

HOUSING INNOVATION CHALLENGE

The Housing Innovation Challenge is a Saint-Gobain initiative launched to invite innovators and thinkers across to identify problem areas that arise in housing and come up with their solutions. If your ideas and proposals hold promise, we may be looking at getting the team at Saint -Gobain Research India on board to lead it into the implementation phase.

There are two broad categories that you may choose from, namely, Sustainable Housing and Housing in Smart Cities.

A dual format (Professional and General Populace) competition, the Housing Innovation Challenge brings together professionals and general public. In the professional space, Architects, Designers, Planners and Engineers and anyone who has an idea worthy of the contest (Not for Undergraduate students) are invited to submit entries on possible areas of intervention in the categories of **Sustainable Housing** and **Housing for Smart Cities**.

The competition also urges the General Public to voice their problems and contribute to the competition by enlisting any housing issues that they may have faced or are facing. We urge you to voice your problems as a user, every minor or major concern in your day to day life, the solution to which will make your life just a little bit more comfortable.

(This section will be open to all and can be viewed by all. A maximum word limit of 100 words is allowed.)

The participating professionals could work on their entries, basis the concerns raised by the public or choose to submit their entries basis their own ideas.

SUSTAINABLE HOUSING – environmental sustainability

Background:

Sustainable Housing is the kind of housing that is environmentally viable and eco-friendly, safe and long lasting. In today's situation, "going green" is the only way to go any further. Sustainable Housing is a concept that believes in water efficiency, energy efficiency, reduction in fossil fuel use in commuting, less waste, more re-use and recycling, low environmental impact and conserving natural resources. Most importantly, these concepts can enhance occupant health, happiness and well-being.

Possible areas of intervention:

- Material – Usage of building materials wherein the environment is least affected; including recycled and reused material. Do keep in mind the life cycle and the short term and long term impact the material might have on the environment.
- Transport of material - Locally sourced materials play an important role in sustainable designs. But often material needs to be transported whether short or long distance. We are looking at innovative techniques for transportation of materials onto site or even within the site, including usage of alternate non-polluting fuels.
- Water Conservation - Ideas that encourage effective usage of water (a renewable energy resource) during construction and/or post occupancy.
- Sanitation and Waste management- Any steps from awareness on sanitation, collection to recycling of waste maybe dealt with. This could be during construction and/or post occupancy.
- Recycling and Reuse - Steps to increase awareness and ideas that compel occupants of the housing to recycle and reuse.
- Maintenance- Ideas for decreasing the need of active maintenance etc. maybe looked at.
- Energy efficiency - Effective use of energy, with the aim of reducing energy consumption in homes including looking at usage of non-renewable sources of energy
- Health and well-being of occupants - Performance based systems which ensures minimum performance of day-lighting, ventilation, indoor air quality, aspects of fire safety and acoustics comfort

Output:

- We are looking for ideas and innovations that would make a difference in the Sustainable Housing sector.
- These ideas and innovations shall be for housing with a minimum of 16 residences.
- You may choose to look at the examples given above to propose your intervention, or you may also choose a path of your own.
- Please note however, that we are not looking at design ideas for the entire housing. Instead we are looking at smaller ideas and interventions that may be incorporated in this kind of housing that may or may not be replicable, and can make for a large impact.
- We are looking at solutions and ideas specific to housing and not ones that are generic in nature.

SMART CITIES- smart housing

Background:

With an urban population of 31%, India is at a point of transition where the pace of urbanization is speeding up. Keeping this in mind the Government has decided on developing 100 "Smart Cities" in the country as satellite towns of larger cities and by modernising the existing mid-sized cities of the country. The idea of these smart cities is to plan our urbanization strategy in the right direction by taking advantage of the latest developments in technology especially in ICT (Information and Communication Technology). Moreover, it also offers us an opportunity to create conducive environment for creation of more employment opportunities and economic activities while improving the quality of life substantially.

Smartness in a city means different things to different people. It could be smart design, smart living, smart utilities, smart housing, smart mobility, smart technology etc. The focus of our challenge is on "Smart Housing" for a Smart City. If a city you live in or relate to, were to become a smart city what would you do differently for the housing here to ensure its compatibility with the rest of the elements of a smart city.

