



Bureau of Energy Efficiency



सत्यमेव जयते
Government of India
Ministry of Power



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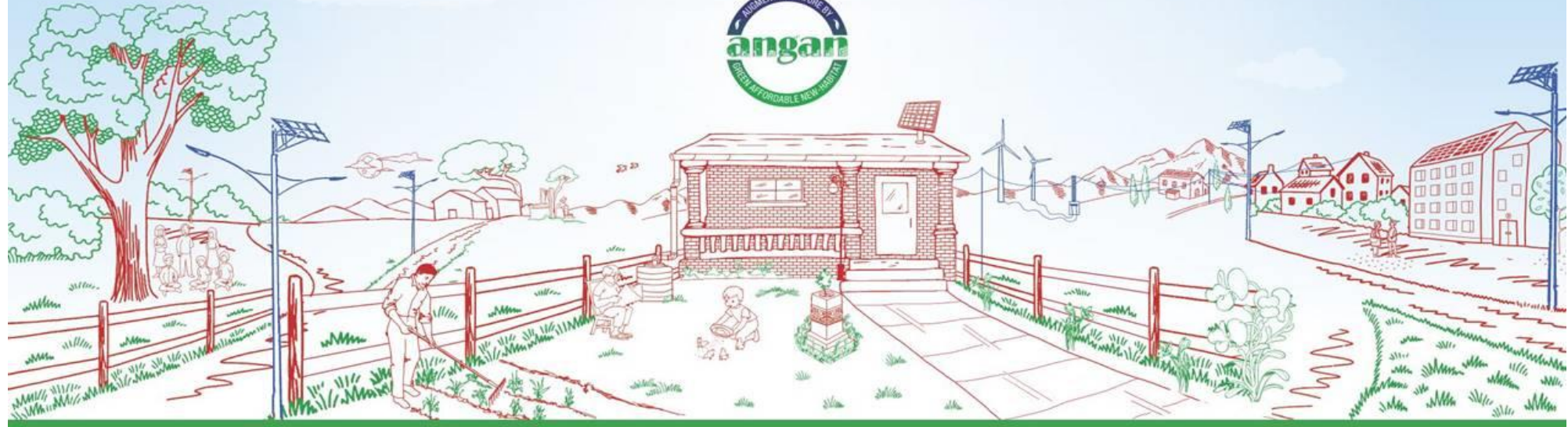
ANGAN

Augmenting Nature by Green Affordable New-habitat

A Courtyard for Revolutionary Change in Building Energy Efficiency

An International Conference on Building Energy Efficiency

9th-11th September, 2019 | Hotel The LaLiT, New Delhi





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THIS PRESENTATION WAS SHARED BY

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FOR THE SESSION:

“Keynote Address #2”

