



While paving the way for sustainable development, green buildings not only reduce the operational expenses, but also improve the health and productivity of the residents

# THINK SUSTAINABLE

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The quantum of built-up area envisaged to be urbanised is simply humongous. Therefore, in order to extricate itself from the present scenario, India must follow the principles of sustainability. After all, the construction and operation of buildings have an enormous impact on the local environment, and also on greenhouse gas emissions.

"India has the highest growth rate of 'building energy consumption' in the world, so this concern is particularly pressing for corporates as well as for the government. To really tackle the challenge of making sustainable buildings, we need to rethink the way a building is designed and operated. Here, green buildings can surely offer a way to relieve the mounting pressure," says Andrew Hines, co-founder, CleanMax Solar, a rooftop solar power development company.

## SEE GREEN, SEE LIFE:

According to the Dodge Data & Analytics World Green Building Trends 2018 SmartMarket Report, India is expected to see strong growth in the green building sector with nearly 55 per cent of all projects likely

to pursue green by 2021.

So, what are the top triggers driving the green building activity? Firstly, the clients today (particularly the commercial tenants) are demanding green certified buildings, followed by increased awareness among home-buyers about the advantages green buildings have on the health of the occupants, and lastly, the governmental push and environmental regulations.

## THE CHOICE IS YOURS...

A green building stands on five main pillars – water, waste, energy, human experience and carbon footprint. So, in line with the growing trend of green building development, the focus on the usage of sustainable products during the construction stage is immense.

"Double-glazed glass is being extensively used by architects in the construction of buildings. So are water-efficient fixtures and energy-efficient lighting. Components - free of toxic materials such as chlorine, lead, mercury, arsenic, chromium and cadmium - are also being frequently used by builders," says GopalaKrishnan Padmanabhan, managing director –APAC and Middle East, Green Business Certificate Institute (GBCI). Elaborating on the same line of thought, Harleen Oberoi, senior executive director, project management India, developer projects



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leader, South Asia, Colliers International, adds, "Blocks and concrete, which have a higher ratio of fly ash and blast furnace slag, are preferred by the developers. So,

when it comes to finishes, the objective is to use non-VOC emitting and anti-fungal alternatives in adhesives, paints, cladding, and carpets. With technology making big strides, light-weight precast concrete walls, fibre reinforced products as alternatives to conventional pipes, stray bales, compressed earth blocks, and other innovative building blocks for structural construct are also popular options."

## THE WAY AHEAD:

According to the report (as mentioned earlier), 63 per cent of Indian respondents said improved occupant health is the most important benefit of a green building. Additionally, respondents rated environmental reasons such as reducing energy and water consumption, and protecting resources. Therefore, experts believe that India is poised for an upward trajectory.

"Both developers and occupants have come to realise the benefits associated with green buildings. Sustainable products, which pass the acid test of having a positive impact on the environment, are being used in the construction of buildings. Not to forget, the demand by buyers for such buildings is high too," concludes Padmanabhan.

According to Harleen Oberoi, senior executive director, project management India, developer projects leader, South Asia Colliers International, the benefits associated with green buildings include:

- Reduces energy consumption, thus indirectly reducing the pressure on natural resources;
- Green buildings efficiently use and re-use water, thus reducing water pollution and thereby the load on city's treatment plants, which ultimately leads to conserving the water table;
- Ensures physical and mental well-being of end-users;
- In short, a green building uses less energy, water and natural resources, creates less waste and is healthier for the people living inside compared to a standard building.