



Eco-Solar Home Tour 2022

Sunday 5 June, Noon to 5 pm

Glenora NZE Garage Suite

Tour Day: Sun 5 Jun

Address: 10615G

137 St NW

Hosts: Homeowners

Parking: on street

Energuide Rating: n/a



Why people need to see your home

- A garage suite built with sustainable practices, including location (near Bus Rapid Transit & bike lanes) design, demolition, materials chosen, and ongoing operation of the suite

What will people see and learn about at your home?

- Passive solar design
- Solar PV system
- Larssen Truss walls (through photos, video)
- Lower embodied carbon materials where possible throughout build, including reclaimed and recycled materials

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

- Designed to maximize solar energy (passive and active solar)
- Sustainable materials
- Food forest designed with permaculture principles

Are there main items that they can't see?

- Wall/insulation design: Larsen Trusses (will have pictures)
- Foundation design (screw piles + grade beam, ICF)



Butterwick





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Glenora NZE Garage Suite

Why is this home on the tour?

This garage suite is a great example of increasing density in a mature neighbourhood and using best practices for energy efficient design and low carbon building. This is a new build with more than one purpose: a garage for the property owners, and a place to live for the tenants. The tenants' rent will pay for the mortgage, and the solar panels will cover electricity needs for the main house, garage, and suite.

What features save on energy costs?

- Insulation: Larsen Truss wall system wraps around the entire building
- Passive solar design (lets solar heat in the winter, blocks it in the summer)
- Solar generation (sloped roof faces the south, 36 solar panels on a shed roof)
- Air source heat pump air and hot water, no gas line to the building
- Energy efficient appliances, LED lighting
- Sustainable practices for the build and demolition for carbon capture, choice of lower-embodied-carbon materials as much as possible
 - Completed demolition ourselves to maximize recycling and salvaging (gifted and sold lumber, kept scraps for burning, recycled shingles and metal). Minimized waste in construction by salvaging, gifting, saving offcuts for burning
 - Some materials/items salvaged elsewhere for the build:
 - Flooring
 - Appliances
 - Some lighting and plumbing fixtures
 - Otherwise ensured low carbon materials in the build: wood and engineered wood framing and cladding, cellulose insulation plus next gen pink insulation; ECO mix concrete from Lafarge

What features save on water costs?

- High efficiency toilets & fixtures
- Rain barrels
- Solar powered electricity for heating water

Other special features

- Lot has small food forest on front lawn
- Water harvesting for extensive gardening on lot