DURING ANGAN 2019

Knowledge Partner

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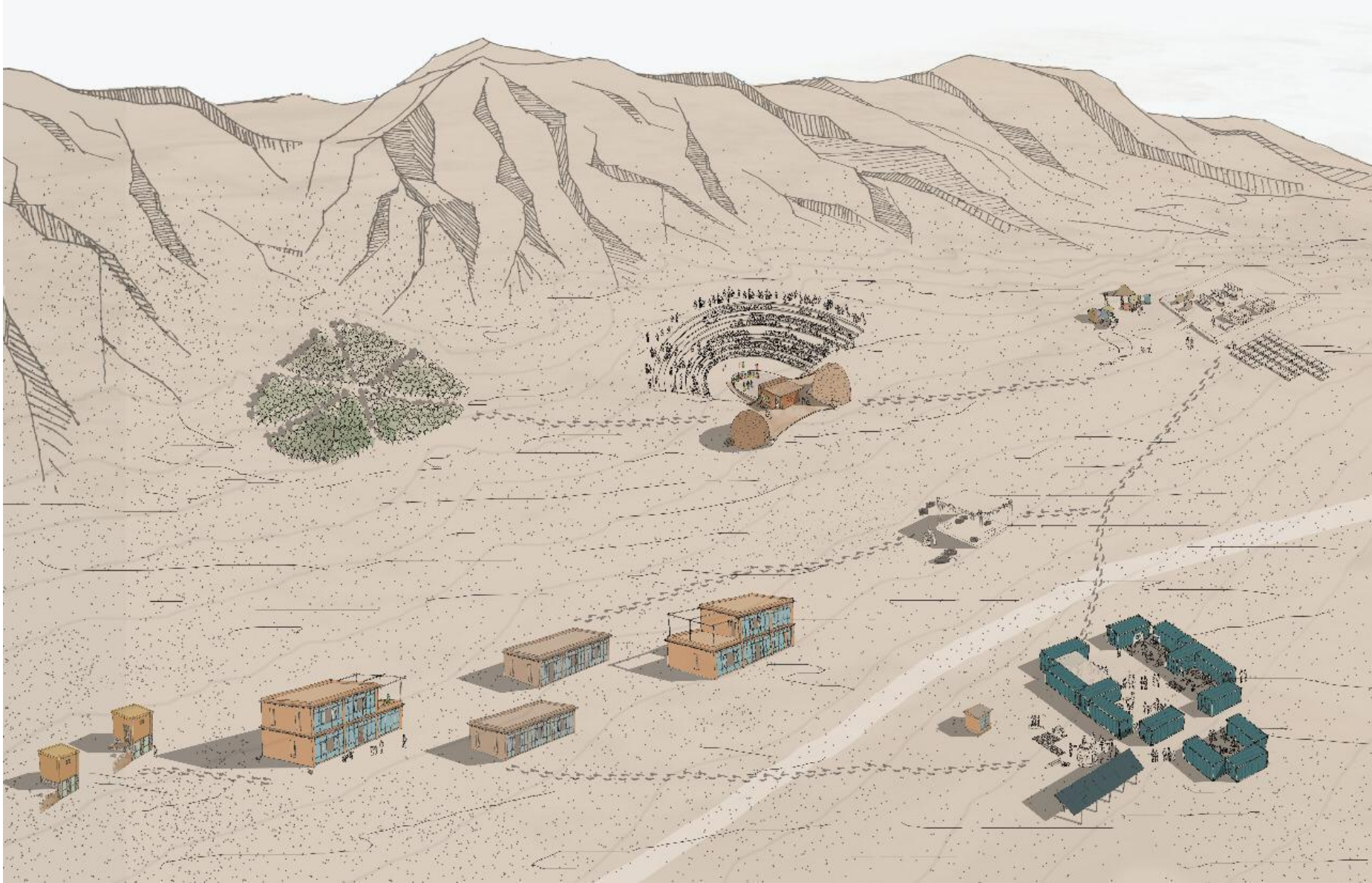
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HIMALAYAN INSTITUTE OF ALTERNATIVES, LADAKH

