



## Energy Efficiency: Reaching the Bond Market

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# Energy Efficiency: Trend and Ambition

- Energy efficiency plays a central role in global low carbon transformation
- A majority of G20 countries have adopted energy efficiency targets
  - ❑ EU, China and India
- Green financing and green bonds are gaining strong momentum
  - ❑ Global market: US\$45billion in 2015
  - ❑ China: US\$11 billion in the first half 2016 - one third of global market
  - ❑ India: Yes Bank, Axis Bank, IDBI Bank, Exim Bank and corporate green bonds
- ***How can EE projects benefit from green capital?***

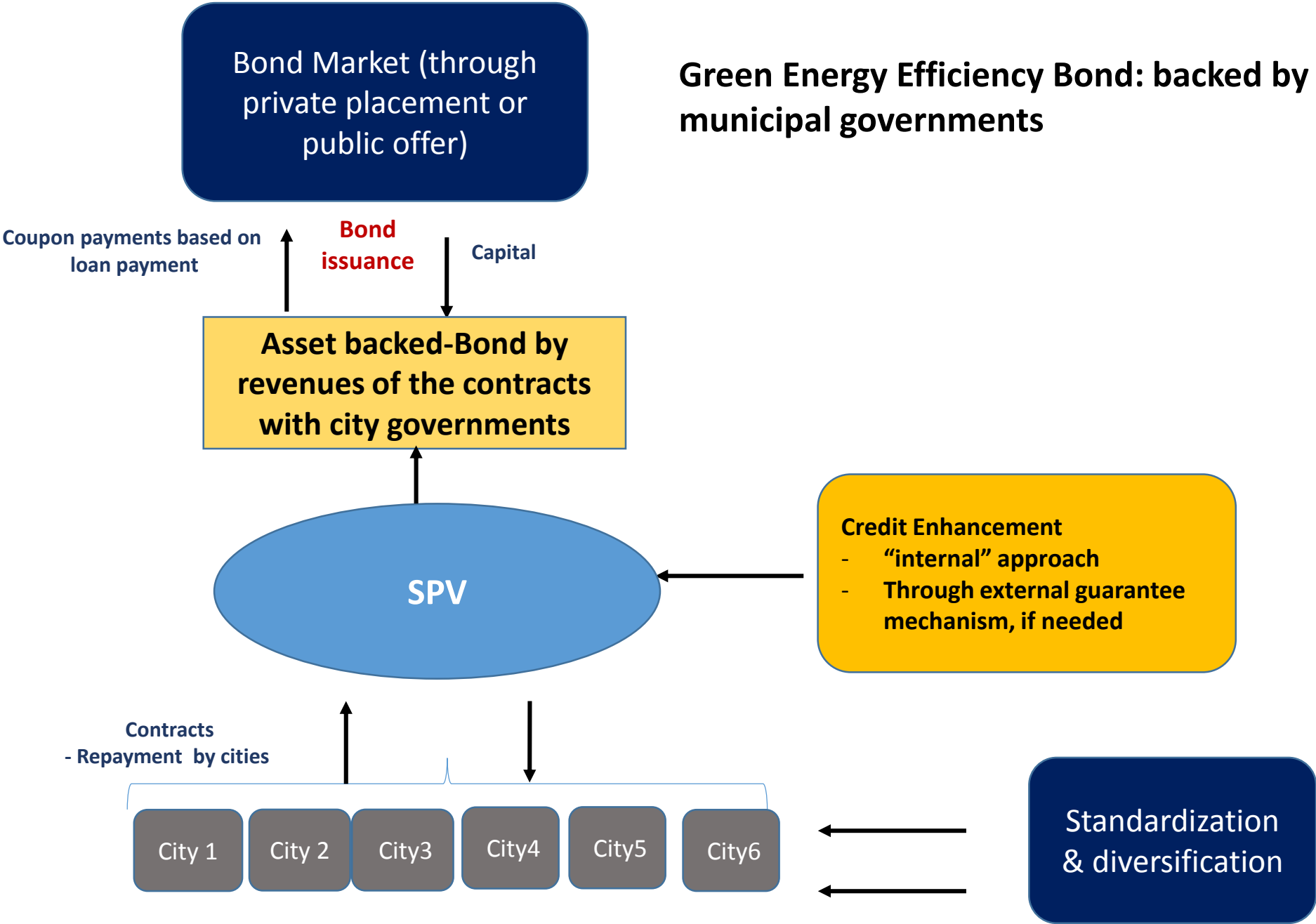
## EE: Barriers to Reaching the Bond Market

