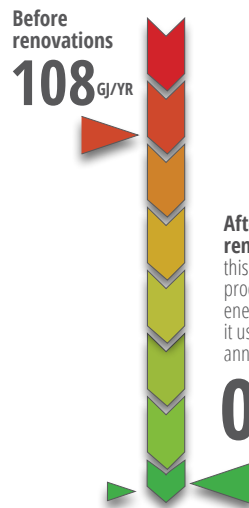


**Renovator** Peter Darlington, Solar Homes Inc.

**Service Organization** 4 Elements Integrated Design

**Energy Advisor** Cooper Le, 4 Elements Integrated Design

**Net Zero Pilot Home** Calgary, AB (Climate Zone 6)



## NET ZERO RENOVATIONS PILOT HOME POST-RENOVATION DETAILS

### BUILDING ENCLOSURE

**Windows:**

Lux Windows & Glass, Triple Glazed Low-E

**Walls:**

R24 EPS added to exterior

**Ceiling:**

1.5" 2lbs spray foam, R60 Blown in

**Foundation:**

R20 XPS added to exterior (to 12" below grade)

**Envelope:**

34% better than NRCAN reference house

**Airtightness (ACH @ 50 Pa):**

Pre-reno 5.22 → Post-Reno 1.79

### MECHANICALS

**Fuel Source:**

All-Electric

**Heating & Cooling:**

Daikin ASHP & Electric Furnace

**Water Heating:**

Electric heat pump

**Ventilation**

Greentek PH7.15ES

### RENEWABLE ENERGY

**PV System:**

12.7 kW Canadian Solar PV array

**Energy Monitor:**

Sense



### Homeowner Testimonial

*"As a scientist, I had become very uncomfortable with my carbon footprint, and had decided it was important to me to get my home to net zero. Solar Homes was easy to work with, straightforward with their advice and approach to the problems we encountered, and I am happy and excited to have achieved my goal (and the house looks great!)."*

\*Utility cost savings based on EnerGuide energy profiles and assumes the following utility rates: Natural Gas: \$3.98/GJ plus carbon price: \$1.58/GJ \$40/month admin. Electricity: \$.08117/kWh and \$.14/kWh plus \$6/month admin. Strategic electricity rate shifting during times of high generation assumed, per renovator's recommendation to the homeowner to generate income stream.