CASE STUDY: MITTAL AURIGA Making sustainable living a reality in Bangalore



About the Project



BUILT UP AREA 26,300 Sq. Ft.



GREEN BUILDING 20 - 30% MORE EFFICIENT Mittal Auriga is a luxury residential complex in the heart of Bangalore. Developed by Living Habitats and ecoengineered by Smarter Dharma, It is designed to be among the first carbon neutral buildings in India.



Sustainability Snapshot*



ENERGY SAVINGS 4,000 KWh



WET WASTE HANDLED 9,000 Kg

CARBON FOOTPRINT

4,707 Kg CO2

REDUCED



1.80 Lakh Liters

WATER SAVINGS



The project aims to be Bangalore's most planet-friendly residence. Mittal Auriga goes beyond world class offerings by integrating elements of sustainability at every phase of the project.

* Projected savings from implementing sustainable solutions. Savings numbers based on annual usage.

Client Speak



'My family has been in the construction space for decades now. The value I could add is building differently, taking sustainable design beyond the drawing board."

– Sanjay Mittal, MD, Mittal Builders

Achieving the Sustainability Development



This project aims to work towards the *Sustainability Development Goals (SDGs)* set by the United Nations for cities and countries around the world to collectively achieve, by the year 2025.

Redefining urban living spaces

Mittal Auriga was conceived to be a living place for conscious living. It was envisioned to become a carbon neutral building which would not only reduce consumption during construction and after; but also socially relevant with focus given to the lives of every stakeholder; from the labour to the end user.

Here are a few features which make the project unique and bring in the tenants of true sustainability & conscious living:



Solar powered homes - Each home is provided with an independent grid tie solar setup, which can power the entire home and generate additional units which are given back to the grid. Not only does each house run on renewable energy but generates revenue as well for the end user.

Distributed solar water heating - A centralised setup with decentralised storage allows the luxury of having hot water whenever you need it. Each bathroom is equipped with decentralised hot water storage. This eliminates waste of water, provides for hot water on solar as soon as you turn on the tap and brings down the need to setup a circular water system, thereby eliminating heavy energy consumption.

Common Areas on Solar - When the entire common area is built on solar, the dependency on the grid not only goes down but it also drastically reduces your monthly maintenance bills. When the swimming pool filtration is also on solar, it alone is enough to provide home owners tremendous benefit of living consciously. Of course, there is always the conventional tie in to the grid, a battery supported setup for the night and a tertiary DG set if ever there occurs a need.

Future of travel - Mittal Auriga is ready to accept and charge your electric cars & bikes with charging points at the parking lots. A designated cycle space is also allocated to stove away your bikes for your daily commute.

6 CLEAN WATER AND SANITATION

Water treatment - Mittal Auriga will be the one of first apartments in Bangalore to treat grey-water naturally; without consuming power during filtration. This is by way of a natural phytorid based sewage treatment system. The treated grey-water will be used for all non potable water use; thereby drastically reducing the demand for fresh water.

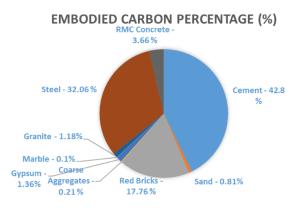


Rain water harvesting - Mittal Auriga has been built keeping in mind, the water stress on a city like Bangalore. Looking at Bangalore's rain pattern, enough water can be collected and stored for re-use in the project which can support the community for upto four months in the year without the need to depend on external sources of water. This makes Mittal Auriga a unique project which cares not only for the tenants in the apartment but also the community at large.



On-site waste management system - The complex has a proper segregation plan in place with wet, dry, medical, e-waste and sanitary waste being handled ethically. The wet waste is managed in-situ and compost generated is used in the gardens to grow food. The medical waste is handed over periodically to the closest hospital for proper incineration.

Luxury with a conscience - Mining and quarrying are among the most polluting industries within construction. When we replace high polluting but luxurious flooring options like marble & granite with conscious and more luxurious flooring options like FS certified premium wooden flooring and traditional Athankudi tiles to adorn the floors and common areas; both the customer and the environment win. Additionally, the the materials are locally sourced and lower in cost per square feet, it allows to bring out overall construction cost of the building. In the end, if the customer still demands marble, then we work with the customer to offset the carbon emissions; and bringing balance in the world.



Technology to assist in better living - Each home owner is provided with an app to track, monitor and measure consumption at house level; with awareness and educational tips being provided for a more conscious lifestyle.





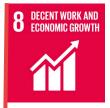
Having control of the chemicals you put into your body - Vertical gardens envelope the complex and terrace gardens have been setup to grow vegetables and greens. Tenants are free to grow and buy from within the community; and when they have control of how vegetables are grown, they also have control over what chemicals go into growing the vegetables.

the compost for the gardens come from the composting setups within the complex, thus providing a circular system of managing waste, converting it into compost which is again used to grow food. Of course, we don't even have to mention the reduction in ambient temperature due to the vertical garden covering the complex.



IGBC Platinum Certification - All the measures taken at Mittal Auriga cumulatively add up and exceed the credit criteria of IGBC Platinum rating for Green Homes, the highest level of green certification for such a residential complex globally.

Joining the Sustainability Development Goals of the UN - The embodied carbon of the various construction materials and their quantities used in the project has been computed and it is being offset by planting a micro forest with rare endangered and threatened species of trees in the Western Ghats. This allows us not only offset our carbon emissions from materials used during construction but revival of species which are endemic to local ecosystems & increasing bio-diversity.



Social Impact - The labour teams at the project site were engaged with monthly entertainment activities preceded by educational informative sessions on hygiene and children's education. Mandatory monthly health checkups, bank accounts and priority to quality of food and water to all labourers was made mandatory. Considering a holistic approach, yoga and

meditation classes thrice a week and educating employees on the need to save also became standard during the construction phase.



About Us

Smarter Dharma is a social enterprise operating in the field of sustainability. We help our clients shift from the 'business-as-usual' approach to one that entails efficient and sustainable business practices. We work at the intersection of societal welfare and environmental sustainability and deliver financially viable solutions to our clients.

smarterdharma.com

CONTACT US

Reach out to us for more information about our work in the construction sector at **enquire@smarterdharma.com**

