Financing Green Housing – build a better future and differentiate from your competitors

IFC’s solutions in housing finance to mitigate the impact of climate change

Dr. Friedemann Roy
IFC Washington
February 3, 2015
Why going Green in construction and finance? – Changing customer preferences and conditions in the environment and legislation

Rising urbanization and growing population in India

Strain on infrastructure

Rising pollution

“Smart city initiative of Indian Government”

Deteriorating health

Changes in legislation
Changing consumer patterns in housing provide opportunities for developers and lenders

Rising share of Green buildings in relation to total construction volume (estimated at US$ 15 billion by 2018)

Rising housing cost provide an incentive for households to consider green housing options
- Rising consumption of energy
- Increased cost for water
- Increased demand for more spacious living areas
- Higher cost for commuting

Source: IGBV, IFC, Planning Commission
Key Players

Building users

Developers/Construction industry

Banks

Material suppliers
Typical project design to create market for Green Mortgages in India

Controls and certifies

Certification authority

Confirms adherence to certification standards

Developer/construction material supplier

Lender

Household

Loan

Developer/construction material supplier

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How to benefit from these opportunities?
Developer’s and builder’s perspective
Are Green homes more economical than conventional homes?

YES!

Because:

- Water consumption: 40% less (source: IGBC)
- 20 – 40% savings on operations costs, including electricity (source: IFC)
- Higher resale value: 10 – 14% (data from UK, USA)
- Enhanced quality of life
- Less costly to build than perceived
Green Homes typically have

- Roof and wall insulation
- Low environmental impact building materials [embodied energy]
- Water efficient fittings and rain water collection
- Smart meters for better control and metering
- Solar hot water heaters

- Energy efficient appliances
- Modernization of cooling systems
- Solar electricity using photovoltaics
- Energy efficient ceiling fans and lighting
- Passive design features for thermal comfort
- Energy efficient appliances
Why aren’t Green homes more common?

“Why aren’t Green homes more common?”

Home Owners

“We would like lower utility bills, but there aren’t any efficient homes.”

Investors

“We would fund efficient buildings, but there is no demand for them.”

Developers

“We would ask for energy-efficient homes, but investors won’t finance them.”

 Builders

“We can build energy-efficient homes, but developers don’t ask for them.”
IFC’s Efforts to break cycle

- **Government regulations**
  - Mandatory building codes
  - Investing in construction of new homes

- **Supporting new financial products**
- **Investing in buildings and technologies**
- **EDGE certification system**
  - Promotes new Green stock
    - Mandatory building codes
    - Investing in construction of new homes
  - Certifies Green stock
    - EDGE certification system
    - Partnerships with local Green Building Council

- **Create business opportunity**
  - Training and capacity building with banks
  - Investment in credit lines
IFC’s EDGE System
EDGE Resource Efficiency Rating

- EDGE stands for “Excellence in Design for Greater Efficiencies.”
- Designed for emerging markets.
- Reveals technical solutions for going green and captures capital costs and projected operational savings.

Who uses EDGE?

- **Investors** – to test the financial viability of a green building project.
- **Banks** – to offer green mortgages and green construction credit facility.
- **Developers** – to brand their projects ‘green’ and attract investors and buyers.
- **Building Owners** – to save on operational costs.
What is the EDGE standard?

‘A greenfield building that has 20% less energy, water and material consumption compared to an equivalent local benchmark.’

The standard provides a performance assurance to buyers and investors.
The EDGE Tools

• EDGE has contextual data of utility costs and climate for different cities

• EDGE uses building physic calculations to give design-specific results

• EDGE spells out the most effective technical measures

• EDGE provides an investment planning tool for building owners and developers

Available for free at www.ifc.org/edge
The EDGE Tools: Energy efficiency section

Available for free at www.ifc.org/edge
EDGE can be useful for all...

- Green branded homes
- Loans for green construction
- ‘Green Mortgage’
- Equity/debt Risk Share Facility
- Project or corporate level investment
- IFC’s Investment planning tool
Green Mortgages
What is a Green Mortgage?

