

RECONNECT

The GRIHA Summit'16

17th February 2016

IHC, New Delhi

Green Rating for Integrated Habitat Assessment

Tool to facilitate design, construction, operation of a green building, and in turnmeasure “greenness” of a building in India



What gets measured gets managed

Key Highlights of GRIHA

Timeline for GRIHA ratings

TERI- GRIHA



2005

GRIHA Council established



2009

Adoption by:

Cities: Pune, Pimpri Chinchwad, Noida, Greater Noida

States: Delhi, Punjab, Goa, Sikkim

Organizations: CPWD, NBCC

2016

2007



MNRE support to GRIHA

2007

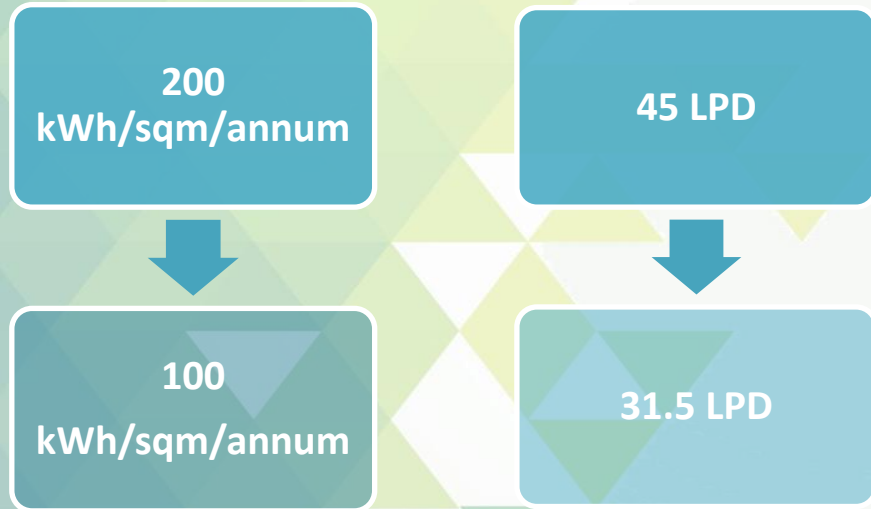


GRIHA rating launched

About **700** projects **registered** - almost **280 million sq.ft.** built up area

Over **30** projects **rated**
100 Eols under process

Impact



- Passive architectural design
- Daylight integration
- Shaded windows
- Roof insulation
- RE integration
- Solar water heaters
- Low flow fixtures

Typical office building- 8 hour use

- 30% - 50% reduction in energy consumption compared to GRIHA benchmarks
- 40 - 65 % reduction in building water consumption compared to GRIHA base case
- At no/negligible incremental cost

Current Impact of GRIHA rated projects (30)

