

DESIGNING FOR SUSTAINABILITY

GRIHA – Can it be a GAME CHANGER?

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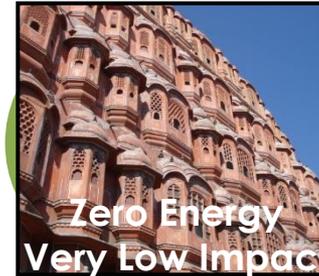
'There are few professions more harmful than the industrial design, but only a few...

by creating whole new species of permanent garbage to clutter up the landscape, and by choosing materials and processes that pollute the air we breathe, designers have become a dangerous breed....'

- Victor Papanek (1985)



**Zero Energy
Very Low Impact**
1000 yrs ago –
Temple complexes



**Zero Energy
Very Low Impact**

**500 yrs ago
– Palaces
and Forts/
Vernacular**

Sustainable design has not been a part of a design brief for at least the last 15 years in India



**Low Energy
Low Impact**

**100 yrs ago
– Colonial**



**Medium Energy
Medium Impact**

**40 yrs ago
- Contemporary
Vernacular**



**Past 15Yrs
– Modern**

**High Energy
High Impact**

Recent Years

Government Intervention

- Regulations
- Incentives

Increase in awareness

International Pressure

Resource Crunch and Inflation

- Power cuts
- Diesel scarcity
- Water scarcity
- Increasing energy cost
- Increasing cost of water
- Increasing in cost of materials

Present

Sustainability is finding its way back into the design brief

GRIHA

LEED

Present

GRIHA is poised to be a **Game Changer** in the Indian Green Building Movement

To be a real GAME CHANGER

- It has to be applied by principle, with the spirit intended
- NOT just by the BOOK

This leads to..

- Lower levels of Performance
- Higher cost
- Lower comfort
- Rating just becomes a plaque on the wall

- Loss of faith
- Elitist
- Expensive
- Back lash against the whole concept of green design

Very similar to what happened with Solar hot water systems

Examples - Energy

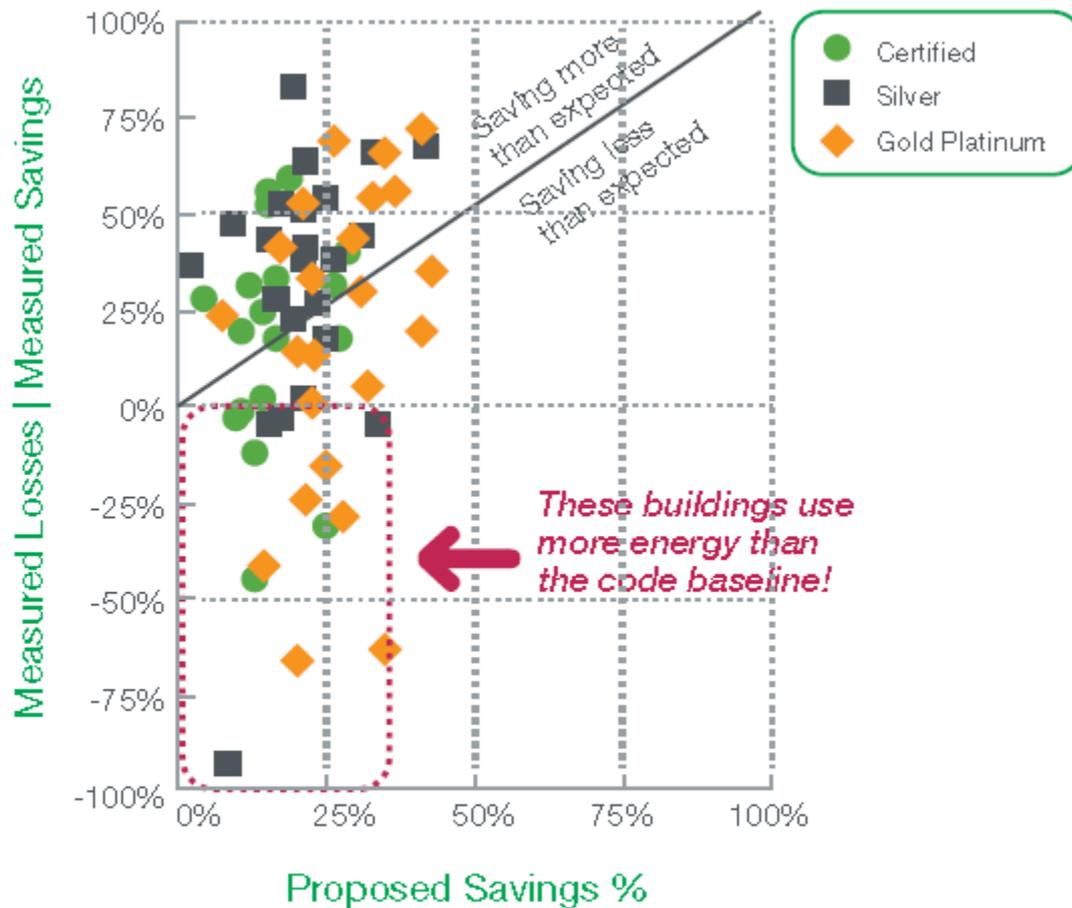


Figure 2. Source: New Buildings Institute report, *Energy Performance of LEED® for New Construction Buildings*, March 4, 2008

Challenge for Designers

- Understand the breadth of the agenda
- It is more than using 'energy efficient' products
- It is more than using 'recycling' and using 'recycled materials'

It is about being

- Responsible
- Contextual
- Holistic
- Restorative
- Efficient
- Creative

Understanding the principle behind the rule

Keys to creativity

Do not design for achieving a rating

Design for sustainability

Use GRIHA as a tool that **inspires** you and **empowers** you

Meeting the requirements of the client
and
those of an increasingly fragile planet

'In this age of mass production when everything must be planned and designed, design has become the most powerful tool with which man shapes his tools and environments (and, by extension, society and himself).

This demands high social and moral responsibility from the designer'

- Victor Papanek (1985)