

Sustainable Energy Bonds

Sustainable energy projects in India – including distributed renewable energy (small-scale and off-grid solutions), energy efficiency projects for buildings or in industries, projects for increasing energy access, and projects to encourage sustainable urbanization – are capital intensive, with high capital expenditures and low operating expenditures, and have long project lifetimes. Long-term financing is a key requirement to accelerate the sustainable energy market.

Further, while equity capital has been more forthcoming, there's been a lack of access to debt capital. There are several sustainable energy companies that are capitalized with equity and have proven that their model works. However, they are not able to raise debt at appropriate terms, which limits their ability to scale.

One main reason why long-term debt investment has been hampered is that the sustainable energy sector is in early stages, with a thin track record of projects. Further, since many sustainable energy projects are small-scale projects, the transaction costs associated with investments in small ticket size projects are higher, which also deters impact investment. Impact investors are in some cases willing to trade lower returns for measurable data on sustainable energy impact measures, and are a good potential source of initial investment to catalyze additional mainstream investors.

However, presently data on impact is being captured in several different ways, leading to differences in interpretation and an additional reporting burden for borrowers. Standardization of impact measures among sustainable energy

projects can channel more impact capital, which can catalyze additional private investment.

Sustainable Energy Bonds aim to drive impact investment to sustainable energy in India by offering debt exposure, sufficient returns, and standardized impact measures.

Sustainable Energy Bonds (SEBs) are debt instruments that include an impact assessment mechanism, in order to meet the needs of impact investors whom are looking for debt exposure in the early phases of market development, as well as clear and standardized evidence and benchmarks for project impact.

Sustainable Energy Bonds are a class of debt instruments, being floated by cKers Finance, meant for impact investors looking for exposure in debt issuances that will be used exclusively to finance sustainable energy assets and to also track the impact of investments. cKers Finance estimates that SEB can mobilize USD 3 billion in the industrial segments of decentralized renewable energy and energy efficiency, and USD 1 billion in the energy access segment. SEBs also aim to help establish a track record for mainstream debt investors to invest at a later stage, by channelling impact investments and raising the confidence of other classes of investors. Finally, SEBs also provide an aggregation model that can streamline investment into small-scale projects, which will lower transaction costs.

Instrument Design

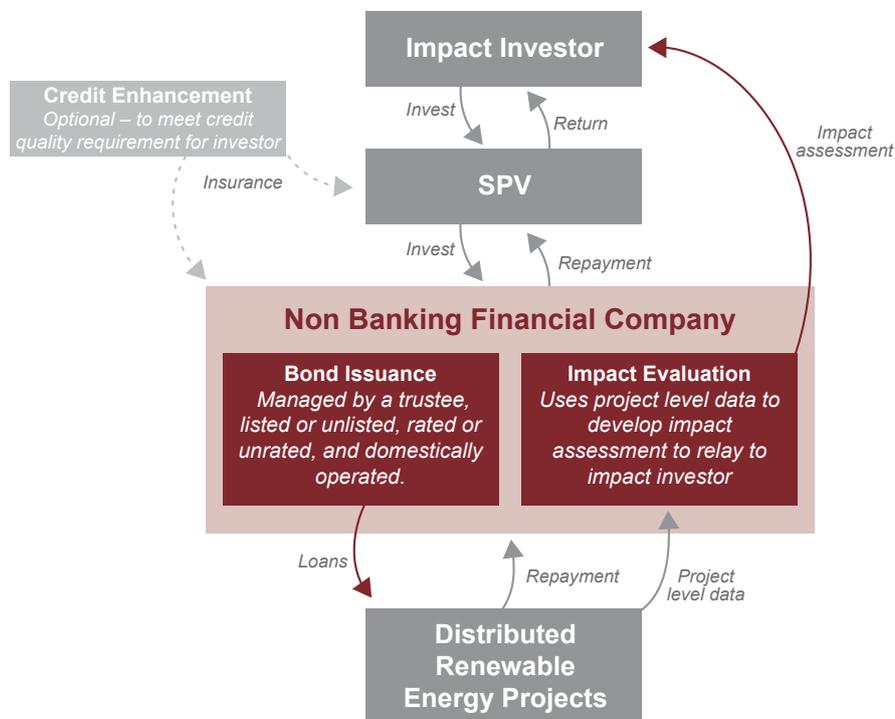
The proposed structure of SEBs consists of a special purpose vehicle (SPV), which acts as an investment vehicle for impact investment, and is a holding company registered in a Double Taxation Avoidance Agreement country to avoid double taxation issues. This SPV then invests in bonds (nonconvertible debentures (NCDs)) in an NBFC registered in India using the Foreign Portfolio Investment (FPI) route. The FPI route allows the entry of foreign funds in a country where foreign investors can make investments in the country's stock and bonds. The NCDs can be rated or unrated depending on the credit quality sought by the impact investor. NCDs that have a higher credit rating are considered safer with a lower default risk. However, getting a credit rating for the NCD has cost implications and hence the decision of these rated or unrated NCDs depends on the impact investor and the NBFC.

The NBFC then either lends to sustainable energy projects or securitizes the existing portfolio and goes for off-balance sheet funding. The loan portfolio comprising investments in sustainable energy projects makes the loan and interest repayments to the NBFC that are then passed on to the impact investor as agreed in the term sheet. Finally, impact investors gather the returns from the interest repayments

of the NCD. The proceeds of the issuance and repayments are managed by a trustee.

Any investment coming from outside India can have issues with double taxation issues. An SPV in a Double Taxation Avoidance Agreement (DTAA) country can help in countering this. In the proposed structure, the SPV is registered in a DTAA country which will lower taxation and this reduced taxation cost is passed along as reduced cost of lending by the NBFC on its portfolio.

A key feature of the SEB structure is an impact assessment mechanism that standardizes impact measurement and reporting. The NBFC that issues the SEB conducts the impact reporting by using data obtained from sustainable investment projects, at predetermined intervals throughout the project lifetime. Some of the indicators used for impact measurement and reporting include: renewable energy capacity installed, increase in hours of electricity available, reductions in emissions and pollution, private investment catalyzed, number of beneficiaries to increased energy access, and number of new jobs created.



The India Innovation Lab for Green Finance is a public-private initiative in India that brings together experts from government, financial institutions, renewable energy, and infrastructure development to identify, develop, and accelerate innovative investment vehicles for green growth in India.

Analytical and secretariat work of the India Lab has been funded by **Shakti Sustainable Energy Foundation**, the **David and Lucile Packard Foundation**, and the **UK Government**. **Climate Policy Initiative's** team in Delhi serves as Lab Secretariat and analytical provider.