## NEV Member Building Meetings First one – 4th Sat of month (to begin with)

To assist members designing their home – non-members welcome

#### John Shiel

Has an Energy Efficiency business; Author of Cooling Your Home;
Former Civil Engineer with PhD in retrofitting houses for climate
change and scarce resources; Former IT consultant; Convener, Stage
2 Building Standards Working Group; Living in a cluster on site;
Helped with original building standards; On Legal and Finance and
Smartgrid groups

Please note – we are recording these presentations for others (we will save the questions and answers). Turn off your screen if you wish

## Agenda

- 1. Please note we are recording this for others
- 2. Acknowledgement of country
- 3. 1:05pm Next meeting 4<sup>th</sup> Sat in March 26/3/22
- 4. 1:10pm Deb and Dan Mohr's house & Q&A
- 5. 2:10pm Bio-break
- 6. 2:20pm Variety of houses in Stage 1
  - Earthwalled (rammed earth, super-adobe), hempcrete, strawbale, timber stud, brick veneer, reverse brick veneer, computer-cut timber
- 7. 2:40pm Workshop breakout rooms to discuss your house
- 8. 3pm Final Q&A –house plans, ideas
- 9. 3:25pm Closing round

## 2. Acknowledgement of country

I acknowledge the Guringai and Darkinjung people, the traditional owners of the land on which I live, and the owners of the lands of all attendees, and pay my respects to the Elders past and present.

## 3. Next meeting

- 4<sup>th</sup> Sat
- 26/3/22
- Another member house, plus an expert in sustainable building design.

#### 4. Deb and Dan Mohr's house & Q&A

 PH drawbacks – high insul; vapour barriers; filter brings in smoke

## 5. Bio-break

## 6. Variety of houses in Stage 1

- Earthwalled (rammed earth, super-adobe)
- Hempcrete
- Strawbale
- Timber stud
- Brick veneer
- Reverse brick veneer
- Computer-cut (NC) timber

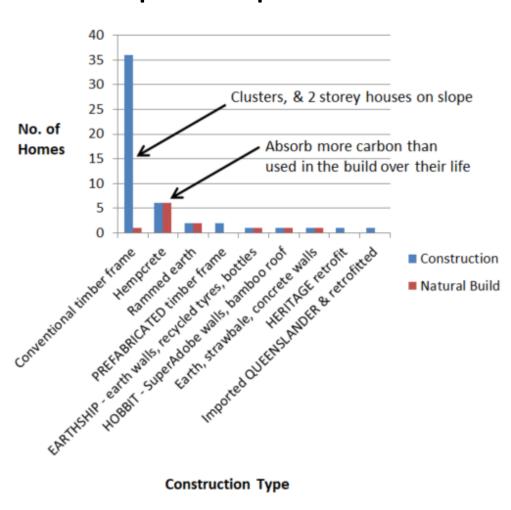
## Stage 1 homes

- Our building standards are key to delivering on our vision & mission
  - Our values include using energy efficiently (CMS) more sustainable homes, less air conditioning
- 50 homes have achieved
  - Average of 7.7 stars NatHERS rating
  - Average of 6.2 kW of PV
  - Floor area av. 129m2
    - 66% below 150m2 preferred maximum
      - Small homes are more affordable, and use less energy

## Variety of houses

## Due to our performance-based building standard which is not prescriptive

Туре	No.	Natural Build
Conventional timber frame	36	1
Hempcrete	6	6
Rammed earth	2	2
PREFABRICATED timber frame	2	
EARTHSHIP - earth walls, recycled tyres, bottles	1	1
HOBBIT - SuperAdobe walls, bamboo roof	1	1
Earth, strawbale, concrete walls	1	1
HERITAGE retrofit	1	
Imported QUEENSLANDER & retrofitted	1	
Grand Total	51	12



## Conventional timber frame













### Hempcrete

Absorb more carbon over its lifetime than it uses – Our CMS aspiration







## PREFABRICATED timber frame





## Rammed earth





# EARTHSHIP - earth walls, recycled tyres, bottles

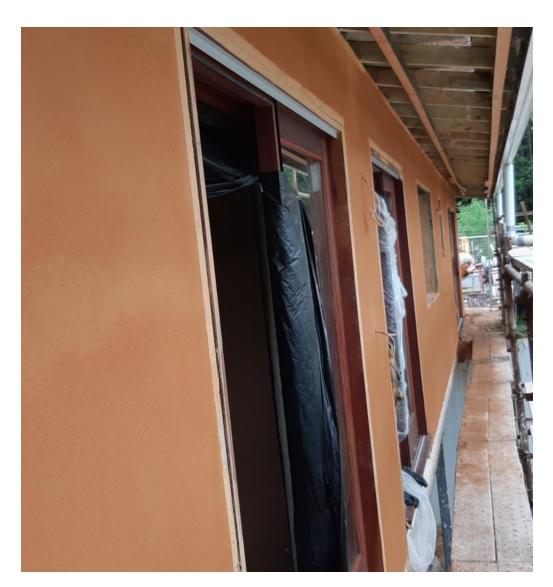


## HOBBIT - SuperAdobe walls, bamboo roof





## Rammed Earth, strawbale walls



## **HERITAGE** retrofit



## Imported QUEENSLANDER & retrofitted





## 7. Workshop

- Breakout rooms
  - to meet others interested in building in the village
  - discuss your ideas
  - bringing questions back to main room

### 8. Final Q&A

- Questions on any house plans
- Issues?
- John S
  - Max and Tina share with son; Clair to share with sister
    - Issues material shortages
      - partner with hempcrete supplier; NEV could get 2<sup>nd</sup> hand licence and demolish houses
    - Builder shortage
      - NEV will ask additional builders to visit site for Clusters and see if they wish to be involved
- Megan
  - Ruth; Rod has been sampling different types of houses stay in cluster, hempcrete, micro-climate (humidity, heat)
- Heather (shipping containers)
  - Simon (shared house), Mary-Lou Hansen, Adam & Sierra (family)
    - Lou said hempcrete overseas was better quality
- Bon
  - Linda, Richard Denham cost of materials, builders,

## 9. Closing round