An Alternative Institute for Mountain Development



Vision

From DESERT

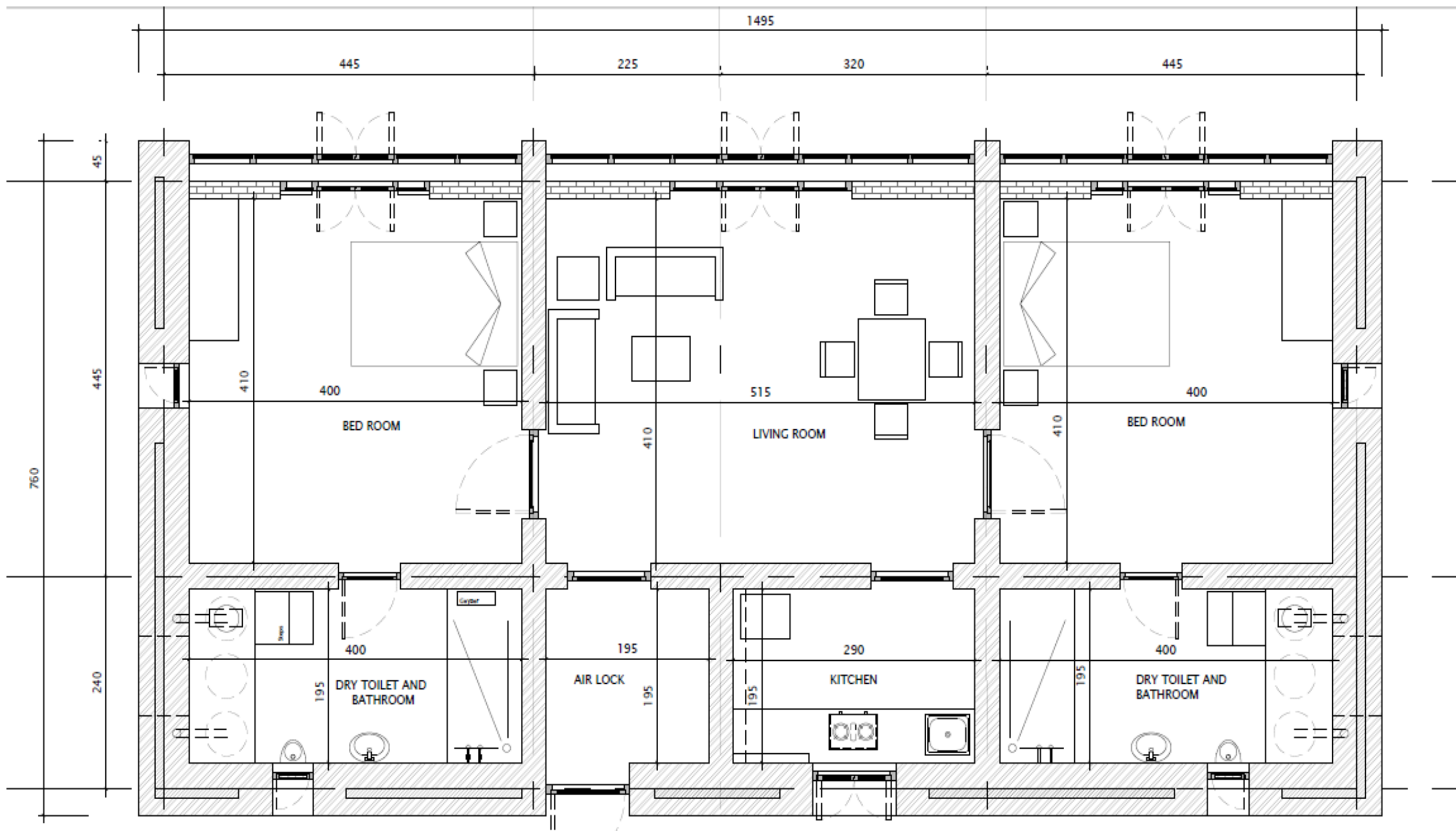


To Univer-City



Staff Quarters





Features

- 4 SQs of same design but different construction materials
- Full-scale experiment instead of Models
- Built-up Area of 113 m² each.
- No mechanical heating required.
- **Year-round running hot tap water**
- **Attached dry-toilet and bathroom**

