Greening Affordable Housing

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Background

- World’s population
  2050  9 billion

- World’s urban population
  Present  50%
  2050  70%

- India’s urban population
  Present  28.4%
  2030  40.8%
  2041  50%

- Housing sector - 40% of energy consumption
- Huge demand - affordable, green housing
EE in Housing

- Energy efficient housing
  - Lighting
  - Space utilization
  - Ventilation
  - Energy efficient building materials
  - Energy efficient equipment
  - Alternative and renewable sources of energy

- Reducing energy demand at source
  - More sustainable in long run
  - Often with little incremental cost
Govt.’s Commitment

- Part of national psyche
- Traditional building materials
- Alternative energy sources and energy conservation
- India’s role as a responsible and enlightened member of international community
National Urban Housing & Habitat Policy 2007

Focus on Affordable Housing

- Improving the affordability of the vulnerable and economically weaker sections of society

- Technology enhancing energy and cost efficiency, productivity and quality in housing
National Urban Housing & Habitat Policy 2007

Focus on Green Buildings

- Promote appropriate ecological standards - healthy environment, better quality of life in human settlements
- The concept of ‘green’ and ‘intelligent’ buildings
Convergence of these two focus areas can bring about tremendous benefits in terms of:

- Large scale proliferation, acceptance of energy efficiency concepts in housing
- Scalability of technology and economies of scale
- Benefits percolating down to all segments of the population
Barriers

- Lack of awareness
  - Not my problem

- Perception
  - Energy efficiency is expensive requiring huge upfront investments
  - Marketing gimmick of developers
  - High maintenance cost

- Lack of information about Government schemes
Overcoming Barriers

- Sensitization
  - Macro level
  - Applicability and usefulness in day-to-day life
  - Govt. schemes

- Perception Issues
  - Need not be comprehensive (and expensive) but incremental (and affordable)
  - Payback period manageable
About NHB

- Statutory body
  - National Housing Bank Act, 1987
- Regulator of Housing Finance Companies in India
- Promotion and development of housing and housing finance sector
- Financing provided to retail institutions for housing finance
NHB’s Efforts

- NHB working with all categories of primary lending institutions to ensure that energy efficient housing concepts are extended to all segments
  - Based on geography (urban / rural)
  - Based on socio-economic groupings
  - Need based
    - Comprehensive energy efficiency solutions
    - Incremental needs (domestic solar equipments)
NHB's Efforts (contd.)

- NHB has been working on multiple platforms to promote energy efficiency concept in residential buildings
  - Product development
  - Promotional efforts
  - Awareness building
  - Capacity building
  - Market infrastructure development
  - Financial assistance
    - Refinance
    - Capital subsidy
## NHB’s Financing Products

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**for**

- General Housing
- Rural Housing
- Special projects (in natural disaster affected areas)
NHB KfW Partnership

- Promoting use of energy efficiency techniques in buildings
- Promoting energy efficient residential housing
- Jointly by NHB and KfW in 2008 pursuant to Indo-German Government-to-Government negotiations
- First of its kind programme in India
Partnership contd.

- Feasibility study
  - Market potential
  - Awareness
  - Industry’s framework
  - Characteristics of borrowers
  - Types of houses financed
  - Functioning of institutions involved in housing finance
- Rapid assessment study
- Modalities of Programme designed
Line of Credit: €50 million
Technical assistance grant: €1.5 million

The Programme
- Financial assistance - housing loans to individual borrowers through retail lending institutions for purchase / construction of EE residential houses / flats
- Technical assistance - assessment tool to calculate the level of energy savings of EE houses on the baseline (developed by TERI / Fraunhofer)
Partnership contd.

- Implementation
  - Identification
    - EE building projects
    - Retail lending institutions
  - Refinance potential
  - Borrower information
  - Energy calculation & certification
  - Compliance with NHB’s reporting requirements to KfW
Capacity Building

- Training and capacity building programmes for housing finance personnel
- Special familiarization programmes focused on energy efficiency in residential sector
- Energy efficiency not only for the elite
- Showcasing of successful models to encourage replication
Financial Assistance

- Refinance for energy efficient housing
- Refinance for installation of solar water heating and solar lighting equipments in homes
- Channelizing the capital subsidy available under JNNSM for installation of solar water heating and solar lighting equipments in homes
Benefits

- Reduction in energy usage without compromise on comfort
- Building of sustainable housing and habitat to impact society and environment
- Availability of fund - source for encouragement
  - Lenders
  - Borrowers
- Availability of assessment tool - help to developers
- Percolating down of benefits to all segments
Next Steps

- Absorption capacity / consumption of EE products in India to be enhanced
- Scalability important due to challenges
  - Cost aspects
  - Huge housing shortage
  - Existing housing
  - Present product for niche market segments
- Programme to be expanded to include existing housing units