Solar Rooftop
Financing Challenges and Way Forward

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YES BANK – Remarkable Growth Story

11 +Years of high growth Institutional Excellence

Currently the 5th largest private sector bank in India

Pan-India Penetration (Sep 30,2016)
(Branch / ATM Network – 950/1,756)

Balance Sheet size of INR 2799.4 billion (Sep 30, 2016)
(grown faster than any other Indian bank during the corresponding period in their lifecycle)

Market Capitalization of INR 556.5 billion (Sep 30, 2016)
(return of more than 1300% since its public listing in July 2005, creating value for investors)

Existing relationships with all major corporates in India
(Relationship based, rather than transaction based approach to banking)

Knowledge Banking
(Focus on key growth sectors of Indian economy
Dedicated knowledge teams for each respective knowledge sector)

Complete suite of Financial Products
("One bank" approach providing all banking solutions under one roof)

Excellent Human Capital
("Professionals Bank of India" led by arguably the best management team in the country)

Backed by Pedigree Investors
(Key institutional investors include LIC, Franklin Templeton, Fidelity, Bajaj Allianz, Coronation, Birla Sunlife, Vanguard, Fullerton, among others)

YES BANK – "Renewable Energy Partner"

- ❑ Knowledge Partner for **RE-INVEST 2015 and RE-INVEST 2017**
- ❑ First private sector bank to provide Green Energy Commitment **(GEC)** for **financing 5,000 MW** of renewable energy projects in **next 5 years.**
- ❑ **First commercial Indian Bank** to issue **Green Infrastructure Bonds** (*Issuances ~USD 250 MM till date*)
- ❑ **INR 2,135 Crs**. raised recently through **long term infrastructure bonds** (*largest* issuance by YES BANK till date)
- ❑**Knowledge Partner** to International Solar Alliance **(ISA)** launched jointly by India and France during **COP21** in Paris in December 2015

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2016 – "Landmark year for Solar Rooftop"

- ❑ 1 GW cumulative capacity crossed

- ❑~ 700 MW new capacity addition (*15% of total solar capacity addition ~4.9 GW in 2016*).

- ❑ New tenders for 900 MW of solar rooftop systems floated (10*% of total solar projects tendered ~9 GW)*

- ❑ SECI's 1000 MW tender *(Largest tender in India's rooftop history)*

- ❑ System cost (*Modules, inverter, BOS etc*.) falling to all time lows

Key Drivers- Financial subsidies, improving economics, net-metering implementation and AD / 80IA benefits.

Financial challenges

Low Credit profile

- Individual/Commercial & Industrial (C&I) borrowers having limited long term bank financing experience – *majority of them having working capital relationship*
- Line of credit for project implementation drawn randomly leading to repayment structuring issues.
- Inadequate **free** business cash flows for rooftop loan servicing.
- Uncertainty over credit quality and cash-flows under RESCO model for developers

Security Coverage

- Uncertainty over continued availability of rooftop space with no security interest especially under OPEX model
- Inadequate business assets for collaterals.
- Low and untested resale value of solar rooftop modules – primary asset under charge.

Other Relevant Issues – (1) Net metering

Net metering states accounted for ~580 MW vs. ~180 MW for gross metering states –*Overall Progress however continues to be slow*.

<u>Prevailing Issues-</u>

❑Current policy based on CERC 2013 regulations- *too rigid on system size, connection type and consumer categories/models.*

❑ No satisfactory financial compensation for utilities – *financial incentives announced recently.*

❑ Lack of appropriate training/process protocols at the local utility level- *leading to high connection lead time of 90-100 days*

❑ Residential and agricultural consumers having low economic incentive (*tariffs already low on account of high cross subsidy)*

<u>Financial implications-</u>

❑Abandonment of C&I segment connections by DISCOMS's casts shadows over future funding for]most prevalent segment in rooftop space.

❑Restrictions (*size, load constraints etc*) on residential segment make project economics unviable.

Other Relevant Issues – (2) OPEX Model

OPEX model gaining popularity amongst Indian consumers *(no upfront capital costs, developer bearing development, financial risk etc.)*

<u>Prevailing Issues-</u>

- Perceived issues in ensuring continued availability of rooftop space for project tenor of 15-25 years - Lack of Contract enforceability and legal sanctity for rooftop lease contracts.
- OPEX model relying on consumers ability to honor commitment throughout project tenor *(both under PPA/lease model*) to make minimum returns.
- Lack of adequate collaterals

<u>Financial implications-</u>

- Limited private sector players granting acceptable credit risk over extended project period *(High perception of customer default risk and contract enforcement issues)*
- Consequently, most OPEX players remain nearly wholly equity financed.

"Way forward"

- **Extension of AD/80IA** sunset clauses beyond FY17 - *Tax Credits/rebates for capex towards solar rooftop systems at individual level, as prevalent in the nature of Solar Investment Tax Credit (ITC) in the US*

- Bank Financing in Pooled Standard Rooftop Assets under PPA/Lease – *working in US with Banks/FI's refinancing developers under pooled assets portfolios*

- **Urgent Reforms in Net metering policy-** *Adoption of best practices from various countries facilitating quick connections, fair deal to utilities etc.*

- **Contract Enforcement -** *Dedicated commercial courts, providing legal sanctity to rooftop project contracts.*

- **Downward trend in domestic interest rates** - *positive sign across rooftop segments/sectors.*

Thank You!