Possible areas of intervention:

- Safety - How to ensure safety of and within the homes for both the occupant and the property.
- Comfort & Well-being - Performance based systems which ensure the best in performance of day-lighting, ventilation, indoor air quality and acoustic comfort.
- Live, work, play module - One of the philosophies of a smart city is creating an environment that is habitable, revenue generating as well as provides for healthy recreation. How can housing in your smart cities inculcate this philosophy?
- Social equality- What ideas and interventions in this housing can bring in inclusivity and equality?
- Identity- Ideas of creating an identity for your smart city through this housing.
- Art and Culture- Like for any other city, smart cities will need the colour of art and culture to liven it up. How will the housing in your smart city contribute to this?
- Sanitation and Waste management- Any steps from awareness on sanitation, collection to recycling of waste maybe dealt with. This could be during construction and/or post occupancy.

- Medical emergencies- Nothing stays smart like preparedness! Devising plans of action during medical emergencies.
- Disaster management- With the devastating news of the unfortunate incidents at Nepal, one can never be over prepared for disasters. Ideas for awareness and disaster preparedness for the housing are welcome.
- Local retail- A large part of the population of the smart cities may be the migrant population from the rural parts of India looking for job opportunities. How can the housing complex contribute to revenue generation for them?
- Mixed land use- How various other activities can be incorporated into this complex that may work symbiotically with the housing to create a healthy booming environment.
- Transport- A lot of smart cities that come up are transport oriented developments (TOD) that work around metros, buses, monorails etc. How would this influence a housing complex, or how the housing can influence the transport systems.

Output:

- We are looking for ideas and innovations in the Housing that is built in upcoming Smart Cities. You may look at a city of your choice being transformed in part or whole into a smart city, and provide for specific design ideas.
- These ideas and innovations shall be for housing with a minimum of 16 residences.
- The above enlisted areas are issues and concerns that are to be addressed by any city today, but with the fresh smart cities coming up, we are looking at ideas of how these issues may be addressed right from the planning stage.
- You may choose to look at the examples given above to propose your intervention, or you may also choose a path of your own.
- Your ideas may be about how these concerns can be addressed in the housing itself, or how the housing can address these concerns for your smart city.
- Please note however, that we are not looking at design ideas for an entire housing in the smart city. Instead we are looking at smaller ideas and interventions that may be incorporated in this kind of housing that may be replicable, and can make for a large impact. We are looking at solutions and ideas specific to housing and not ones that are generic in nature.

Submission format

- All entries to be only soft copies.
- A maximum of **four A3** or **five A4** sheets with legible drawings and/or graphs and/or charts and/or text in pdf format OR **Four A4 sheets**, if you wish to submit a paper with only text OR a power point presentation, a maximum of 5 slides or a running time of 4 minutes maximum is allowed (please ensure that the submission in this case is in a **power point format** compatible with MS Office 2007) OR a movie clip, maximum running time of the movie shall not exceed 6 minutes. You may even choose to make your submission part pdf/ ppt and part movie, in which case you may have a maximum of 3 A3 sheets/ slides and a movie with a maximum length of 3 minutes.
- Please do not write **names** and other **details** on any of the sheets.
- Proper sourcing and credits are imperative.

Evaluation criteria

Your idea/intervention will be evaluated broadly in the following criteria:

- Context
- Concept
- Originality/ Novelty
- Efficiency
- Implementability
- Replicability
- Implementability
- Business idea
- Ease of development of idea for execution
- Return on Investment
- Short term Impact
- Long term impact

Saint-Gobain Research India (SGRI) team will be part of the Jury to determine if one or more entries may be taken forward to the next level of implementation.

Important Rules and Conditions:

1. This contest is open only for professionals mentioned in the brief and not for undergraduate students.
2. All the others can submit ideas as part of the "General Populace" category
3. The competition is open to single member participant or a team consisting of two members and not more.
4. The submitted entry is original work and due credits have been given when ideas have been borrowed.
5. Please note that once submitted, Saint-Gobain shall hold the rights to all the entries, and they shall be used in all media in perpetuity at Saint-Gobain's discretion, with due credits given to the participant.

Important Dates:

1. Contest Opens: June 5th, 2015
2. Submissions Deadline: Sep 5th, 2015
3. Announcement of Results: October, 2015