



## Green buildings are the future of sheltering

Founded with an aim to develop high quality constructions, Salarpuria Sattva Group has today become a leader in Property Development, Management and Consulting organisation. With the concept of Green Building gaining traction in India, **BIJAY AGARWAL, MANAGING DIRECTOR, SALARPURIA SATTVA** in an exclusive interaction with **CONSTRUCTION OPPORTUNITIES** shares about the growing trends of green building, the company's projects in the green building sector and the future outlook of the industry.

**Green Building industry is booming in India and is expected to grow over 20 per cent. How do you look at this growing trend? Where does green buildings**

**footprint in India stand right now in comparison with the world?**

The concept of green buildings is fast gaining global acceptance, especially in urban areas where sustainable development is an integral part of living. People have begun facing the impact of shortage of water, energy and depletion of natural resources. Most of the regulatory bodies across the country have introduced necessary laws to conserve natural resources and encourage green norms. In fact, green building concept in India are now being certified by Indian Green Building Council (an independent body) and also GRIHA (a body of central govt. for certifying the green buildings). Some of the following features are incorporated into the design of green buildings such as optimizing energy performance of the building by reducing use of conventional energy, design to use maximum daylight implementing to the ECBC norms for energy, usage of low energy materials for interiors, rain

water harvesting, use recycling waters, soil conservation in both pre and post construction areas and also use of organic waste converter and efficient solid waste management.

According to Anarock property consultants, India's green building market is estimated to double by 2022 at 10 billion sq ft., valued around \$35-50 billion. By the end of last year, there were 4,300 projects with 4.7 billion sq ft. of built-up area, equaling to 5 per cent of the total buildings in the country. This shows that we have just started our journey into the world of green buildings but we still have a long way to go. These figures also mean that the significance for green buildings is paramount especially with homebuyers now more aware of the advantages of green technology. The government is also encouraging developers to adopt green technology in the residential projects for sustainable development. This is the need of the hour and a challenge to be met not only in India but across the globe.





**Share details about some of your green building projects. Best Practices implemented and top quality construction material used in your projects. What is your criteria/selection process for identifying green building construction materials for your projects?**

Most of our leading projects have been platinum rated by IGBC. Our landmark project, Knowledge City has been certified as 'IGBC's LEED India New Construction Platinum rating' and residential project Navaratna Residency has been rated as pre-certified 'four star' by GRIHA. We have achieved a pre-certification under the 'LEED India for Core & Shell Gold Rating' for Sattva Galleria in Bengaluru and precertification under the 'IGBC Green New Buildings – Pre-certified Platinum Rating' for Knowledge Court, Bangalore. Some of the best practices we have implemented are rainwater-harvesting, collection of rooftop rainwater and surface run-off water to be stored in collection tank for use. We ensure that zero discharge of rainwater to the storm water drain. 100 percent-used water are being recycled and used for flushing and gardening purposes. We design the landscape by selecting trees and shrubs that are drought tolerant and effective irrigation systems are used for water supply system for landscaping purposes. We ensure efficient water fixtures like water closet, lavatory faucet/taps, health faucet/jet spray, showers. We use recycled water for air conditioning system by using water coolers in the commercial building. Electrical fixtures complying with ECBC norms are also used in our projects to optimize the consumption of conventional energy.

Efficient power distribution systems are in place to reduce any transmission loss in the process of power distribution. Renewal energy based hot water systems are being used for the residential projects which reduces dependence of conventional energy. Best practices of segregating of waste at the source level are being implemented for an efficient waste management policy. We ensure that the recyclable waste is being used and put to the organic waste converter, which reproduces manure that is used for gardening purposes. The balance waste that cannot be used is handed over to the authorized agent for further use. E-waste in the commercial buildings are kept at an identified location that is handed over to the authorized agents recognized by local pollution boards for recycling purposes. We select low energy VOC materials for interiors and use materials such as cement blocks, wood, tiles and glass that have recycled content.

**Can you detail us on the green innovations featured in your residential/ commercial projects? Share details of awards/ accolades won by your company for Green projects.**

As already mentioned, we make use of design and products for green building certification purposes for our residential project Celesta in Bangalore and Knowledge City in Hyderabad. We have obtained IGBC's LEED India New Construction Platinum by IGBC for our project Salarpuria Sattva Knowledge City- Novartis, Hyderabad.

**Important landmarks projects you have completed – name, size, features,**

**geographical areas of operation, special features, people involved in design and architecture, investments – ongoing and future projects?**

Presently our landmark project is Salarpuria Sattva Knowledge City, located in Hi-Tech City, Hyderabad, consisting of 7 million sq ft of leasable space. Knowledge City has been designed to have the features to be rated as a green building 'platinum' rated. We have completed 4.5 million sqft that is being leased out. The same has been certified by IGBC.

Currently another 7 million sq ft of commercial buildings that cater to IT/ITes are in progress in Hyderabad surrounding Hi-Tech City and Gachibowli area. All these buildings have been designed by architects of international reputation; RSP. These projects are designed to meet green building norms provide facilities of international standards.

