



Renewable Energy Innovative Financing Solutions

INDIA INFRASTRUCTURE FINANCE CO. LTD. (IIFCL)

IIFCL ASSET MANAGEMENT CO.LTD - IDF

Dr. E. S. Rao, Chief Executive Officer IIFCL AMC - IDF and Chief General Manager, IIFCL

18.05.2017

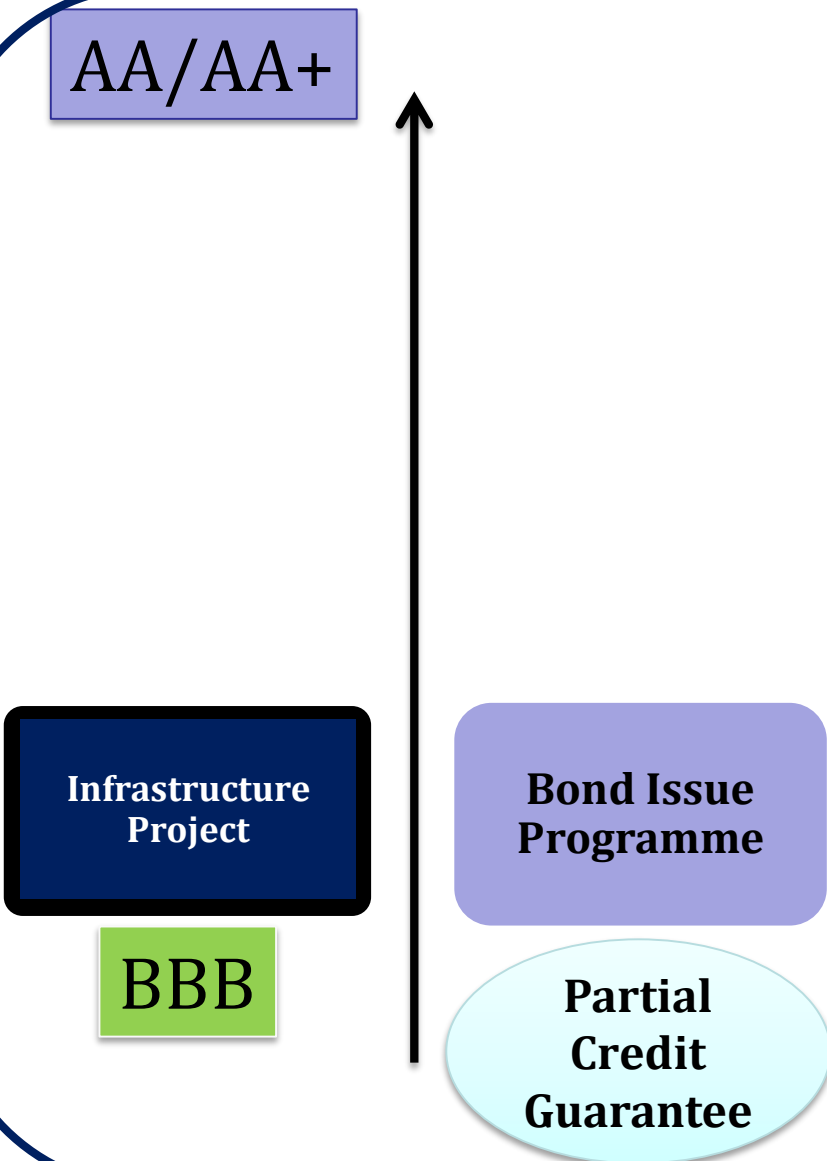
Background

- India currently having a Total Installed Power Generation of around 320000 MW comprising of Thermal, Hydro, Renewable & Nuclear
- India has ambitious Renewable Energy targets of 175GW by 2022 - 100 GW of Solar Power, 60 GW of Wind Power, 10 GW of Waste-to-Energy Power and 5 GW of Small Hydropower.
- Existing Installed Renewable Capacity is 42.89 GW comprising Wind – 26.87 GW, Small Hydro Plants- 4.27 GW, Waste to Energy – 4.94 GW and Solar Power 6.76 GW.
- Additional investment required - \$189 billion includes \$57 billion in equity and \$132 billion in debt .
- Banks burdened with stressed loans and overexposed to the infrastructure sector.
- Foreign and domestic institutional investors - Potential to bridge this financing gap.

ENABLING SOLUTIONS INNOVATIVE FINANCIAL INSTRUMENTS

- Credit Enhancement
- Infrastructure Debt Fund
- Infrastructure Investment Trusts
- Securitization & Asset Backed Securities
- Green Bonds

