



# Eco-Solar Home Tour 2021

Sunday 6 June, 1:00 to 1:40 pm

## Cromdale NZE Retrofit



*Butterwick*



SkyFire Energy  
Solar Energy Systems



*Link Allen*  
SNOWFLAKE PHOTOGRAPHY



Tour Day: Sunday 6 June  
Time: 1:00 to 1:40 pm  
Hosts: Homeowners

### Summary

- This is a NZE retrofit of a 1936 house.
- Mitsubishi heat pump, AO Smith heat pump hot water, drain waste recovery system
- 9.2kW solar on the garage
- Induction cooktop



### What are the main things people will see at your home?

- Heat pump has been operational for a year, we will be able to show how much money we have saved by turning off natural gas
- They will see the solar system but not the inverter, the inverter is in the garage and not accessible (who needs to see an inverter anyway)
- The air source heat pump - both internal and external unit
- The air source hot water heater and drain waste recovery
- We will have our Solar Edge Energy Monitoring system for people to explore

### Are there main items that they can't see?

- Insulation
- Inverter



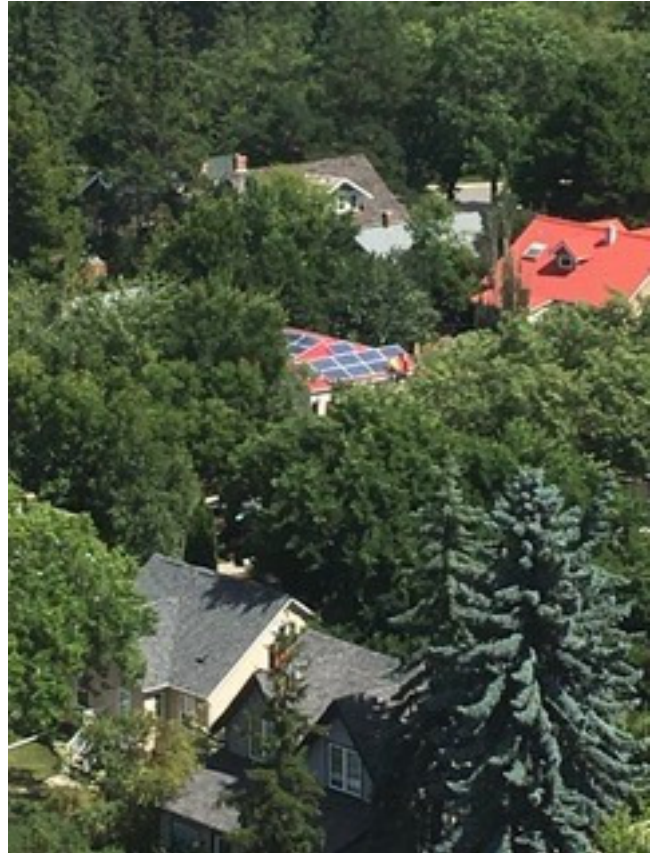


# Eco-Solar Home Tour 2021

## Cromdale NZE Retrofit

### Why is this home on the tour?

This is an 80-year old home that no longer uses natural gas as an energy source. In December of 2018 we installed a Mitsubishi air source heat pump. We have an heat pump hot water heater and an induction stove top. We also have a drain water waste recovery. In 2017 we upgraded our 2.5kW to a 9.2 kW solar system to accommodate going off gas. The solar faces south, east and west. We have a wood stove that is used extensively all winter to burn biofuels. We renovated the main floor, adding insulation, we put cellulose insulation in the attic and fibreglass on the walls on the second floor. This will not be highlighted on the tour but we are happy to talk about it. In addition, we have a pesticide free lawn, a fantastic compost pile, and a lot of pea and pumpkin plants.



### What features save on energy costs?

- 9.2 kW solar system
- Air source heat pump for heat and water
- Drain water heat recovery
- Wood heat

### What features save on water costs?

- Low flow toilets, showerhead, high efficiency washing machine and dishwasher

### Are there any other special features you want to highlight?

- Permaculture garden
- Standing seam metal roof - no waste from re-roofing and the roof can be recycled at the end of life. Roofed right over the old asphalt.
- 93 year old home that is renovated to 2109 standards, reusing as much material as we possibly could.