Solar Car-shed



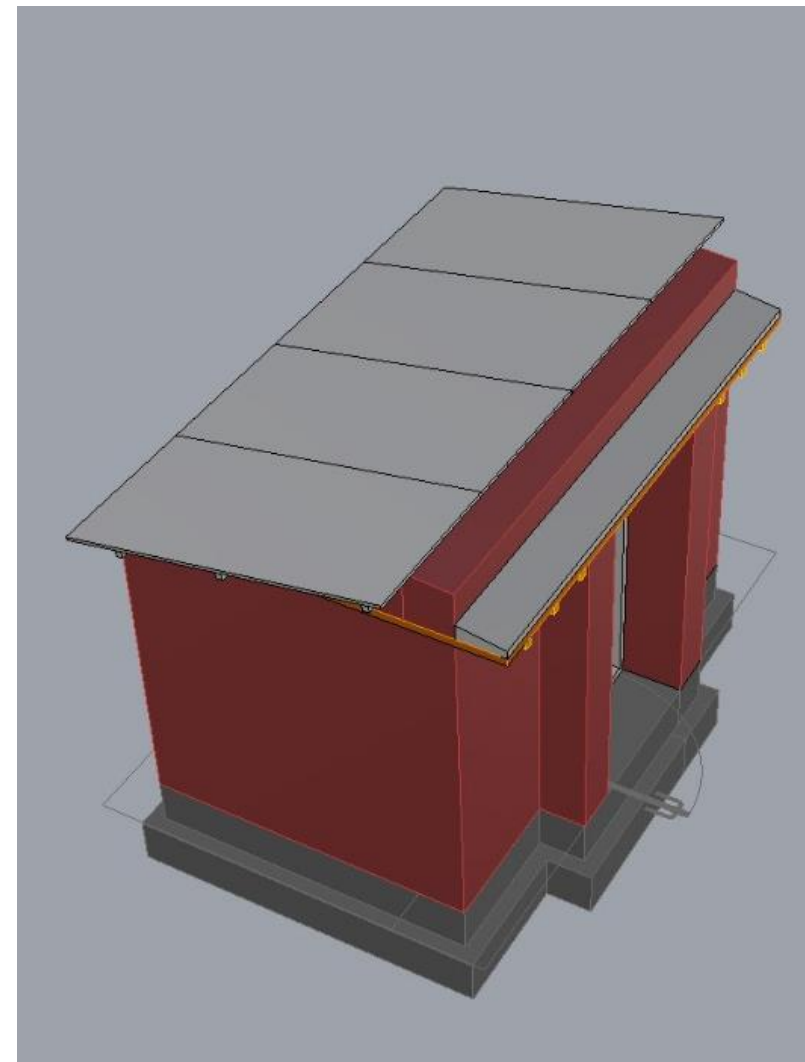
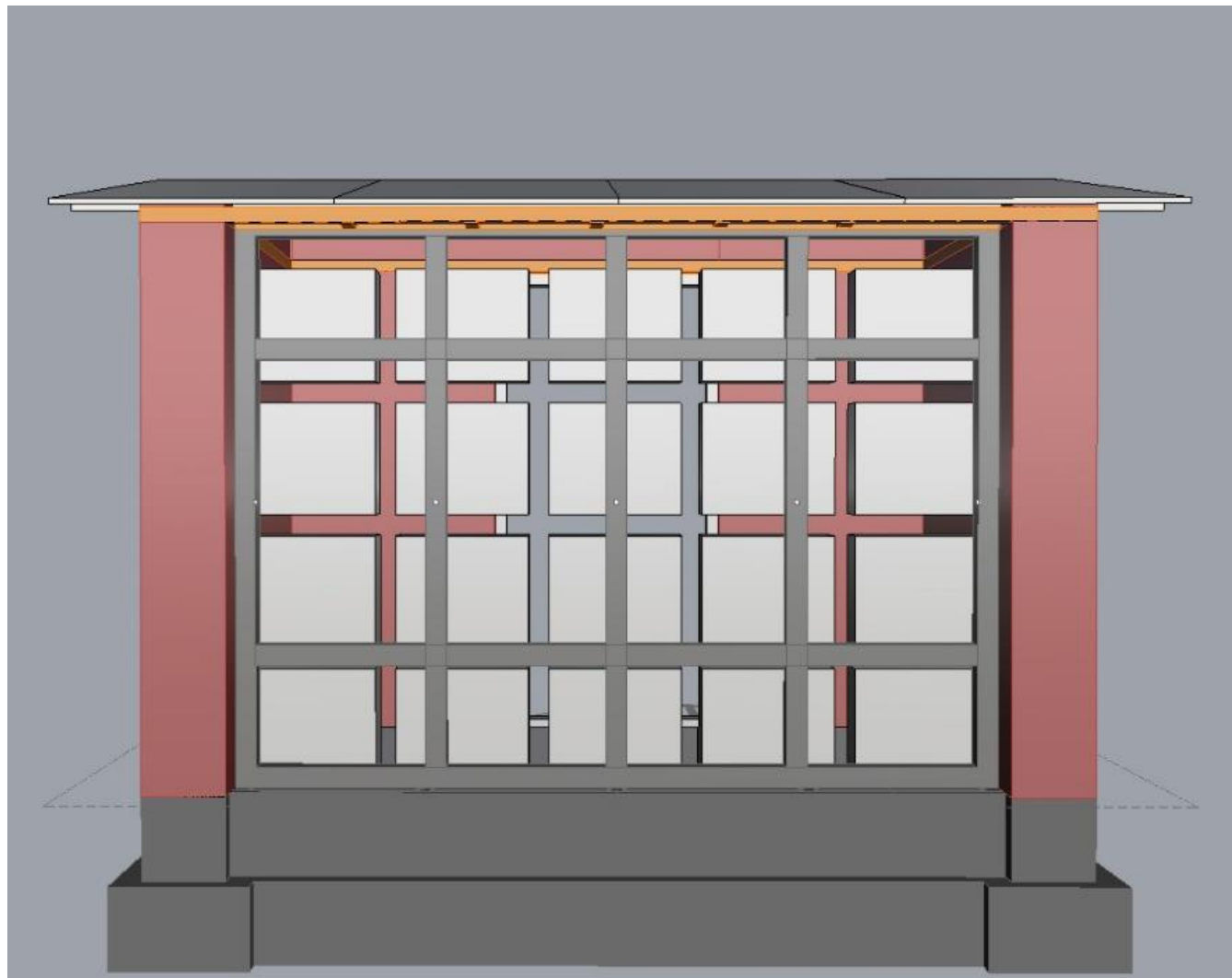
Solar Car-shed Features