Credit Enhancement- Structure



Insurance Companies	✗	Investors
Pension Funds	✗	
Commercial Banks	✓	



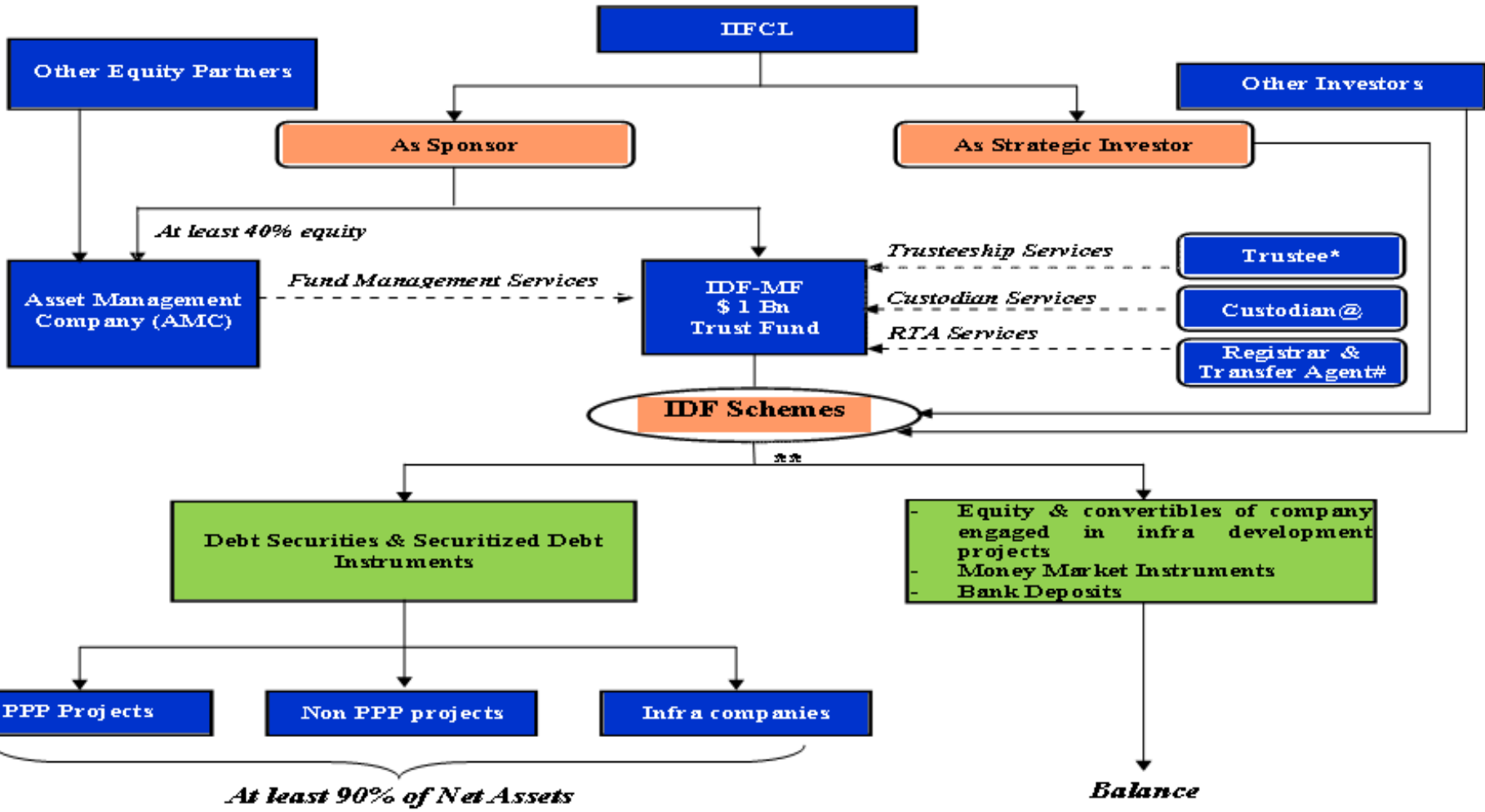
Credit Enhancement – Benefits

- Better rating for Infrastructure Project (AA or higher).
- Bridging gap between stand-alone rating and min. investment rating for Long Term Investors like Insurance and Pension Funds.
- Effective in mobilization of Long Term Debt.
- Freeing up of Bank's capital as well as exposure
- Longer Term funds for the project with cash flow suiting a project's requirements
- Development of Bond Markets
- Reduced rate of interest for the borrower/project



INFRASTRUCTURE DEBT FUND- STRUCTURE

IIFCL MF (IDF)



