



HOW GREEN IS MY VALLEY?

There are too many compliances and codes to follow to create a complete green building.

By Molly R.

Buildings account for nearly 40% of global carbon emissions, making it essential to reduce their environmental impact through a combination of smart design, sustainable procurement, efficient technologies, and strong policy support. Material choices make a substantial difference in a building's environmental footprint. Using recycled materials, locally sourced products, and alternatives to high-carbon materials like traditional concrete reduces embodied carbon.

Here are some of the steps that numerous developers are taking to create green.

RIGHT USE OF MATERIALS

Namrata Nulwala, ESG & Sustainability Head, Rustonjee Group: We prioritise materials with credible third-party green certifications such as IGBC GreenPro, FSC for wood, GREENGUARD for low-emission products. We eliminate materials with high VOC content and other toxic substances to promote better indoor air quality and ensure the well-being of future occupants. We've also initiated Life Cycle Assessments (LCAs) in select projects like Belle-Vie to deepen our understanding of embodied carbon and

resource impact. While not yet conducted across all projects, these insights are helping us shape a future-ready approach.

Sandeep Jain, director, Arkade Developers: We prioritise materials like recycled steel, sustainably sourced timber, and low-VOC paints, which help reduce environmental impact without compromising quality. Beyond the materials, we monitor our suppliers to ensure they're following responsible practices. Sustainability doesn't stop at what goes into a building — it extends to how we manage waste during construction.

PK Mishra, VP, planning & procurement, Setiva Group: Green materials are selected during the design phase. We maintain relationships with manufacturers developing innovative materials such as bio-based insulation and carbon-

sequestering concrete. These partnerships help us access emerging technologies.

Ramen Sapru, director, design & engineering, K Raheja Corp: We encourage the use of regional materials to reduce transport-related emissions. Our construction practices include low-carbon alternatives such as concrete made with fly ash and GGBS. To improve energy efficiency, our buildings are equipped with high-performance insulation.

Sainath Bhonsale, sr. GM, commercial design head, Century Real Estate: Preference given to materials sourced from manufacturers within 100 miles and materials with recycled content. Diversion of more than 75% of construction waste from landfills. Procurement policy integrated into project specifications encouraged the selection of materials that meet multiple LEED MR and EQ credit requirements.

Ashjeet Gawde, head of business development & marketing, construction business, Godrej Enterprises Group: We have deployed circular economy design principles of 'Recover, Recycle and Rebuild' for recycling concrete debris to produce prefabricated concrete products such as building blocks, pavers, culverts, ducts, and other customised precast concrete products.

REDUCING POLLUTION

Neeraj K Mishra, executive director, Ganga Realty: Reducing the environmental footprint of buildings involves a three-pronged strategy: sustainable design, efficient operations, and smart demolition. Post-construction, energy-efficient systems, solar power, rainwater harvesting, and green cover help reduce operational emissions. Over time, urban planning and building codes



Ramen Sapru

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Namrata Nulwala

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ventilation, daylighting, and thermal mass—significantly reduce the need for artificial heating and cooling. Options such as bamboo, hempcrete, and cross-laminated timber offer durability with reduced embodied carbon.

Avneesh Sood, director, Ecos Group: While green buildings may initially cost 5–6% more, they deliver up to 16.9% in operational savings within five years. Government incentives introduced in recent budgets, including tax benefits and fast-track approvals for IGBC-certified projects, are helping reduce the affordability barrier, especially for middle-income homebuyers. Our



must evolve to mandate such practices.

Rohan Khatau, director, CCI Projects: We can't mend it overnight, but each project is an opportunity to do it better. It begins with planning smarter — designing to let more natural light in, employing smart insulation, and installing systems that reduce energy consumption. Next it's minimizing waste — utilizing recyclable or reuse materials.

R. Santhoshkumar, VP, projects, DRA: Passive design strategies—such as optimizing natural



Renewable technology, STPs, renewable energy are some of the basic steps that developers always undertake.



