

Long Green Strides

As the concept of 'green' permeates our lives, property developers to product manufacturers are scrambling to comply with sustainability norms

By MITALEE KURDEKAR

We are well passed the time when one was required to explain the idea of 'green'. What was once a buzzword has now evolved to become a necessity of our time. The realisation that we can no longer ignore the dire consequences of not conserving and protecting earth's natural resources has been a rude awakening for many, but also a push in the right direction for all. And luckily enough, the real estate world has been quick to take heed. Whether it is developers or product manufacturers, both parties have risen to the challenge. As a result, green buildings are fast becoming a common occurrence.

"Green Building is a type of structure which uses less energy and water, creates less wastage and greenhouse gases and makes the environment healthy for both residents and workers. It is not just about constructing a more efficient structure but focusing on optimal utilisation of power, water and raw materials. It's more a need of the hour, than a choice and we have to be conscious about it," says Bharat Dhuppar, CEO, Sheth Creators.

Developed to LEED

With green buildings gaining importance, a LEED, IGBC or GRIHA certification is becoming a coveted endorsement for developers and property owners. Dhuppar's company has acquired a LEED Gold certification for all its projects by using techniques like high insulated glasses, low toxic raw materials and detox paints, STP, rain water harvesting, introducing recycled water on site, etc.

As one of the five founding members of the Sustainable Housing Leadership Consortium (SHLC), Godrej Properties is collaborating with other real estate leaders to promote sustainability in their housing projects and facilitating access to green technologies for future projects. Currently, 91% of their development portfolio is green certified and by 2020, they are aiming for the 100% mark. Anubhav Gupta, chief design officer and head, CSR & sustainability, Godrej Properties, says, "Through our processes, we also mandate basic green compliance and practices from contractors that we work with during the design and construction of our projects. We have incorporated low flow fixtures to reduce water consumption, high solar reflective index paints to reflect heat from the roof and double glazed window units to prevent heat from entering the interiors of the building into the design of our product offerings. We provide a 'sustainability manual' as part of our handover process to guide our residential customers in efficiently using the building (optimisation of resource consumption) over its lifecycle to realise key benefits and encourage the use of high-efficiency (BEE 5-star) appliances."

While admitting that there is an increased awareness when it comes to sustainable living in India, Rohit Gera, MD, Gera Developments, also points out: "The payback for a lot of the green initiatives is beyond the horizon of what most people are willing to accept from a payback perspective." Despite this, Gera's latest project in Goa, a commercial building titled Gera's Imperium Green has been designed to reduce the heat in the building in order to bring down the cost of air conditioning. During construction, the use of materials factored in recycling as well as minimal pollution. The building has a sewage treatment plant and 75% of the building water needs are met through recycled water generated from the building itself.

Green Innovation

Product vendors also realise that there is an ever-increasing need for sustainable products and are consciously developing new technologies to keep up with sustainability requirements. Business is booming for manufacturers that comply with these norms. They are scrambling to develop products that are not just more environment-friendly, but look and function better across both residential and commercial spaces.

"We maintain our intention to lead by example by improving the environmental/social performance of our products and processes, which we measure through our development of eco-premium solutions. They are a fundamental driver of our 'Planet Possible' agenda for creating more value from fewer resources and minimising the environmental footprint of the products we sell and the processes we use to manufacture them," states Rajiv Rajgopal, director, India and South Asia cluster, decorative paints, AkzoNobel.

With a focus on innovation, the paints leader has introduced new products with clear customer benefits in terms of energy savings and well-being. The Dulux WeatherShield exterior paint range uses revolutionary technology that reduces the surface temperature of walls by up to five degrees Celsius. The Solar Reflective Index (SRI) of this range of paint is double compared to regular exterior paints, thus reducing the heat build-up inside houses. In addition, the company want to reduce their carbon footprint (including VOCs), and is identifying opportunities to promote waterborne paints where possible, offering products with additional sustainability benefits.

Vendors are continually innovating on their product portfolio to improve their sustainability scores. Anchor Electricals believes in offering innovation in three spaces when it comes to its vast product line-up that involves over 3,000 products across six verticals in the Energy Generation & Conservation Business. As part of the Panasonic Group, it has been looking at scaling up its R&D activities as well.

"Some of the new technologies at the company involve a product line-up dealing with indoor air quality as well as lighting, with Panasonic IAQ equipment such as the Ventilation Fan and LED lighting product. We were the first company in India to introduce the concept of Screwless Termination & RoHS in Household Electrical Switches and these are manufactured in India at our own facilities. We intend to introduce some of Panasonic's trendsetting products in India, expanding our basket of solutions for assorted Indian premises," says Rajesh More, project sales head, Anchor Electricals.