Impact of the GRIHA programme

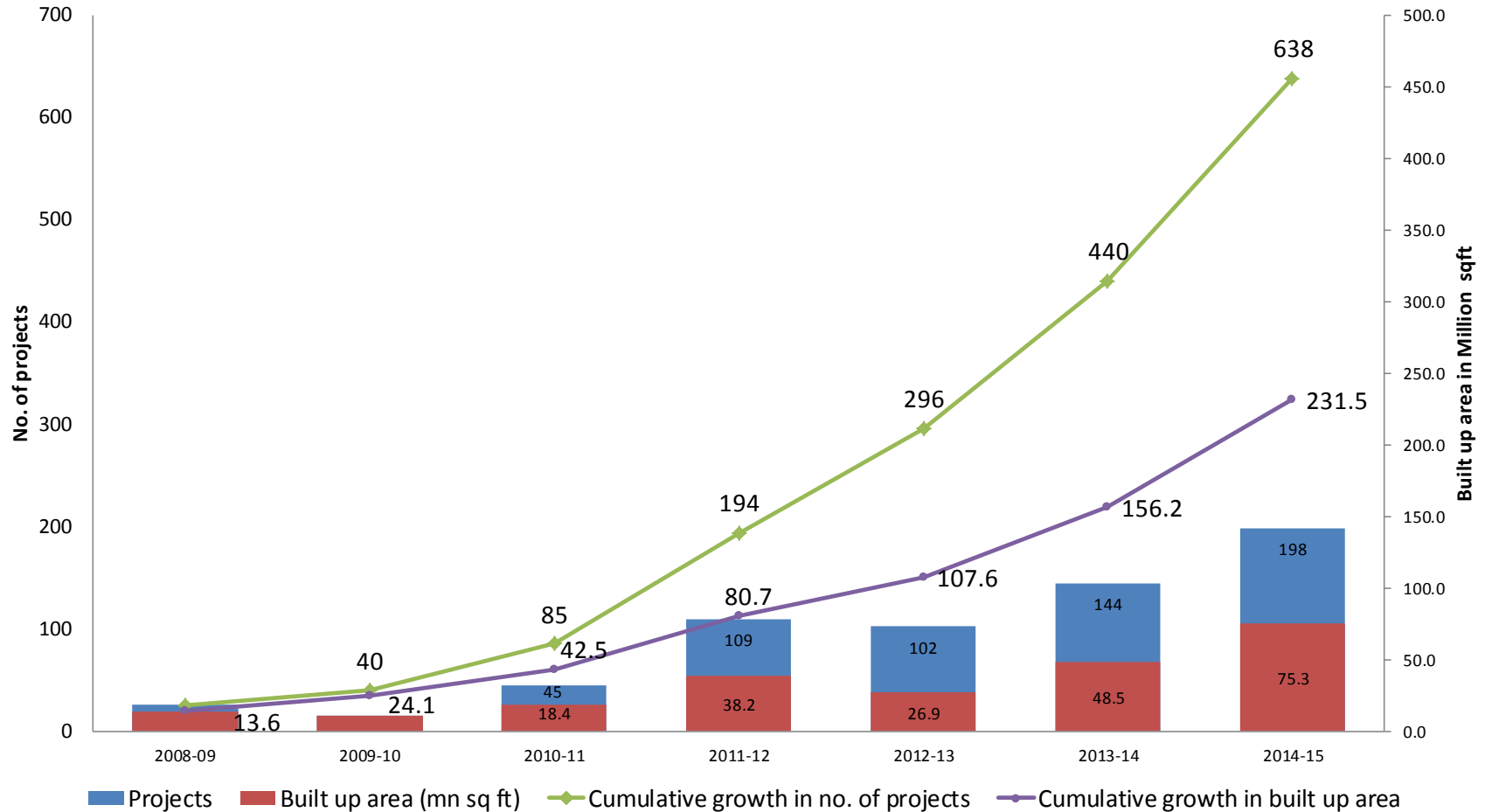
- Resource use optimization
- Social transformation
- Market transformation
- Green jobs
- Synergies across policies and programmes to implement objectives
- Enhancing capacities of stakeholders