- Lack of primary market volume
- Small sized projects and lack of “track record” data about historical performance of EE loans and financing
- Lack of standardization of energy efficiency financial products
- Lack of credit rating for many potential borrowers (e.g SMEs) and municipal governments
- Poor financial strengths of ESCOs (“aggregator”)
- No familiarity of financial institutions with appraising EE projects and documentation
- Lack of assets that can be hypothecated by the lender or banks

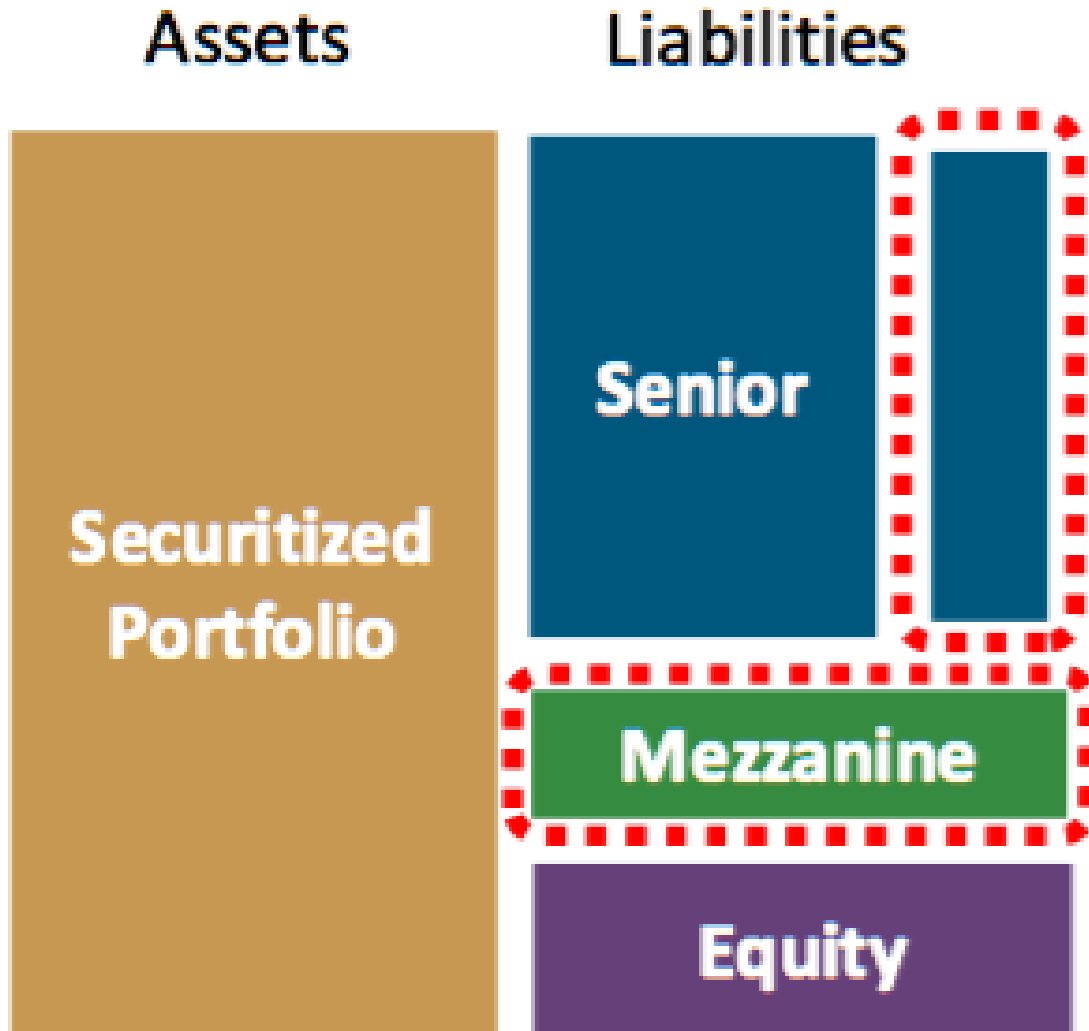
# Why LED Lighting: Opportunity for Innovative Financing

