For capital to flow to low-carbon sectors more barriers need to fall

The resolution of regulatory issues through the Finance Act 2016 is a welcome step. However, some significant barriers remain to be addressed if securitisation is to live up to its potential of channelling funds to the low-carbon sectors in India.

Ease of enforcing contracts is an issue

India ranks very low on ease of enforcing contracts in global rankings.[2] Making enforcement easier is important both in respect of the contractual framework of securitisations and because the underlying assets rely on project finance mechanisms for initial funding and are, therefore, heavily dependent on robust contract law support to be deployed on the ground.

Greater allocation of capital to low-carbon sectors needs to become a priority

The Indian banking system has a history of driving lending by marking certain sectors as priority. This approach can be used to sponsor green loan origination.

Bond investors such as pension funds and insurers have been constrained by their exposure to certain sectors and mostly invest in sovereign debt. Due to limited experience with ABS and green sectors, risk mitigation instruments such as partial guarantees, greater credit enhancement and over-collateralisation may be needed to enable them to invest in green ABS.

Sustainable agriculture needs to be defined

Microfinance Institutions and banks involved in agricultural lending will need to develop definitions for sustainable and climate-resilient agriculture. While SEBI guidelines have created a definition of what is *green*, other sector regulators may need to align themselves and, in some cases, create more granular definitions.

Standardisation will help to scale up

Retail assets like battery-operated vehicles and residential rooftop solar will need standard documentation combined with a low cost refinancing solution to create the volumes needed.

Recommendations to scale up green securitisation in India

1. **Improve contract law enforcement mechanisms** by creating special dispute resolution institutions for the sectors labelled as *green* and actively prioritising and addressing court backlogs for these sectors.
2. Widen the classification for **Priority Sector Lending** to include green assets and green securitisation and develop definitions to enable the tagging for eligible loans as *green*.
    a. The **required definitions** can be based on the work done by the High Level Expert Group and European Union on a common taxonomy for sustainable assets.
    b. For microfinance institutions and banks involved in agricultural credit, **develop of a list of green agricultural activities** to enable the tagging of *green* loans.
3. **Create standard documents** for popular retail assets such as battery operated vehicles and rooftop solar. Standardisation would also be beneficial for new funding instruments such as energy efficiency loans and green mortgages, particularly when they can be based on established financial products (mortgages).
4. **Set up or work with warehouse platforms** that can buy standardised green-tagged loans at competitive rates, possibly with the support of multilateral development banks. Multi-originator platforms can further scale up market access by making it easier and faster to assemble collateral pools for green ABS.
5. **Create a dedicated Bond Guarantee Institution** to provide risk mitigation at scale. In combination with widening the classification for Priority Sector Lending, this should allow institutional investors to allocate more funding to green sectors.

Endnotes:

1 Information sourced from http://www.millenniumpost.in/opinion/indias-urban-challenge-287344
2 Information sourced from http://www.doingbusiness.org/data/exploretopics/enforcing-contracts

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