Our Climate Friendly Home

Our home is a 2-storey rendered strawbale house, with a concrete slab floor and timber framing. The strawbales are not loadbearing. We have three bedrooms, one bathroom… and two kids. The floor size is 120m^2 (130 including verandah), and the house cost us around $100,000 to build ourselves (not yet finished).

Our electricity use is between 4 and 8kwh per day and the internal house temperature ranges from 15 (winter) to 22 (summer) with minimal energy input. We have a large bush garden – kept trimmed by visiting wallabies, possums and cockatoos.

Energy saving features include the following:

Design

- Strawbale = sustainable building material (cement-lime render).
- Owner-builders (inexperienced) = square and simple shape
- Passive solar design
- 2 storey = smaller footprint, more retained bush, less heat loss.
- Recycled timber framing, windows, doors (where possible)
- Double-glazing
- Locally made kitchen - local timbers
- Tung oils, low VOC paint, wool carpet
- Fire safe = light colour, low roof angle, no gables, 20,000L tank water

Technology

- Quantum heat pump (hot water)
- Induction cooktop
- Marmoleum flooring
- USB tuner for TV (dual purpose computer)
- Petrol pump and fire-fighting equipment

Household Practices

- Vegie garden, herbs and fruit trees
- Composting
- limit use of heaters and car
- energy efficient light bulbs
- home brewing, jams, preserves
- washing machine = cold wash only
- hot water bottles and flannelette sheets in winter...
- recycling
- op-shopping
- re-use water in summer
- buying local produce
- walk/bike/bus commute to work
- cloth shopping bags and re-use of plastic bags

Our next Steps

- finish building house...start building shed
- solar panels
- draught-proofing
- final coat of render
- add garden water tank
- fireproof window shutters
- upgrade freezer and washing machine (when they wear out)