- Solar mounting structure doubling as car-shed
- Will power HIAL's construction activities
- Powering the current electric bikes and electric car at campus and other future electric vehicles

Battery House



Battery House 3D



Battery House Features

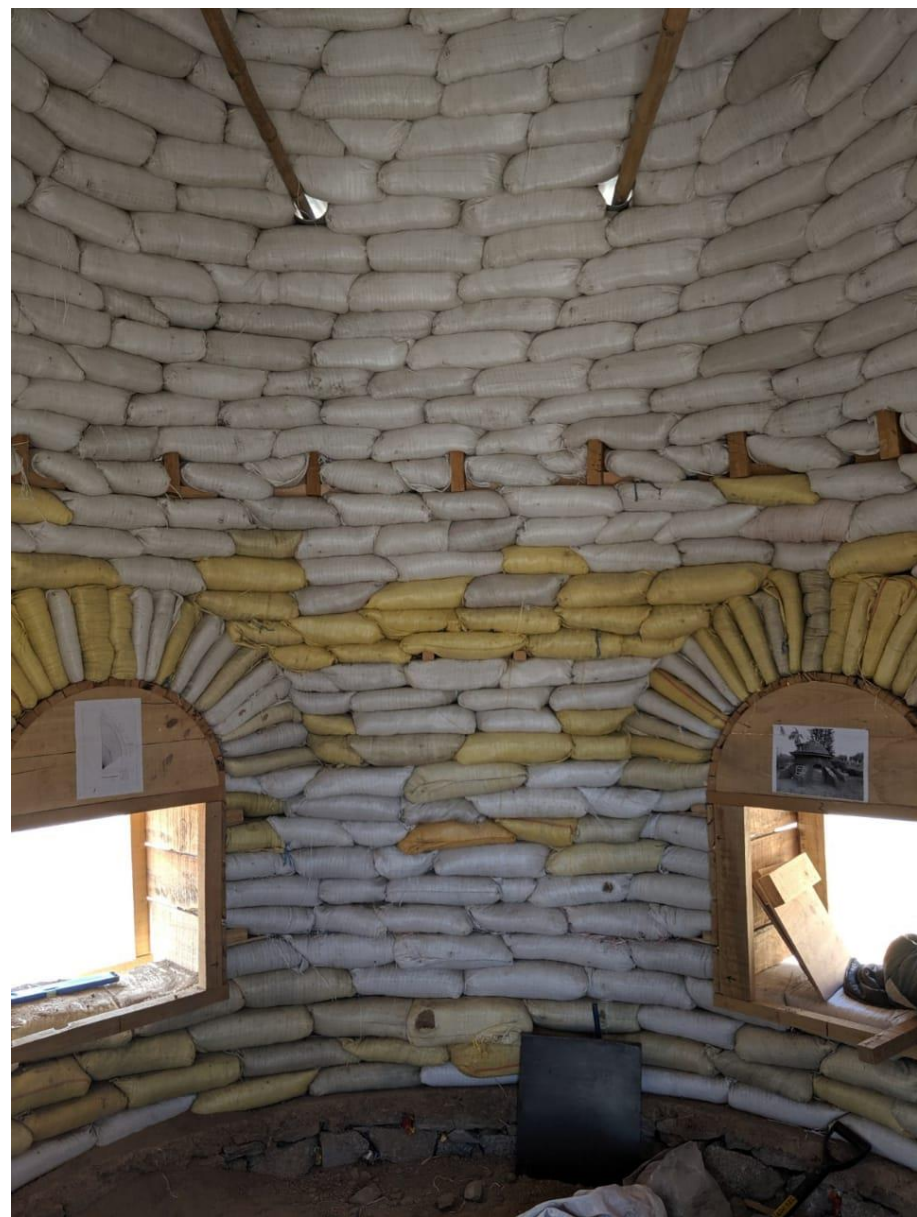
- Passive Solar Heated to maintain Battery Temperature
- Full scale experiment of Batteries as Thermal Wall
- Solar Panels as light, insulative and power generating roof
 - Reducing the dependency on wood
- A model that can be replicated for Army Guard House (Santri House)
 - many of them die due to fire accidents

Earth Bag Dome



Earth Bag Dome Features

- Natural and local material building technique
- Low embedded energy
- **Upcycling of waste cement bags**
- Serves as Green room for the amphitheatre



The Beginning...

