

My Climate Friendly Home

Bought in 2005, my home is a 1950s 2-bedroom weather-board house with tiled roof having an extensive garden space.

Despite its cold siting, I have managed to reduce annual electricity consumption from 5,800 kwh to 2,000 kwh within a period of four years (2005 to 2009) - through a thorough solarisation / insulation program plus a number of other steps as outlined below.



Design

- Have made best use of home's best features, despite its generally poor passive design
- Depending on season I use different living spaces in house rather than use unnecessary heating / cooling
- Have a cool room for food storage under house - fully insulated via batts and polystyrene

Technology - energy & water supply

- Solar provides all hot water for 60 - 70% of the year, minimal electric boosting used at other times
- Solar power installed in 2008. (1 kilowatt, with 2 kilowatt inverter)
- 4,000 litre rainwater tank recently installed under house

Technology - energy & water saving

- Ceiling insulation to R3.5
- Underfloor insulation R3.5 batts + recycled polystyrene.
- Low-flow showerhead
- All lighting via efficient bulbs
- No unnecessary technology - eg dishwasher or clothes dryer.
- Windows in living area insulated with lined curtains & pelmets.
- Hood over ceiling exhaust fan reduces heat loss
- Washing machine set to rinse only once
- All appliances having stand-by power are switched off after use

- Space heating delivered via small heat pump plus occasional use of wood heater. LPG gas for cooking. Small instant heater in bathroom. Bedrooms etc not heated.

Household Practices

- Chickens provide eggs and manure
- Orchard fruit and nuts. Soft fruits and veggies grown under nets
- Jam cordial and wine produced. Some veggies also preserved
- All organics are composted
- Attempt to buy only seasonal foods and recycle wherever possible
- Make my own laundry detergent and use home made house cleaning agents

Next Steps

- Another 1 kw of solar power
- Some form of double glazing in heated living space
- Thicken ceiling insulation
- More work on draught exclusion
- Feed tank water to laundry taps
- Grey water recycling