= “Energy-efficient” mortgage:

• to finance energy-efficient upgrades of existing home

• to purchase new green home

Benefits for customer

• Lower energy and water bills

• Increase in value of green home

• Lower default rate
Example Mexico: Green homes market can take off with right incentives and provide enhanced quality of life for homeowners

Green home market in Mexico:
- 600,000 homes per year
- 2.4m beneficiaries
- Green mortgage of up to USD 125,000
- Savings on utility bills offsets monthly mortgage

Jose, homeowner: “The Green Mortgage Program offered by INFONAVIT helped me to realize my dream. The utility bill decreased by 40% once we moved in!”
Offering Green Mortgage loan products – benefits for lenders

- **Market share growth**
  - Opportunity for market differentiation

- **Higher cross sell and loyalty**
  - Opportunity for cross-selling
  - Stronger retention rates

- **Reduction of credit risk**
  - Higher collateral due to higher homes values
  - Lower default rates in comparison with standard mortgages

- **Positive branding**
  - Innovator reputation, enhanced corporate social responsibility
## IFC’s offer in investment and advisory services to support green housing solutions in India

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International Finance Corporation (IFC)
The IFC program India Green Building Program targets transformation of market

- Support Govt. policy interventions
- Investments in clean tech + green buildings
- Access to green buildings finance through FIs
- Mass market voluntary certification - EDGE

STAKEHOLDERS
- Bureau of Energy Efficiency, Ministry of Power, Gol
- Urban Local Bodies (Municipalities, Development Authorities)
- Private Sector Firms, PPPs
- Financial Intermediaries National Housing Bank (NHB), Indian Mortgage Guarantee Company
- Realtors and Developers Architects & Designers Property Owners
FT/IFC
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- Achievement in Information and Communications Technology
- Achievement in Transformational Finance
- Achievement in Inclusive Business

For more information and to apply:

www.ft-live.com/transformationalbusiness
Structure of IFC Green Housing Finance Finance Toolkit – a guide to implement Green Mortgage Lending Programs within a lender’s organization (I)

- Goal: bridge supply and demand side of green housing finance
  - Catalyze primary market origination of green mortgages/other green housing finance products (including housing microfinance)
  - Promote development of and investment in green technologies and materials
  - Develop attractive incentive mechanisms to implement and to make housing more affordable
Structure of IFC Green Housing Finance Toolkit – a guide to implement Green Mortgage Lending Programs within a lender’s organization (II)

- Structure:
  - Green housing finance product design
  - Market entry assessment, marketing and sales strategy
  - Internal processes
  - Annexes (tools to calculate energy savings and determine loan pricing for both new construction and home improvements, etc.)
  - Training programs for lender staff
  - Education program for borrowers
  - Operating manuals/practical tools
Example Albania: creating a market for green housing finance to support reduction of energy consumption

Market needs:
- The housing sector in Albania consumes 54% of all electricity available.
- The price of electricity increased by 66% between 2003 and 2010; further increase in January 2013
- The energy market will be liberalized in 2015
- 34% of households have access to bank accounts
- Households have a monthly utility bill of $200-300

Financing needs:
- 88% of the buildings were constructed before 1990 and require energy efficiency renovations
- Potential investment need is estimated at $300-600m
Albania: with help of IFC, a viable market for energy efficiency (EE) loans was created

Number of EE loans outstanding in USD at Banka Credins, an IFC client

Demonstrated business case and market potential:

- Program has been working with 2 MFIs, 3 banks
- Excellent EE loan portfolio performance: NPL 0.56% in all institutions – other consumer loans: 8% PAR
- Surge in demand for EE loans: IFC investments of USD 4m
Conclusion: paving the market for green mortgages in India

- Indian market offers opportunities for lenders and developers to benefit from surging demand for green mortgages
- Numerous investment opportunities:
  - US$ 5.8 billion required to support urbanization in cities >1m
  - Market potential for Green building products and technologies: US$ 120 billion

Source: IGBC, CII-Godrej

“Well-insulated windows makes doing homework easier 😊“
IFC Housing Finance
www.ifc.org/housing

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