



# Eco-Solar Home Tour 2021

Sunday 6 June, 3:00 to 3:40 pm

## Creekwood Chappelle NZE Home



*Butterwick*



*Linh Allen*  
SNOWFLAKE PHOTOGRAPHY



**Tour Day:** Sunday 6 June  
**Time:** 3:00 to 3:40 pm  
**Hosts:** Homeowners  
**Energide Rating:** 0 GJ/year

Net Zero construction is a journey; this house is an example of one path. Although it looks like all the rest of the homes on the street it runs much differently.

### Why people need to see your home

- Cold climate air source Heat Pump.
- Provides heating and cooling to the home.
- The heat pump uses a lot less electricity than a standard furnace – making it a perfect fit with the solar energy.
- This home has a 13.7 kW solar system
- Two Sunnyboy inverters in the furnace room
- Home monitoring system
- Urban Cultivator
- The size of a bar fridge that sits in the kitchen island.
- Access to grow some of my own food.





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## Creekwood Chappelle NZE Home

### Why is this home on the tour?

In the beginning I was curious to see how a net zero home would look like in suburbia. Would my home look like all the others? Could you tell it was different? I suppose I wanted to see how a production house like mine would fit into the net zero framework. Selecting the features for net zero was easy – I went with the specification from my builder. There are many ways to reach net zero and I wasn't about to re-invent any wheels. I added a couple of personal touches like the urban cultivator and wood burning stove and then we built the house. Our home was built using efficient practices like factory panel construction which creates less waste and lowers the carbon footprint of the construction process.



### Features that save on energy

- Air source heat pump – heating & cooling system
- Air source heat pump – hot water tank
- Solar panels
- All light fixtures run on LED bulbs



### Features that save on heating

- Heat Recovery Ventilator
- Insulation – spray foam throughout house including attic and under slab

### Features that save on water use

- Low flow toilets 4.8L
- Low flow showerheads
- Drain water heat recovery unit – 50% efficient

### Features that save on waste generation

- Compost, indoor vermiculture and exterior composts
- urban cultivator – food production



### Features that save on emissions

- No gas line inside the house – This house is completely electric
- Landscape and food production features
- Permaculture will be highlighted in the landscape design.