

With 42 green buildings, city leads the pack

Sharanya Gautam | TNN

Chennai: The state may be hobbled by a severe power shortage, but its capital is home to more green buildings than any other city in the country. Chennai is home to 42 of the 212 structures in India that are certified as eco-friendly by the Indian Green Building Council (IGBC).

Chennai is followed by Mumbai, with 29 green buildings, and the National Capital Region (28), among cities awarded Leadership in Energy and Environmental Design (LEED) certification by IGBC. Hyderabad and Bangalore are tied in fourth place with 24 each and Kolkata is sixth with eight.

Tamil Nadu tops the states with 47 green buildings and 57 more have been registered for certification in 2011, a big increase over previous years. Sriperumbudur has three green buildings, Tirupur, two, and Madurai, Salem, Siruseri and Coimbatore have one each.

Among the green buildings in Chennai are the Turbo Energy office complex in R A Puram, Menon Eternity in Alwarpet and Shell Business Service Centre, all with platinum certification, the highest rating. Platinum is followed by gold, silver and certified ratings, based on sustainability, waste management, use of natural resources and indoor environmental quality.

Anna Centenary Library and the new Tamil Nadu assembly building are gold-rated as is Express Avenue Mall.

Viswa Syamalam, a house in Madipakkam, is one of only two individual homes in the country to have received a green rat-

GOING GREEN



City	No. of green buildings
Chennai	42
Mumbai	29
National Capital Region	28
Bangalore	24
Hyderabad	24
Pune	13
Kolkata	8

WHAT IS A GREEN BUILDING?

A green building is one that uses less water, is high on energy efficiency and sustainability, generates lesser waste, conserves more natural resources and has a better indoor environmental quality than a conventional building

ing. It was awarded platinum rating in 2009. The other green home is in Hyderabad.

"People in Chennai have been proactive about green buildings," says Sathiaran Ram, managing director of En3 Sustainability Solutions Pvt Ltd, a green building consultancy in Chennai. "The Confederation of Indian Industry (CII) is also promoting the concept."

Tamil Nadu Developers Grab Business Opportunity As Eco Buildings Get Popular; Clients Save On Energy, Water Bills

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Today's monoliths of concrete, glass and steel will soon be replaced by green, self-sufficient buildings and towns. Eco-friendly blueprints are off the drawing board, hauled onward by energy-saving rafters and photovoltaic louvers on gigantic cranes, as the cities of the future rise from the grime of urban sprawl.

While these new cities are taking shape in China, the United States and various European countries, builders in Tamil Nadu are getting into the act too, constructing ecologically sustainable buildings that generate their own power, stay cool with cornices covered with native plant species that require little water and save electricity with occupancy sensor-fitted lighting.

According to the Indian green building council (IGBC), there has been a sharp increase in the number of buildings in Chennai that have been awarded green certification over the past three years.

Chennai leads the country with 42 green buildings with leadership in energy and environmental design (LEED) rating. Only 10 buildings in the city won the rating from 2004 to 2008, while 37 buildings received the rating between 2009 and 2011. Experts attribute this to rising ecological awareness as well as business opportunity: Green certification gives builders a new branding option.

"For a consumer, the

green certificate is a third party validation, just like a college degree. They are ready to pay more for a green building," says Sathiaran Ram, managing director of En3 Sustainability Solutions Pvt Ltd, a green building consultancy in the city.

A green certificate is also a sign of corporate social responsibility. "Many IT companies have adopted the concept as company mandate or an initiative for sustainability," Ram says.

There is also a rise in the number of buildings that have been registered for green certification, with builders needing to ensure that the structure meets certain parameters in terms of sustainability, waste generation and conservation of natural resources.

Fifty-seven buildings were registered with IGBC for green certification in 2011, 13 buildings in 2010, and 25 in 2009. The rating is divided into four categories, based on how eco-friendly the structures are, with platinum at the top, followed by gold, silver and certified buildings.

At Rane Institute for Employee Development (RIED), Perungudi, workshops and conferences are conducted in which participants can see the benefits of an energy efficient building. The RIED building, a silver-rated green building, is equipped with low-flow showers and sinks and solar PV cells to reduce water and energy consumption.

"The building is well lit to ensure we do not have to use artificial lighting during the day. At other times, we use compact fluorescent lamps that save electricity up to 20%," says N Hari Babu, vice-president, RIED.

"Although it costs more to construct a green building, the returns are high," says a spokesperson for the IGBC. "The government should provide initiatives to encourage green developers. Green builders are provided incentives in Pune and Greater Noida. A lot of people also opt for green certification as it makes it much easier to get environmental clearance."

GREEN IS GOLD FOR STATE BUILDERS

Pics: A Prathap, L R Shankar



Rane Institute for Employee Development at Perungudi is a silver-rated green building equipped with low-flow showers and sinks and solar PV cells to reduce water and energy consumption

Eco-friendly buildings in TN

YEAR	NO OF BUILDINGS CERTIFIED
2004	00
2005	01
2006	04
2007	03
2008	02
2009	11
2010	18
2011	08

Investment FOR future

Constructing a green building costs 3% to 5% more than a normal building, but subsequent expenditure is low. On an average, these buildings consume 40% to 50% less energy than a normal building and cut water consumption by as much as 40%



PRIDE OF Chennai

Chennai has the largest number of green buildings, with almost 42 certified projects over the last seven years. Chennai also has one of two green certified independent bungalows in the country

SOME GREEN buildings in Chennai

- WORLD BANK BUILDING ● OLYMPIA TECHNOLOGY PARK
- TAMIL NADU LEGISLATIVE ASSEMBLY ● ANNA CENTENARY LIBRARY
- EXPRESS AVENUE MALL

Green Building Ratings in India

In India, the IGBC (Indian Green Building Council) gives the LEED (Leadership in Energy and Environmental Design) rating, a system which rates buildings on design, construction and operation and offers four certifications for new constructions: Certified, Silver, Gold and Platinum



Adarsh (Association for Development and Research of Sustainable Habitats) founded by Teri (The Energy and Resources Institute), New Delhi, and the ministry for new and renewable energy, (government of India) also issue Griha (Green Rating for Integrated Habitat Assessment) to deal with small residential complexes and homes. Griha ratings range from one star to five star

Number of buildings rated by IGBC in India

212

Number of buildings rated by GRIHA in India

8