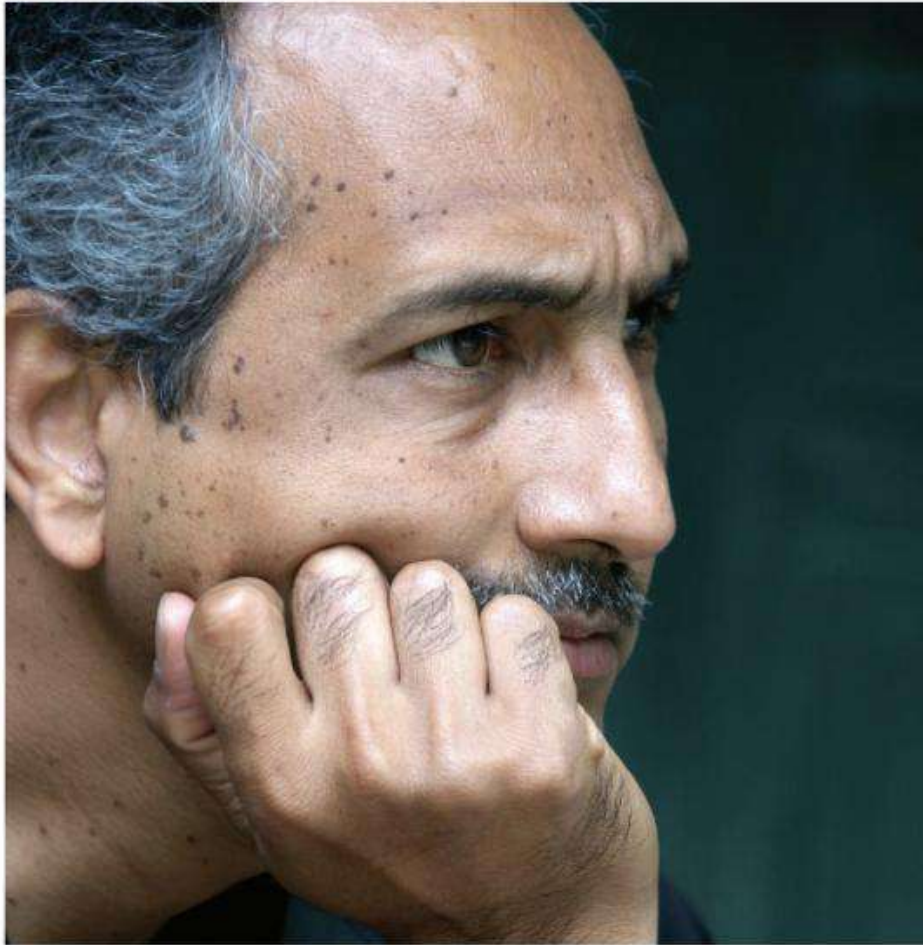




# FROM ASPIRATIONAL TO OPERATIONAL

Architects and designers can adopt a cost- and time-effective sustainable approach to make debates about environmental benefits moot

RAHUL KADRI, PARTNER AND PRINCIPAL ARCHITECT, IM KADRI



adopting passive design strategies with net-zero design principles can go a long way in optimising our consumption patterns and protecting the depletion of natural resources.

## VIEWING THROUGH A WIDER LENS

Sustainable design is a complex concept that involves sketching and building structures that minimise the use of natural resources and energy. At the same time, it reduces environmental impact and offers inhabitants a better quality of life.

Sustainability is as much about the process as it is about the structure. Its principles must follow through the entire lifecycle of the building – from its initial design and construction, use and maintenance, to its demolition and reuse of building materials.

## LOW IMPACT APPROACH

Adopting sustainable practices in architecture – which include passive design strategies such as strategic orientation, maximising daylight and ventilation, designing walls with high thermal mass and using jaalis and sunshades – can reduce energy consumption and result in cost-effective solutions. Utilising local skills and vernacular knowledge as well as sourcing materials from nearby vendors not only cuts cost and time but also respond to the region's climate and context.

Some might argue that adopting technologies like solar panels incur high installation costs. However, it is imperative to note that the net reduction in the lifecycle project cost makes up for the initial investment within the first five years. Moreover, owing to wider implementation of these systems today, costs have significantly gone down as well, making it a viable option. ■

**M**ost hotels are currently refurbishing existing properties to save costs and reduce go-to market time instead of building new ones. The difference between the two is largely to do with the design constraints within each. It is significantly enough in brownfield projects to limit the range of potential solutions.

Moreover, refurbishments that breathe new life into existing properties require architects to consciously conserve their resources and historic value in a manner that the intervention remains contextual and functional, while responding to the new needs. On the other hand, greenfield projects allow a higher degree of freedom. Architects are empowered with a sense of discretion in terms of design development, spatial layout, aesthetics and materiality.

It is becoming increasingly important for architects and designers to encourage environmentally conscious and sustainable design practices. Recycling and reusing on-site waste materials, and



**The challenge is reinterpreting and pushing the boundaries of conventional design to create spaces that have something new to offer.”**