

Financing Green Housing

What is the issue?

The percentage of greenhouse gases emitted from housing are expected to increase as housing demand accelerates, putting India's green transition targets in trouble.

What are the issues with housing sector?

- Housing is a major greenhouse gas (GHG) emitting sector
 - Consuming about 24% of the country's electricity
 - Emitting over 20% of total GHG
- Conventional housing materials such as concrete and steel are made with energy-intensive processes.
- Households' electricity consumption has been on rise as climate change effects such as heat waves increase heavy-duty HVAC appliances and refrigerator usages.

What steps were taken by the Indian government for green buildings?

- **The Indian Green Building Council (IGBC)** - It was formed by the Confederation of Indian Industry in 2001.
- It is the first rating program exclusively for the residential sector.
- It is the India's premier body for green building certification and related services.
- **Green Rating for Integrated Habitat Assessment (GRIHA)** - It is the National Green Building Rating System.
- It is an assessment tool to measure and rate a building's environmental performance.
- The rating is based on energy consumption, waste generation, renewable energy adoption etc.
- **Bureau of Energy Efficiency (BEE)** - It has launched the Energy Conservation Building Code (ECBC).
- It aims to optimize energy savings & launched a five-star rating scheme.
- **ECO-NIWAS** - Energy Conservation-New Indian Way for Affordable & Sustainable homes (ECO-NIWAS) is an online portal to increase awareness about sustainable building and energy-efficient homes.
- **LEED India** - Leadership in Energy and Environmental Design (LEED) India is another Green Building rating program.
- **TERI** - The Energy and Resources Institute (TERI) plays a very crucial role in developing green building capacities.
- **SUNREF** (Sustainable Use of Natural Resources and Energy Finance) Housing India programme was launched by the French Development Agency (AFD) and the National Housing Bank (NHB).
- The project is co-funded by the European Union (EU).
- It aims at scaling up green affordable housing projects in India.

What structural initiatives can reduce the ill effects of housing?

- **Lowering the GHG footprint** - The GHG footprint can be minimized by
 - Use of low-carbon materials
 - Following sustainable construction processes
 - Recycling building materials
- **Reducing energy usage** - An appropriate blend of active and passive design elements when constructing can reduce energy usage by over 35%.
- Replacing incandescent lights with LEDs reduces energy consumption by about 80%.
- **Reducing the heating and cooling demands** - Retrofitting roofs, windows, and doors that have higher energy performance can reduce heating and cooling demands by up to 40%.

What are the challenges?

- **For builders** - Builders have no economic incentives to implement sustainability, as green homes do not command premium pricing.
- **For buyers** - Buyers have no motivation to pay more if it is rented out.
- **For banks** - Commercial banks are unlikely to provide debt as they wish to avoid an increase in the 'loan-value to house-value' ratio.
- Banks rarely provide capital for retrofitting as the borrowers are reluctant to provide their houses as collateral.

How to overcome the challenges?

- **Credit enhancement** - The government, Multilateral Development Banks (MDBs), and Domestic Development Banks (DDBs) can support green housing sector through a credit enhancement mechanism.
- A subordinate loan can be funded by these institutions to cover the incremental cost of construction and design of energy-efficient houses.
- The savings from these houses over a period can be used to pay the loan back.
- **Credit guarantees** - Partial credit guarantees can be offered on energy-efficient homes that pay the lender if the borrower defaults.
- **Global examples** - In China, green housing mortgage securities are traded at a premium over conventional ones.
- In Singapore, Green Mark rated properties are expected to fetch a higher market premium.

References

1. [The Hindu Businessline | Financing green housing](#)
2. [ANINEWS | SUNREF India - Outreach Programme on Green Housing](#)
3. [BEE | Bureau of Energy Efficiency \(BEE\)](#)

Quick facts

Premium pricing

- It is a strategy that involves tactically pricing your company's product higher than your immediate competition.

Bureau of Energy Efficiency (BEE)

- The Government of India set up Bureau of Energy Efficiency (BEE) in 2002 under the provisions of the Energy Conservation Act, 2001.
- Primary objective -Reducing energy intensity of the Indian economy

