## **Green Building Rating Tools in India**

5 May 2010



## CII – Sohrabji Godrej Green Business Centre, Hyderabad

A unique Public — Private Partnership (CII, Govt of Andhra Pradesh, USAID and Pirojsha Godrej Foundation)



Centre of "Excellence" for Energy, Environment, Green Buildings, Renewable energy, Water & Climate change activities in India



## **IGBC Rating systems**

- Voluntary, Consensus-based,
  Market driven
- ❖Based on professional reference standards like NBC, ASHRAE, ECBC, etc.,
  - > Did not reinvent the wheel



# **IGBC Rating systems**

- LEED India rating system
  - **≻Indigenized**
  - > Refers local standards / norms
- National Building Codes (NBC) guidelines for :
  - > Erosion & sedimentation control
  - > Rain water harvesting
  - >Safety for workmen during construction, etc.,
- ❖ Energy Conservation Building Code (ECBC) 2007
- **❖** MoEF guidelines
- Wild Life Institute of India, Dehradun
  - > Endangered species
- Environmental Information System (ENVIS)
  - > Wetlands preservation
- Wherever local codes / standards available Global standards / codes considered



#### **Green Building Rating System – Focus areas**

IGBC, a whole-building approach to sustainability by recognizing performance in five key areas



**Sustainable Sites** 



**Water efficiency** 



**Energy & Atmosphere** 



**Material & Resources** 



**Indoor Environmental Quality** 







# **Rediscovery of the Indian ethos**

### **❖** 5 elements of Nature (Panchabhutas)

Prithvi (Earth)	Sustainable Sites	
Jal (Water)	Water Efficiency	
Agni (Fire)	Energy & Atmosphere	
Vayu (Air)	Indoor Environmental Quality	
Akash (Sky)	Daylight, Night Sky Pollution	











# Rating Programmes to Suit Different Building Types

One single rating cannot be applied to suit all building types

- Programmes launched
  - **≻IGBC Green Homes**
  - > IGBC Green Factory Buildings
  - >LEED India NC
  - >LEED India CS
- Other Programmes on the anvil
  - **≻IGBC Green SEZs \***
  - **≻IGBC Green Schools\***
  - **►IGBC Existing Buildings \***
  - **≻IGBC Green Cities \***
  - **≻IGBC Landscape \*** 
    - \* Rating under development

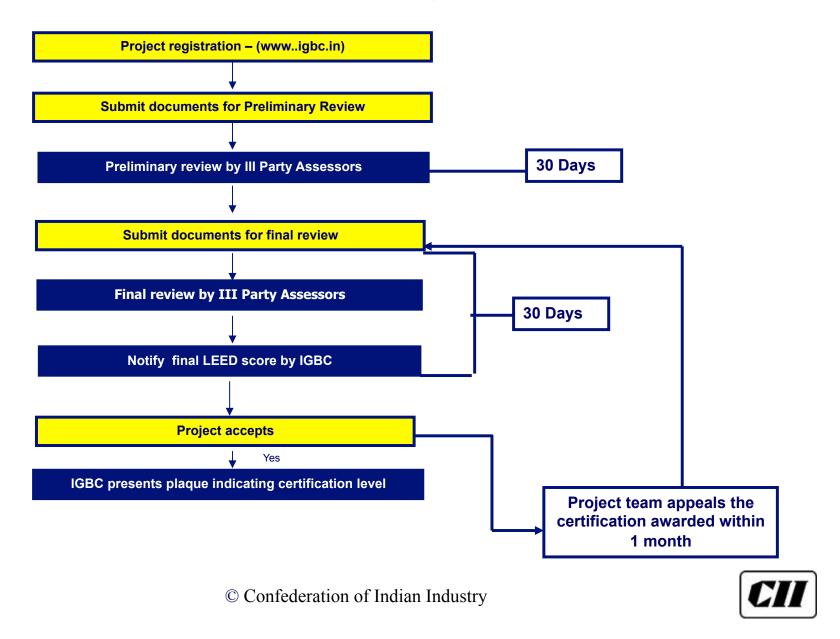


## **Project registration**

- Registration using form in IGBC website
  - >www.igbc.in
- Resources for Registered projects
  - **☐** Free Reference Guide, LEED templates
  - □ 2 Free CIRs (Credit Interpretation Ruling)
- When to register
  - **≻Can register at any stage** 
    - □ Registration at early phase max. potential for achieving certification



### **IGBC Certification Process**



#### **IGBC Accredited Professional Exam**

#### Objective

- Recognise holistic understanding of green building concepts
- Meet the demand for qualified Indian Green building professionals

#### On-line Examination

- > Launched during September 2009
- > 153 professionals





- Overview of the tool development process
- Internal IGBC process in selecting LEED for India
- Process for adopting LEED thorough the USGBC



### **IGBC Green Homes Rating System**

S No.	Credits	Points for individual homes	Points for multi- dwelling units
	Mandatory requirement	9	9
1	Site Efficiency	8	9
2	Water Efficiency	20	20
3	<b>Energy Efficiency</b>	22	21
4	Materials	13	12
5	Indoor Air Quality	13	9
6	Innovation	4	4
	Total	80	75

Complying with prerequisites is mandatory for all IGBC Green Homes projects