* Governed by Board of Trustees - 75% independent members

@ Citibank N.A. appointed as Custodian and Fund Accountant

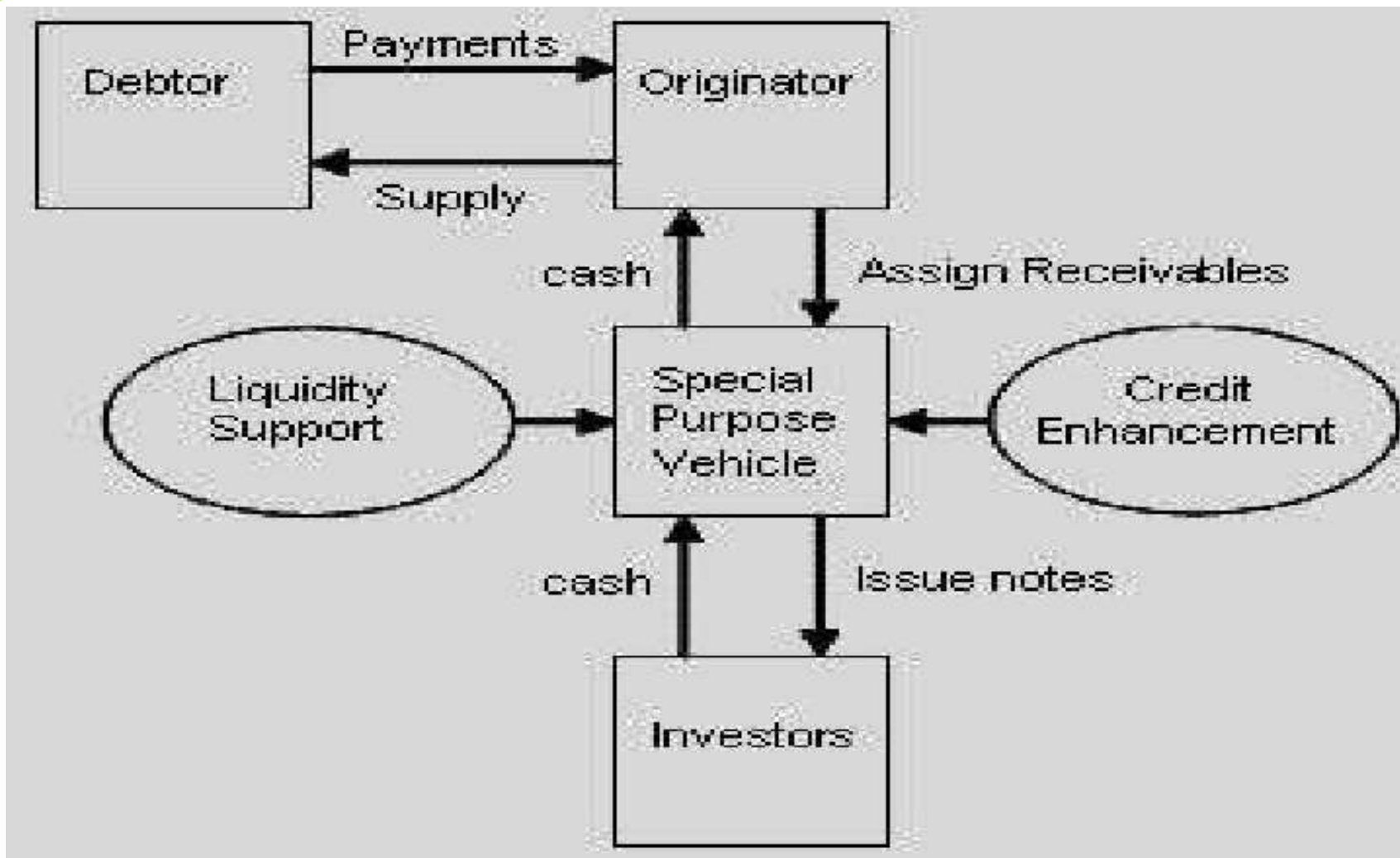
Computer Age & Management Services (CAMS) appointed as Registrar & Transfer Agent

Infrastructure Debt Fund Benefits

- An alternative Medium to Long term investment instrument- with options of tenor ranging 5 to 20 years.
- Investors to IDF includes FIIs, Pensions Funds, Insurance Cos, Sovereign Wealth Funds and other investors
- IDF (MF) can provide a “Structured Financial Products” for SPV’s and Infrastructure Companies.
- Potential to reduce cost of financing to the project and Promoters based on the Rating & Class of Instrument used.

- InvITs are mutual fund like intermediaries enabling investments into the infrastructure sector by pooling different investors like HNI, FI's, FPI's & Retail and channelize funds into Infrastructure projects.
- Mandatory listing of InvITs - Investment opportunity to a larger pool of investors and financial institutions
- Helpful in reducing exposure of Indian banking system and free up the Banks Capital.
- Existing Developers and Banks will be able to de-leverage their debt from the completed projects which will enable them to focus on new projects in the sector and will improve the investor sentiment.

Securitization and Asset-Backed Securities – Structure





Securitization & Asset-Backed Securities – Benefits



- A convenient mechanism to suit changing needs of borrowers and lenders
- Separates the credit risk of the assets from the credit risk of the Originator
- Lower the cost of borrowing for Originator as the security is independent of the rating of the corporate securitizing these assets
- Illiquid assets converted into marketable securities and thus provide alternate funding source
- Risk-diversification advantages to investors
- PTC/ Notes/ Bonds are rated by Credit Rating agencies and placed with capital market investors.
- Allows banks to transform long-term infrastructure loans into cash, thus increasing lending capacity.



Green Bonds



- A debt instrument issued by an entity for raising funds 'ear-marked' for use towards financing 'green' projects/ assets/ business activities with environmental benefits .
- Investor Diversification - Attract new class of investor base – Insurance Funds, Pension Funds , Sovereign Wealth Funds apart from the traditional investors like Bank's, F.I's etc. for financing Green projects.
- Helps in enhancing an issuer's reputation. Illustrates green credentials of the issuer.
- Demonstrates commitment towards the development and sustainability of the environment.
- Potential for pricing advantage

THANK YOU
Dr E.S.Rao