

# **Eco-Solar Home Tour 2025**

Sunday 15 June, Noon to 5 pm

### **Chinook Park NZR Retrofit**

Tour Day: Sun 15 June Address: 104 Chinook Drive SW Hosts: Homeowners Parking: Street parking available Energuide Rating: 118 Gj/yr preretrofit. Post retrofit TBD.



# Summary: Why come see this home?

- Deep-energy retrofit done while the home is occupied.
- Mid-50's common 4-level split layout.
  - Asbestos stucco required an encapsulation approach.
- Commonly available/Alberta-produced materials.
- Above-grade exterior insulation uses a box-beam supported wall.
- Below-grade rigid insulation via Hydrovac excavation.
- All-electric HVAC replacements, no more natural gas service!
- Clever approaches to air sealing.

• Fun in the garden: rainwater management, hardy fruit trees & shrubs, bees & chickens, composting.

• Future-proofing: Electrical upgrades for solar & EV charging.

### What will people see and learn about at your home?

- How to deep energy retrofit, if you don't want to move out.
- Window detail options in retrofit deep walls.
- HVAC: Cold climate air source heat pump, heat pump hot water heater, energy recovery ventilator for continuous ventilation
- Electrical upgrades for future solar/electric car charging





## Eco-Solar Home Tour 2025 Chinook Park NZR Retrofit

### Why is this home on the tour?

This 4-level-split single-family house, built in a common style for the neighborhood, is an example of a mostly practical approach to deep energy retrofitting. People who live in this style of house complain about frozen floors in the bedrooms above their uninsulated garage. We started down this path in the search of comfort in a city with 8 months of heating and started with the garage. After a few years, we moved on to doing the whole house insulation and HVAC work.

We chose materials that were easily sourced and reasonably hardy against Calgary conditions (hail!). The exterior wall framing approach provided level and plumb surfaces for finishing despite existing wall irregularities. The HVAC upgrades improved indoor air quality by adding continuous ventilation and bathroom exhaust and added air conditioning capability for summer heat.



Best of all, it is now comfortable inside on the coldest days.

### What features save on energy costs?

- Exterior retrofit of 8" ~R32 addition of cellulose insulation.
- Exterior retrofit 4" basement insulation
- Triple-pane windows
- Heat pump water heater
- Energy recovery ventilator
- Main heat source air source heat pump

### What features save on water costs?

- Low flow toilets
- Downspouts directed to tree/plant beds
- Clover-grass lawn mix
- Drought-tolerant perennials
- No more diapers kids are growing up.

### **Other features**

• Cold-hardy fruit trees & shrubs, chickens, beehive, rainwater collection.

