

THE HOMES MAGAZINE FOR MODERN LIVING

Livingetc

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INDIA EDITION

HOUSE OF THE MONTH!
Mike and Preeti Knowles' UpCycled home in New Delhi

TRAVEL DIARY
Ar. Seetu Kohli on National Museum of Qatar

ENVIRONMENT SPECIAL

FIND OUT HOW THE DESIGN FORWARD ARE MAKING A DIFFERENCE

Ar. Gurjit S. Matharoo
Ar. Vinod Gupta
Ar. Sonali Rastogi

* Zero Waste Bistro * Recycled seafood waste * The many lives of vinyl



Ar. Sonali Rastogi

Working with available natural resources, comprehensive integration and appropriate planning helped achieve a Net-Zero cycle of energy and water consumption. It was a conscious decision to restrict the buildable zone, which allowed for ample tree cover for sequestration of carbon emissions.



NET ZERO CAMPUS FOR INFOSYS

Morphogenesis's Nagpur Infosys project, accommodating 5,000 people, showcases how an holistic office campus can be designed sustainably with respect to naturally available resources, while minimising site-disturbance. This was achieved through an overall Net-Zero cycle of water, energy, as well as an effort towards carbon neutrality. Though, the additional criteria for a 100% glare-free working space added to the challenge of optimising fenestration design, the design process for the built-envelope involved solar control, daylight distribution, glare control, and heat load control.

The building was divided into three blocks of four floors each. The four floors were stacked on each other, forming a tube with a capacity of 720 employees. These modules were then staggered, mutually shading each other. Orienting the building significantly reduced solar exposure.

To integrate the available renewable resources to offset the energy demand, a 36 acre solar farm was created on site. The water reservoir was designed as a lake, adjoining the existing water-tank in the low-lying area of the site. This facilitated effective rainwater collection from the surface run-offs, due to the sloping terrain. To reduce emissions, large-scale afforestation was also done on the project site. In fact, the final 71 acre tree cover is sufficient to offset the annual per capita carbon emissions for the office occupants.

