

RP1011

# SUSTAINABLE AND AFFORDABLE LIVING THROUGH MODULAR, NET ZERO ENERGY, TRANSPORTABLE, AND SELF-RELIANT HOMES AND COMMUNITIES

## Snapshot

The objectives of this project are to explore through integrated design sustainable Pods with a focus on delivering a cost effective product to the market for off-grid and urban applications. Further, the project seeks to find how these dwellings are best integrated into urban areas in terms of their relationship to energy, water and waste utilities.

The project is directly focused on achieving low carbon and affordable living goals.

## Outcome

It is expected that the project will deliver the following outcomes:

1. A sustainable, net zero energy design of prefabricated/modular home units (Pods) that suit immediate market demand for different climates and locations.
2. A decision making process and pre-optimized designs of Pods depending on location/climate, on grid off grid options, and users' behaviour (energy and water demand).
3. Specific solutions and designs for (urban and rural) off-grid community scale settlements using the prefabricated home units (Pods).
4. A framework for a whole system design approach for developing

sustainable affordable mass-housing, which can offer continual assessment and evolution possibilities for existing designs and technology integration strategies for future growth.



## Integrated Building Systems

### 3. Mainstreaming low carbon buildings

#### Project Leader

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#### Partners

Nova Deko; UNSW

**PROJECT START DATE: JAN-13**

**PROJECT DURATION: 3.5 YEARS**