Energy Savings = 74,000 MWh/annum

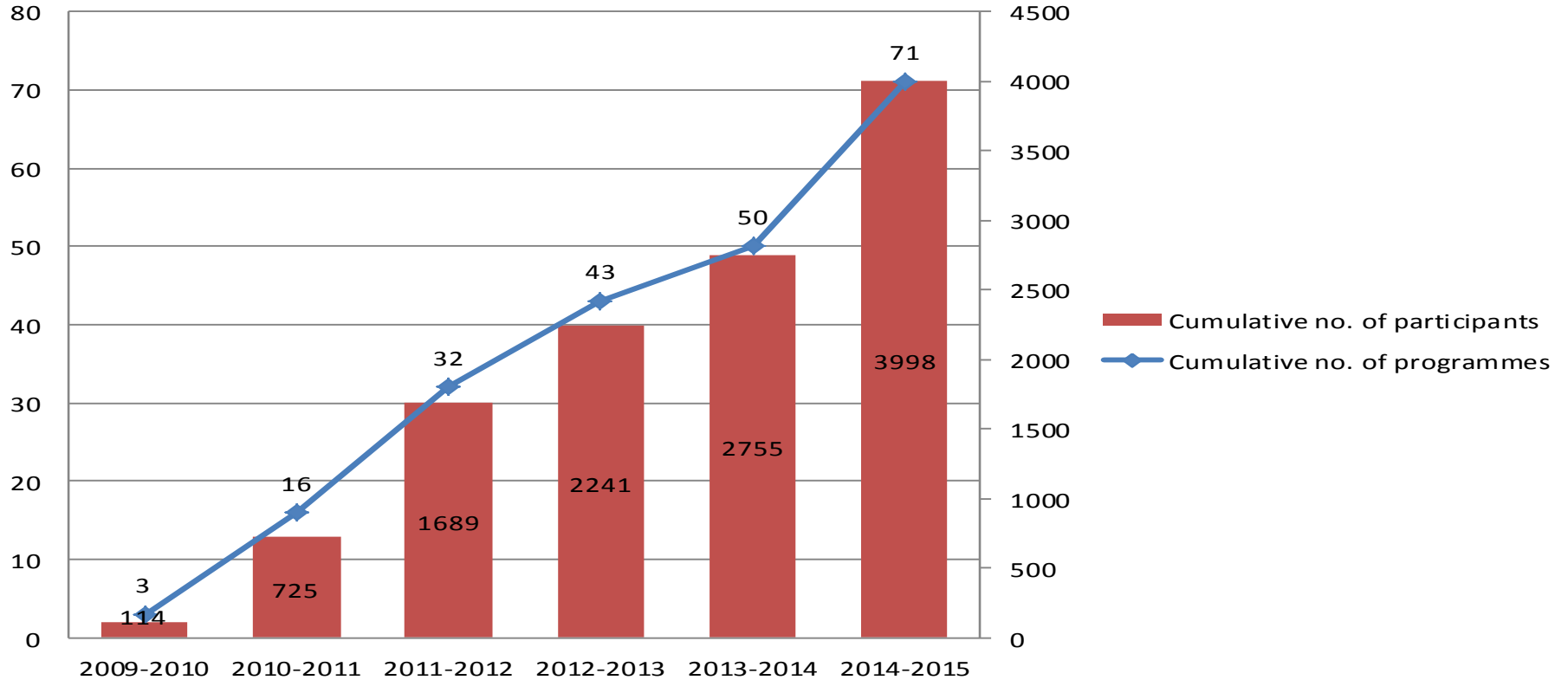
Renewable Energy installed = 14.5
MWp

CO₂ emissions offset = 78,516 tCO₂
/annum

Growth trends of GRIHA rating system



Trends in training programme



Evaluators and trainers

TOTAL Evaluators & Trainers



Total number of Evaluators - 560

Total number of trainers - 420

Engagement with Evaluators & Trainers



Engagement with Evaluators – 123

Total number of projects rated - 45

Associate Members

M E M B E R S



GRIHA Product Catalog -



GRIHA Adoption till 2015

GRIHA has been adopted for implementation of sustainability in the built environment by the following organizations, cities and States:

Cities	States	Organizations
Pune	Delhi	CPWD
Pimpri Chinchwad	Punjab	NBCC
Noida	Goa	OTDC
Greater Noida	Sikkim	Some PSUs (GAIL, BPCL)
Delhi	Rajasthan	
Chandigarh	Assam	
	Kerala	
	West Bengal	

GRIHA Projects' Update & Linked Incentives

GRIHA REGISTERED PROJECTS=700
GRIHA FOOTPRINT=28MN/M² (APP)



- OTHERS**
1. Fast track Environmental Clearance by Ministry of Environment, Forest and Climate Change (MoEF&CC) for GRIHA pre-certified projects.
 2. Financial assistance of INR 5 lakh by Ministry of New and Renewable Energy (MNRE) for each of the proposed 100 Small Townships/Campus.
 3. Concession on rate of interest (presently 50 Basis points) by Small Industries Development Bank of India, SIDBI.

AUDA: 5% discount on chargeable FAR payable to approving authority

- PMC & PCMC: Discount in Premium charges (payable to Municipal Corporation) — for both GRIHA & SVA GRIHA
- PMC & PCMC: Up to 10% discount on Property Tax for home-owners for GRIHA projects. Up to 15% discount on Property Tax for home-owners for SVA GRIHA projects

*The numbers indicated in the map represent registered projects for Rating with GRIHA Council.

New activities and initiatives

- **Scaling up current activities and servicing of registered projects.**
- **Strengthening relationship with Government at Centre and States**
- **Making online content more user friendly**
- **Engagement with end user to create awareness**
- **Upgrading and operationalizing GRIHA rating to version 2015**
- **Charitable activities of GRIHA Council and taking up CSR activities of other organizations**

Contribution to Ongoing Programmes

- Smart Cities
- Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
- Swachh Bharat
- 82 GW installed capacity of RE by 2022
- Sansad Adarsh Gram Yojana
- Housing for All
- Incorporates social aspects of sustainability

Pune launched 'GRIHA' as part of 'Smarter City' initiative

Challenges

Quality –

- Reviews are not of acceptable quality, revising all comments is time consuming.
- Review comments are not consistent.

Delay –

- Since there are multiple reviews the clients delay in providing review responses, often times they do not furnish any additional information.
- There is delay in receiving NDA from the evaluators.

Proposed changes

Improving Facilitation - Change of name from Trainers to 'Certified Professionals'

Change in steps process flow of GRIHA

Check the possibility of online NDA as soon as the evaluator logs in to his/her review account instead of paper based signatures.

Create Discussion Forums

The background features a complex geometric pattern of overlapping triangles in various shades of green and yellow. A faint, light-colored globe is centered behind the text, showing latitude and longitude lines. The overall aesthetic is modern and clean.

Thank You