

PNB Housing Finance Limited aids technological innovations for safe housing

Background:

PNB Housing partnered with Office of PSA to announce funding opportunities in four areas:

- **Precast housing** - Viability and use of Pre-Cast Concrete Structures in low-cost apartments/group housing for metropolitan / urban cities along with green building norms and seismic zoning.

The Cost of affordable housing in metropolitan and Tier 1 cities and sky-rocketing due to increase in Construction Cost and Land price. To provide sustainable and affordable housing study of use of Pre-Cast structures for high rise / group housing along with green building norms and as per seismic zoning.

- **Site housing** - Design and analysis of low-cost temporary structures for project construction workers on/near site.

In Tier I cities rentals are high as compared to earnings of construction workers and temporary structures in use is very unhygienic and unsafe for sustainability. Moreover, during Covid Lockdown we have seen major reverse migration because of one of such reason so need is to design and analyse low-cost temporary housing to benefit both Labourers for hygienic liveable purpose and Developer with low cost and easy arrangement.

- **Water treatment** - End use of sewage treated water / drainage water for aquifers recharges in cities prone to depleted water level.

In metropolitans / Tier I cities lately a depletion of underground water level has been observed to figure out economical and cost centric ways without changes in structural design / layout design of group housing thru various means of recharge methods.

- **Fire resistant building** - Production & wide-scale use of Fire resistance building materials

There is a continued tragic loss of civilians and firefighters, as shown in several fire statistics. It is believed that one significant contributing factor is the lack of understanding of fire behaviour in Commercial & Residential Structures resulting from non-tested systems and non-resistant building materials. The changing dynamics of fires as a result of the changes in construction materials, building contents and building size and geometry over the past few decades and its prevention is to be analysed.

Outcome:

PNB has shortlisted three proposals currently.