**While awareness is growing now on green construction, when was it, according to you, Indian entities started showing interest in the concept of green buildings, energy saving and how has it evolved?**

Like any industry that takes time to adapt to change, the Indian construction sector / real estate sector is gradually aligning itself with the changing trends. This is a positive development for the sector as well as the economy. Green buildings bring in their own advantage from a long-term perspective by reducing reliance on many state utilities, such as the power grid, water supply and contributing to reduction in carbon footprint and overall energy savings. We are still a developing economy and we are required to follow principles in the interest of the future generation which requires sustainable development, which is nothing but optimization of natural resources. Climate change is also a global challenge. All of us should follow principles in every sphere to meet the impact of climate changes on our development.

Green buildings are seen as a futuristic solution for meeting the sheltering demands of billions of people living in this country. Indian civilization has always acknowledged the power of nature and used it to the benefit of the masses. There will be better quality of life and the health of buildings will also experience appreciable improvement. With such increase in



awareness and consequently, in demand of the sustainable buildings, calling greener buildings in India the future face of Indian Real Estate. Technology and sustainability will be key drivers of value for every real estate players. As the cost of enhancing buildings environmental performance falls in line with lower cost of technological innovations in the coming year, buyers would be willing to pay a premium for this enhancement.

#### **Your contribution to India's goal of 'housing for all by 2022,' especially in the Affordable Housing segment.**

In line with the Government of India's commitment towards 'Housing for all by 2022', especially in the Affordable housing segment, we at Salarpuria Sattva, have embedded this philosophy into our planning and are actively participating to develop affordable housing segment. We are shortly launching new residential projects under the Pradhan Mantri Awas Yojana scheme.

#### **Retrofitting is another area, which is being explored to maintain old and heritage structures. what kind of a challenge would that be?**

Retrofitting of old and heritage structures is an exercise that carries a cultural objective of promoting and celebrating our aesthetic achievements as a society. By renovating these structures, investments in existing infrastructure can be wisely maximised. However, the task of bringing older buildings in line with modern functionality is no mean feat; it brings along with it a host of challenges such as the need for

highly skilled labourers as well as use of experimental technology and creative solutions tailored for each structure. Retrofitting is also important in terms of refurbishing existing structures by making them 'green' and enabling these structure to be more energy efficient.

#### **What kind of cost and energy savings we are looking at by 2020 in India as the country's green buildings footprint triples by then?**

We have done a comprehensive study to understand what are the best technologies to use that will boost green footprint. We are developing LEED buildings that has delivered a total value of Annual savings for Energy - 15061 MWh (Mega Watt-hr.) units, Water - 446 ML (Mega liters), Waste - 19480 MT (Mega Tone) from our new constructions. These LEED-certified spaces use less energy and water resources, reduce carbon emissions and create a healthier environment for the community. Even for our existing buildings, we are able to save close 10-12 per cent in operational savings. By 2020 we hope to achieve 12-18% savings for our new buildings and a 10-12 per cent for our older ones.

#### **It is exactly a year since the introduction of RERA. Detail us on the impact of RERA on the industry.**

RERA has ushered in an era of transparency and accountability in Real Estate. It has worked towards dispelling one of the major challenges faced by the industry; the trust deficit among homebuyers. This has been done by ensuring transparency and accountability in all real estate deals giving

more bargaining power to the end user. The single window clearance system introduced by the Act has expedited the process of construction leading to time bound completion of projects. Through standardization of construction techniques and materials, RERA has promoted the idea of sustainable and affordable housing. Perhaps the most significant impact RERA has had is in phasing out speculators from the Real Estate market leading the industry towards sustainable growth. Builders who are transparent, deliver as per their commitments and focus on the time and quality of execution of their projects would welcome the change brought in by RERA as this begets long-term stability in the industry.

#### **How do you expect the market to shape up for the real estate industry through 2018 onwards?**

The growing trends of migration and urbanisation has led to increasing demand for residential, commercial and retail spaces, especially so in metro cities. Rapid growth in service sectors such as IT/ITes, BFSI and Telecom has led to a demand for commercial spaces in cities like Hyderabad, Bangalore, Chennai and Pune. Overall, the real estate market in the country is booming, this has been driven by policies adopted by the government as well as the growing economy. We expect these trends to continue and the market to grow rapidly keeping in mind healthy economic growth coupled with rising standards of living and purchasing power of individuals.

#### **Future outlook for the industry and from a company perspective**

The overall outlook for the real estate industry in India looks promising. The industry is set to grow to mammoth proportions by 2020. There is robust demand for residential, commercial and retail spaces in the country due to increasing migration and urbanisation in cities. The development of 100 smart cities will provide an impetus to developers such as ourselves to diversify in terms of our offerings as well as the locations we cover. The RERA and associated legislations passed will contribute to promoting and stabilising the real estate sector in India. Relaxation in FDI norms is also set to give the sector a boost. From a company perspective. ◆