

# What are green buildings?

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In news

Inaugurating the 12th GRIHA (Green Rating for Integrated Habitat Assessment) Summit virtually, organized by the GRIHA Council, the Vice President appealed to the Finance Commissions and local bodies to encourage green buildings through various measures including tax incentives.

What is green building?

- In simple terms, a green building is a building that, in its design, construction or operation, reduces or eliminates negative impacts, and can create positive impacts, on our climate and natural environment.
- Any building can be a green building, whether it's a home, an office, a school, a hospital, a community centre, or any other type of structure, provided it includes features listed below

Environmental impact of buildings

As per the World Green Building Council data, buildings and construction account for 39 per cent of energy-related CO<sub>2</sub> emissions in the world and called for accelerating the process of total de-carbonization of the built environment.

Features of green building

Following are the features which can make a building green:

- Efficient use of energy, water and other resources
- Use of renewable energy, such as solar energy
- Pollution and waste reduction measures, and the enabling of re-use and recycling
- Good indoor environmental air quality
- Use of materials that are non-toxic, ethical and

sustainable

- Consideration of the environment in design, construction and operation
- Consideration of the quality of life of occupants in design, construction and operation
- A design that enables adaptation to a changing environment

### Indian green building codes

In India, the Green Building Code is a medley of codes and standards contained in the State by-laws, the National Building Code, the Energy Conservation Building Code (ECBC) and in the norms set by the ratings programmes, such as Leadership in Energy and Environmental Design-India (LEED-India), the standards and guidelines put down for the Residential Sector by the Indian Green Building Council (IGBC), TERI-GRIHA and other such certifications.

### Indian Green Building Council

The Indian Green Building Council (IGBC), part of the Confederation of Indian Industry (CII) was formed in the year 2001. The vision of the council is, "To enable a sustainable built environment for all and facilitate India to be one of the global leaders in the sustainable built environment by 2025".

The council offers a wide array of services which include developing new green building rating programmes, certification services and green building training programmes. The council also organises Green Building Congress, its annual flagship event on green buildings.

### About GRIHA (Green Rating for Integrated Habitat Assessment)

- The Energy and Resources Institute (TERI) has developed GRIHA (Green Rating for Integrated Habitat Assessment), which was adopted as the national rating system for

green buildings by the Government of India in 2007.

- This tool has been adopted by the Ministry of New and Renewable Energy. This tool, by its qualitative and quantitative assessment criteria, is able to 'rate' a building on the degree of its 'greenness'.
- GRIHA is a rating tool that helps people assesses the performance of their building against certain nationally acceptable benchmarks.
- It evaluates the environmental performance of a building holistically over its entire life cycle, thereby providing a definitive standard for what constitutes a 'green building'.
- The rating system, based on accepted energy and environmental principles, will seek to strike a balance between the established practices and emerging concepts, both national and international.