

## **Theme of the Session:** The GRIHA Trophy at NASA

### **Concept note:**

Across the globe, the areas valued highest for Real Estate sale or purchase, are the greenest parts of a city. These offer the best quality of life in terms of clean air, cooler surroundings, ample ground water, rich flora and fauna, natural lighting, sufficient wind-flow, recreation areas for children and adults, etc. With unrestricted glass facades and extensive air-conditioned spaces, today we design buildings that work towards isolating the internal from the external environment, thereby resulting in very high energy consumption.

It is imperative we alter this trend to minimize the detrimental impact on the environment and to create a new future for our children, our towns, cities and our country. The sunlight in our country is very harsh and brings with it heat and glare, which people try to battle by rolling the blinds down and increased use of air-conditioning. Lack of appropriate information and tendency to follow fashionable trends that are short-lived often leads us to provide 'international' comfort conditions in our buildings, at the cost of very high energy consumption.

In an endeavour to secure the energy and resource future of our country, GRIHA Council, has been working diligently through green buildings and sustainable habitats since 2007. GRIHA is India's National Rating System for Green buildings. It has been developed by TERI (The Energy and Resources Institute) and is endorsed by the MNRE (Ministry of New and Renewable Energy). It is based on nationally accepted energy and environmental principles, and seeks to strike a balance between established practices and emerging concepts, both national and international. GRIHA attempts to minimize a building's resource consumption, waste generation, and overall ecological/environmental impact by comparing them to certain nationally acceptable limits / benchmarks.

GRIHA is a point based rating system that consists of 31 criteria categorized under various sections such as Site Planning, Construction Management, Performance Monitoring and Validation, and Innovation points. Two of these 31 criteria are mandatory, eleven are partly mandatory, while the rest are optional. Each criterion has a number of points assigned to it. It means that a project intending to meet the criterion would qualify for the points. Different levels of certification (one star to five stars) are awarded based on the number of points earned. The minimum points required for certification is 25.

GRIHA Trophy was launched at NASA (National Association of Students of Architecture) in 2015. National Association of Students of Architecture (NASA India) is one of the largest Architectural Students Organizations in the world with student participants from more than two hundred colleges all over the India and countries around the world. This year's trophy is sponsored by Experion Developers; who are developing townships, group-housing projects, commercial landmarks, organised retail destinations, hotels and resorts across Andhra Pradesh, Delhi NCR, Goa, Haryana, Maharashtra, Punjab, Tamil Nadu and Uttar Pradesh.

Considering the recent growth in the residential, commercial real estate and their inclination to get GRIHA rating, this year's Trophy brief requires the students to design a Multi-purpose complex for Experion Developers. The intent is incorporating the latest thinking on sustainable design. The

Design should have capabilities to improve thermal and visual performance by using massing, solar orientation, wind movement, day lighting, passive cooling system in the climatic conditions of Gurugram. Environment and development are intertwined and therefore must be systematically integrated in design process to produce environmentally friendly designs, thus achieve sustainable development.