

The Business Standard, Mumbai, 12 Mar 2008

## Cool and green in an architectural desert

**CITIES property developers are going for ecofriendly building that help slash energy costs**

REUTERS

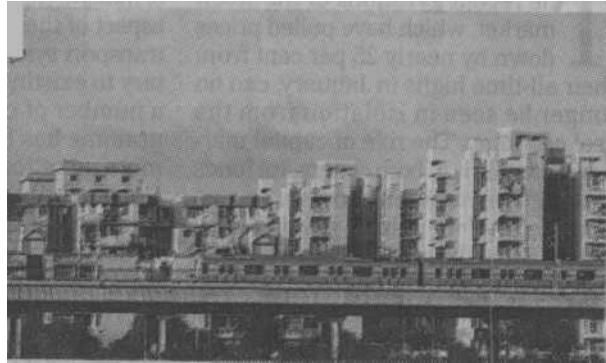
**I**n a sizzling property market, architect Mani Rastogi at MD Morphogenesis has created some of India's coolest buildings, using recycled water, wells, wind tunnels and sun screens to chill work places and slash energy costs.

Thanks to his designs, students in a Jaipur fashion school mill around classrooms cooled to around 25 degrees Celsius (77 F) without air conditioners, while the desert bakes at nearly double that temperature outside. And guests at the Swabhum Hotel in Kolkata feel a breeze as they step out of a building resembling sliced mushrooms fused together, and inspired by the way trees trap wind. But although developers and investors are coming under the environmental spotlight because buildings account for half the world's carbon dioxide emissions, Rastogi says few in India are going green.

"In India's booming real estate market, there are not enough professionals. And because mediocrity sells, it's easier to do that," Rastogi said in an interview in Hong Kong.

"Architects are just doing what developers want. If you start taking them down the sustainable route, people start getting nervous," he said. "They see it as wasted expense."

Building sites have churned up India's dusty cities since 2005, when rules on inward investment in construction were eased, sparking huge land speculation and a near quadrupling in prices. An economy growing



**Japan, Singapore, Hong Kong and India have introduced green building ratings like the ones in Britain and the United States, but they are catching on slowly** BLOOMBERG

at more than 8 per cent annually has drawn over \$12 billion from global property investors, including funds run by Morgan Stanley and Citigroup, and enriched Indian developers such as DLF Ltd. Morphogenesis, co-founded by Rastogi a decade ago "in a garage", has grown into a conglomerate of 100 architects and interior designers. With land prices soaring, it sells its designs as cost-saving, rather than green.

"When they move away from the standard box, we have to tell them its more efficient," Rastogi said. "Many say fine, you've convinced us, but how do we convince the market?" The sales pitch has worked on auditors Ernst and Young. Morphogenesis designed an office block for the company in the New Delhi suburb of Gurgaon, with a ship's hull design cutting direct sunlight on the sides of the eight-storey glass building.

Computers, gauging temperature and the presence of

staff, control air conditioning, and natural light and ventilation dominate. The block costs about 20 per cent less to build than a conventional office and saves about a quarter of running costs.

Studies show going green can pay off quickly. Spending \$264,000 on energy-saving for a 30,000 sq m Sydney office block worth \$145 million would be paid back in cost savings in three years, say consultants Jones Lang LaSalle.

Some Asian countries, including Japan, Singapore, Hong Kong and India have introduced green building ratings along the lines of systems operating in Britain and the United States, but they are catching on slowly. According to a Jones Lang LaSalle survey of 414 companies, 12 per cent in Asia said they were willing to pay premiums of over 10 per cent for "sustainable" buildings, compared to 3 per cent in North America and Europe.