



Bureau of Energy Efficiency



सत्यमेव जयते
Government of India
Ministry of Power



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ANGAN

Augmenting Nature by Green Affordable New-habitat

A Courtyard for Revolutionary Change in Building Energy Efficiency

An International Conference on Building Energy Efficiency

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THIS PRESENTATION WAS SHARED BY

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FOR THE SESSION:

“Market Development & Financing Mechanisms for Energy Efficiency”

DURING ANGAN 2019

Knowledge Partner

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Market Development & Financing Mechanisms
for Energy Efficiency



Mr. Monu Ratra
Chief Executive Officer, IIFL Home Finance Ltd.



UNDERSTANDING THE CONTEXT

The Growth in Residential sector



- By 2030, India's real estate market size is expected to reach **US \$853 billion**, increasing from US \$126 billion in 2015 (**3 Billion sqm** of new residential space)¹
- Rate of Urbanization- **33.6%** ² (exponential growth)

Energy Requirements

- Residential sector consumption- **22%** of India's electricity demand ³
- Electricity consumption in residential buildings is expected to increase **7 fold** during the period 2012-2032 ⁴

The Financial Ecosystem



- By 2030, **US \$90 trillion** to be invested in Infrastructure sector for Climate change initiatives under the Paris Agreement ⁵
- Climate Bonds Initiative aims at mobilizing **US \$100 trillion** bond market for Climate change solutions ⁶
- Focus by International Corporations on investment in Energy efficiency and Climate change initiatives

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Urban Affordable Homes by 2022
PMAY (Housing for All)

33%

Rate of Urbanization in India

22%

Share of residential sector in India's
Annual electricity demand

\$90 tr

Investment in Infrastructure segment
for Climate change



CHALLENGES ↔ OPPORTUNITIES

Market Development



Lack of knowledge & awareness

Lack of trust in new technology

Limited access to Finance

High upfront costs

High perceived risks

Split Incentives

Policy & Governance

- Centralized **Inclusive focus** on **Green Finance**
- Lack of Initiatives by Public sector institutions and Financial bodies
- Provision of Incentives in a **Silo at State levels**

Financing

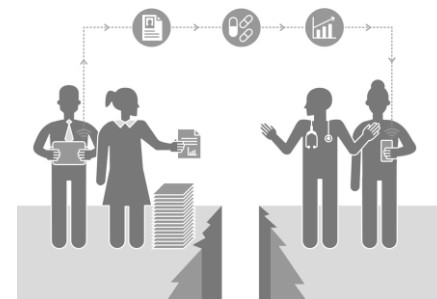
New Affordable Construction under PMAY	-	8.25m Units (assuming 75% of 11m)
Total Construction Area	-	330m sqm (@40sqm per unit)
Capita	-	INR 3.96 tr (@INR 12,000 per sqm)

	30%	50%	70%
Area	99m sqm.	165m sqm.	231m sqm.
Add. Green Cost (@5%)	INR 59.4 bn	INR 99 bn	INR 138.6 bn

THE GAP

09

States providing direct Green building incentives in India



Knowledge Gap

100 bn

Incremental Financial gap (INR) to be bridged for ensuring 50% of new urban construction to be efficient buildings



Market Development



- Creating **multi-faceted** teams to bridge the knowledge barrier
- Provide **platforms** for inclusion of professionals from various fields to address common goals through inclusive problem-solving

Policy & Governance

- Standardizing **Incentive policy** at Central level
- Promoting Green Financing through **Public sector Financial organizations**/ banks
- Enhancing initiatives to ensure access to Finance, such as NHB's dedicated scheme for refinancing Green Affordable housing
- **Localization** of efficiency rating systems and requirements

Financing

Blended/ subsidized loans

On-bill/ performance financing

Incentives and Subsidies

Green bonds

Aggregation

Risk minimization

Knowledge Sharing

