

# **Eco-Solar Home Tour 2021**

Saturday 5 June, 4:20 to 5:00 pm

## **Blatchford NZE Home**

Tour Day: Saturday 5 June Address: 4:20 to 5:00 pm Hosts: Carbon Busters Energuide Rating: 0 GJ/year

# Summary points why people need to see your home

• Blatchford's first net zero energy homes connected to the District Energy Sharing System geo-exchange

• Canada's largest community with a carbon-neutral target



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

- Superinsulated walls, windows, air-tightness, net zero solar PV
  - Superinsulated basement
  - Wiring for electric vehicle (EV) charging
  - Comes with a net zero laneway house
  - o 12" exterior walls
  - Superinsulated basement using SICS system
  - Connected to Blatchford Renewable Energy Utility

District Energy Sharing System delivers COP of 5 (500%) for heating, COP of 9 (900%) for cooling

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

- Double stud superinsulated walls
- Heat pump connected to District Energy Sharing System
- Solar PV with solar-oriented shed roof
- Superwindows
- Heat pump water heaters
- View of historic Blatchford Control Tower

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

- $\circ$  R-80+ roof insulation
- o R-45 walls and R-43 basement walls
- R-18 slab insulation.
- $\circ$  3-foot overhangs on south maximize summer shading



# Eco-Solar Home Tour 2021 Blatchford NZE Home

### Why is this home on the tour?

Edmonton's new walkable community: 50 meters to a playground, 150 meters from a community fire pit and warming centre, and 300 to 350 meters to the future LRT stop and Blatchford Town Centre. These homes are energy efficient, renewably powered, and zero carbon for operations with no furnace, oil, or natural gas. Solar roofs are angled in two ways to collect maximum sunshine and walls are designed to reduce thermal bridging with insulation and fibreglass frame windows. The homes are also fitted with custom designed kitchens with quartz countertops, vinyl plank flooring, and a master bedroom with an ensuite and walk in closet on the main floor. Laneway homes are included on corner lots ready to be rented. These homes are part of Blatchford's new DESS (District Energy Sharing System), with connection to the Blatchford Renewable Energy Utility, featuring over 500 boreholes 400 feet deep under the Blatchford Park and Lake. This geo-exchange system in combination with a ground-source heat pump allows "efficiencies" of 500% for heating and over 900% for cooling.

### What features save on energy costs?

- Walls; R45, Roof R80+
- Superwindows; enhanced thermal comfort, insulated for comfort and sound
- LED Lighting; dark sky compliant exterior lights

### What features save on water costs?

- 3 L: Toilets
- Energy efficient shower heads
- Rain barrel with each home

### **Other special features**

- Net zero laneway homes on corner lots
- Large outdoor patio on second storey
- Wiring for Electric car (EV) charging
- Ground-source heat pump
- Heat pump Dryers











5 June 2021

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