Blue Star too has innovated with a clear focus on energy efficiency. VS Ashok, vice president, air conditioning & refrigeration service group, Blue Star India, professes, "Our focus is on energy since energy consumption is often the single most important factor in determining a product's life cycle impact on the environment. We will continue to invest in R&D for more energy efficient products and solutions."

The HVAC giant has introduced new chilled water systems like VFD chiller, falling film and flooded chillers to meet the cooling as well as efficiency needs of the Indian markets. Their energy efficient products like VRF IV Plus, VRF P (Pre-Pipe), Ducted Split and Ducted Packaged units use Inverter Technology and are using eco-friendly refrigerant like R410a. In addition, their split air conditioners with R32 refrigerant and inverter split units are in compliance with LEED/GRIHA and ECBC norms. Several customers are opting for inverter split air conditioners. Currently, the market share for inverter units is 10%; however it is expected to increase to 40% in the next three years.

Schneider Electric is helping customers reduce their environmental impact through its range of Green Premium products. These products conform to industry leading environmental regulations, such as the Product Environmental Profile (PEP), End-of-Life Instructions (EoLI), and Registration Evaluation Authorisation and Restriction of Chemicals (REACH) and Restriction of Hazardous Substances (RoHS) compliance.

The Energy Efficient Glass range from Asahi India Glass, under the brand name Ecosense, provides the benefit of reducing the heat gain in buildings due to its energy saving properties without compromising on the natural light coming inside the building or the aesthetics that add value to the façade. On the other hand, in winter, they ensure solar gain. They also have AIS Opal, the range of hard-coat reflective glass, and AIS SunShield, a high-performance product that combines durability with advanced solar control technology, effectively reducing heat from entering the building.

Holistic Approach

While most companies and developers are investing in sustainable measures, the change is often not all-encompassing, hence has little impact. There is a strong need to look at a more holistic approach to doing things, in order to ensure that results are far-reaching. Some industry players have realised this, and are taking steps in the right direction.

Aalok Deshmukh, CMVP, LEED AP, and general manager, energy efficiency, Schneider Electric, boasts, "Schneider Electric is the only technology and services provider that delivers comprehensive integrated building solutions through the EcoStruxure system architecture, which guarantees integration of energy management, power management, building and security management, IT room management, renewable energies, and electric vehicle charging. It helps one get a holistic view of all building technical systems."

Another way of looking at the problem is to look within. Grundfos complies with environmental norms through the recycling of pump components, usage of non-volatile paints, usage of energy efficient motors, etc., and around 90% of Grundfos pumps can be recycled as well. But in addition to this, the Grundfos headquarters in Chennai is India's first gold-rated green building under the LEED certification by the US Green Building Council (USGBC). It was later elevated to LEED EB Platinum certification by the Indian Green Building Certification Institute (GBCI) in 2013. This elevation was based on some of the facility's key sustainability features such as high energy efficiency levels with 100% recycling of the sewage, rain water harvesting and solar collectors and photovoltaics.

The scope of sustainability is being altered on an everyday basis. As emerging economies such as India continue to develop and urbanise at breakneck speed, there is a huge requirement for tools that aid a steady and sustainable economic growth. "As member of Panasonic group, we will be also keep an eye on the increasing consumer aspirations and offer them products that are eco-aware. We are gearing up our manufacturing as well as R&D team to address the new challenges that may stem up in the upcoming years," says More.

The increase in green engagement in India has led to a strong market for green products and services to meet aspiring demands. Both commercial and residential buildings expect huge growth in green engagement. According to the World Green Building Trends 2016, the commercial sector in India has contributed more and will continue to contribute more than the residential buildings in the coming three years.

Vikram Khanna, COO, consumer class, COO, Architectural Institutional Business, CMO, CIO, Asahi India Glass, says, "AIS expects the opening of many avenues and innovations with respect to energy efficiency in the next five years. AIS further plans to expand its product portfolio with solar control double silver layered glasses under the brand name of Excel in the coming year."

While sustainable/green buildings and green products are witnessing an unprecedented growth, it is heartening to see that even the government is focussing on the use of cleaner, more energy efficient technologies with its highly ambitious smart cities initiative. Even as these trends are currently visible in Tier I cities, increased awareness is leading to their inclusion in plans across Tier II and III cities too. Finally, things are looking up for the environment, and in turn, people at large. It is important, of course, to continue to take more purposeful strides towards sustainable development.