Most commercial buildings today are B3-B5+ green.

green-certified developments like Sampoonam offer homes that are not only eco-friendly but also cost-effective to maintain.

Siddharth Vasudevan Moorthy, MD, Veecon Engineers: There is a lot of innovation and research being done in trying to solve this problem. There are already solutions available which are clean replacements for fossil fuels for running the construction equipment.

USP OF THEIR BUILDINGS

Rohan Khatau: Making things that last and use less energy is important. The initial phases of our Rivali Park project have been recognized for their sustainable design and construction, with White Spring receiving IGBC Platinum and Wintergreen Towers being awarded IGBC Gold. We work with both IGBC and EDGE to achieve similar certifications for our current development.

Abhijit Gawde: Our new building construction projects are designed and developed as per Green Building principles. Godrej 02 GBD — IT park office building, a Grade A+ commercial office building at Vikhroli recently received a net zero waste 'Platinum' rating by CII IGBC.

Namrata Nulwala: We begin by leveraging passive solar orientation to maximize natural daylight. We also preserve and enhance green spaces through biophilic design. Rainwater harvesting is implemented across most of our projects in Mumbai, supported by STPs.

Raman Sapru: We currently generate 2–4% of our energy needs through on-site renewable and are



Sanath Bhandi

working towards meeting 100% of the demand for Common Areas and HVAC systems. Smart technologies, such as LED lighting, Building management system and energy-efficient air conditioning, contribute to a 25% reduction in overall energy consumption. Our buildings support biodiversity through green roofs and bird-friendly elements.

PK. Malvi: Our buildings are designed to generate their own energy through solar panels and efficient building systems. We incorporate living systems like green walls and rooftop gardens that improve air quality while providing aesthetic and psychological benefits.

25%
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efficient ACs.



In many cases, green features are not yet fully appreciated or valued by apartment.



Anandh Sood

Compact and efficient layouts ensure usage of fewer resources.



Siddharth Vasudevan Moorthy

for occupants. Water conservation is achieved through rainwater harvesting, efficient fixtures, and water recycling systems.

Sandeep Jain: Our landscaping uses native plants that require minimal water and upkeep, further lowering environmental impact. Rather than chase flashy green certifications, we focus on pragmatic, daily decisions that add up to meaningful results. Natural light and ventilation play a big role — they're simple, but highly effective.

MORE GREEN HOMES?

Siddharth Vasudevan Moorthy: It is easier to construct and maintain a commercial green building than a residential green building. Usually commercial buildings are managed by professional service agencies whereas residential buildings are run by the society. Having said that, Vascon has built not just one of the greenest commercial buildings on planet Earth, but also platinum rated residential buildings too.

Ameesh Sood: One major reason is the



Many homeowners do not stay in one property long enough to benefit from the long-term savings.



Government bodies need to come stronger green building codes, performance-based regulations.



R. Santhoshkumar

Individual homeowners have access to fewer government subsidies or tax breaks as compared to commercial projects.

perception of higher upfront costs, especially in budget-conscious segments. For middle-income homebuyers, affordability takes precedence over features that offer deferred value. Rising input costs and narrowing profit margins have made it harder for developers to incorporate green

technologies without pricing themselves out of the market. While commercial buildings benefit from structured certifications and tax rebates, similar advantages are yet to be widely adopted in mass housing schemes.

Sainath Bhonsle: LEED and other green certifications require documentation and expertise, which can be a barrier for small-scale residential builders.

R. Santhoshkumar: Individual homeowners have access to fewer government subsidies or tax breaks as compared to commercial projects. In contrast, commercial developers often benefit from bulk incentives, zoning bonuses, and easier financing options—making it more viable for them to adopt green building practices.

Neeraj K Mishra: There's a lack of incentives and standardization in residential regulations, unlike in the commercial segment where certifications like LEED or IGBC are prevalent and sometimes mandated. We are working to shift this narrative by integrating green features in Nandaka without passing on undue costs to the customer.

Overall, developers are doing their best to create green buildings, but the extent to which it is possible remains doubtful. I hope the Centre helps this cause. ■