- LED lighting: a great opportunity for energy and cost saving
  - ❑ Global push for LED lighting - Global Lighting Challenge launched by Clean Energy Ministerial in 2015 at Paris Conference
  - ✓ Deploying 10 billion LED bulbs - saving \$120billion global electricity bill; avoiding 801million tons of CO2
  - ✓ India, China and US are part of this global campaign
- LED technology is mature, reliable and proven
  - ❑ Performance record is being established: LA reported 64% energy saving for LED street lighting
  - ❑ Recognized as one of the most actionable and ready-to-implement technologies for cities to transition to a low carbon economy
  - ❑ India industry is in leading position to produce low cost and high quality LED bulbs

# Green Energy Efficiency Bond: backed by repayment from municipal governments



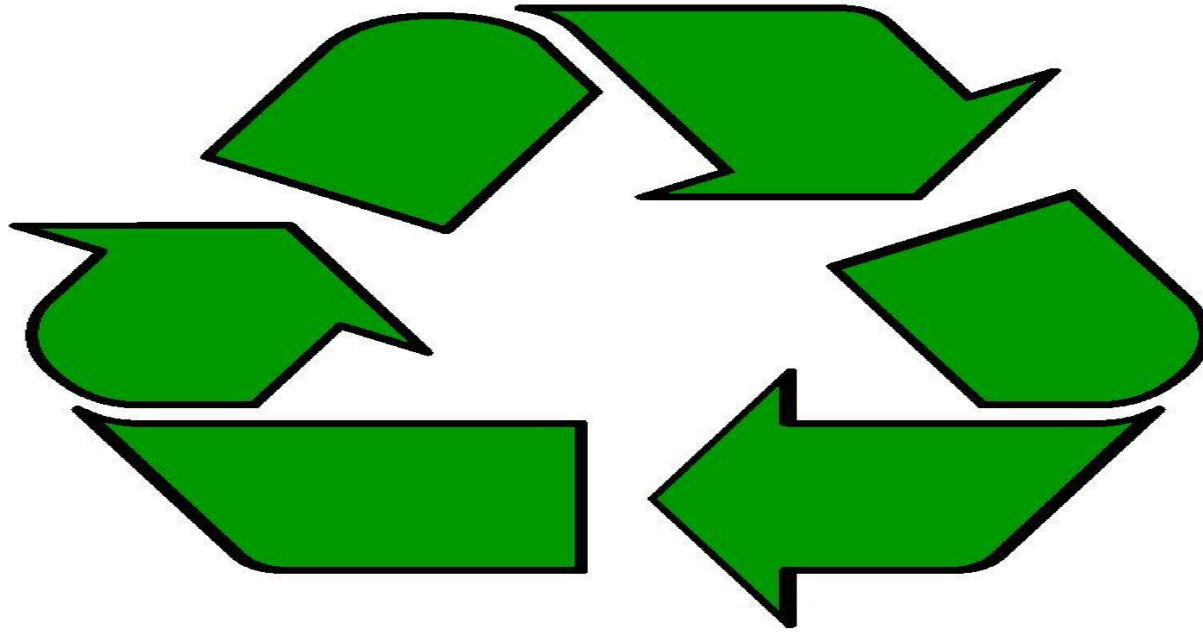
# ABS Structure



- The proposed ABS will ring-fence selected SLNP projects
- The proposed size of the issuance will be US\$50-60 million and is expected to be launched in June 2017
- Care will be taken not to cherry pick projects and offer a “typical” portfolio to create a replicable model
- IFC has shown interest in participating in the mezzanine tranche of the proposed ABS for EESL’s street lighting portfolio
- A portion of World Bank’s lending may be used as equity/ credit enhancement for the ABS
- However, it is possible that the bond will raise funds at a slightly higher rate of interest
- The primary purpose of the ABS is to create an innovative model tailored to EESL needs that can provide a replicable source of market-based finance

**Action:**

**Piloting and creating market for  
A new Asset Class - Energy Efficiency Green Bond**



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