

What Colour Is Your Company?

With new technologies and innovative solutions, Spectral Services is helping buildings go green

"ENERGY efficiency is no rocket science," says Prem C Jain, founder chairman of Spectral Services Consultants in Delhi. Jain should know—after all he heads a company that helps make buildings in India save energy and go 'green'. Going green needn't be expensive, insists Jain. The key is in making smart use of available resources, and innovating. "At an energy efficient building energy is saved whereas in a green building it is also recycled," he says. For instance, in a green building 100% of the water used is recycled. And a simple bamboo flooring in a building can help cut down noise pollution. Currently, Jain's team is working on a technology where recycled water can be used not just for flushing but can be made fit for drinking, as well.

Founded in 1980, Spectral has been providing engineering services such as air conditioning, fire suppression, building automation and security systems for buildings. And now with green being the buzzword in corporate circles the 350-strong firm is tapping the growing opportunity in this area too. Recalls Jain, "When I returned from the US in the '70s, air-conditioners used 10 watts of energy per sq ft. When we started our business we brought it down to five watts per sq ft." Now the buildings Spectral works on consume 2.5 watts per sq ft on air-conditioning, and Jain says he's aiming for two watts per sq ft for its 'Green Spaces' building project in Faridabad. Spectral's portfolio of projects includes the Commonwealth Games Village and the Delhi International Airport, besides several other commercial real estate projects. His Noida office is a signature green building as well.

But the feather in Spectral's cap is the Godrej Green Business Centre in Hyderabad. The building won the platinum rating from the US Green Building Council (USGBC)—the first building outside the USA to do so. It uses wind towers to reduce ambient air temperature by 10 degree Celsius, and then send to the Air Handling Units so that the energy required in cooling is reduced. 88% of the building is naturally lit and hence doesn't require artificial light during the day. It recy-



cles 100% of its water and 80% of the material used in the construction of the building is recycled. These initiatives have helped cut down energy costs by nearly half, says Jain.

Going green comes at a cost, to begin with. A silver-rated green building certified by India Green Building Council (IGBC)—of which Jain is the chairman—costs 4% more to build than a conventional building, while a gold rated building costs 6% more, and the highest rating of platinum comes at a premium of 8-9%, where energy savings are the highest possible.

The cost aspect may be impacting the adoption of green technologies, but going green isn't an option any more for corporates as climate change concerns are on the rise. Going by global standards, though, India has a bit of catching up to do, says Jain. The US has 300 green buildings whereas in India 40 green buildings are complete while 60 are in the pipeline. Sourcing of products is also an issue—the US has 8,000 green products whereas in India there are only 100 such products. Most of the green buildings are coming up in South India, and 40% of those will be in Bangalore, Chennai and Hyderabad. That should change with the emergence of low cost green technologies, and with more businesses realising that green will be the only way to survive.

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