

Upper Rossland home goes all-electric with solar & heat pump



Kathy and David's 20-year old home is perched up above a street in historic Upper Rossland. With a timber frame, cedar siding and rugged angles, it suits the mountain setting well. And with over 3,000 ft² of floor space, you might expect a mountain of a utility bill—but that's not the case.

Large windows provide lots of passive solar warmth, and in-floor radiant heating provides efficient comfort. With low-e windows and high R-value insulation, their home is well-sealed against drafts.

While the home is comfortable, Kathy and David started to feel uncomfortable about the natural gas boiler. The desire step back from fossil fuels motivated them to look into a heat pump, and to explore whether solar panels would make the switch affordable.

That's when they turned to **Retrofit Assist**.

“We wanted to make the world better, to do the right thing. Retrofit Assist really helped navigate the complexities.”

—Kathy

Air tightness

1.4 ach

Energy use

↘ **67%**

Carbon pollution

↘ **98%**

Rebates earned

\$5600

Kathy & David's Journey with Retrofit Assist

Initiation	<p>Kathy and David wanted to remove natural gas from their home and to add a heat pump to provide cooling in the summer.</p> <p>They secured 1 of 50 spots in the Retrofit Assist pilot intake.</p>
Evaluation	<p>Retrofit Assist got things started with an EnerGuide home energy evaluation from a preferred Energy Advisor.</p>
Renovations	<p>Choosing from Retrofit Assist affiliated contractors, they hired Micah's Plumbing for the recommended upgrades: a heat pump, upgraded ventilation, and removal of the old gas boiler (as required for access to CleanBC rebates). They also got quotes from Infinity Solar for solar panels on the house and garage.</p>
1x1 Support	<p>Retrofit Assist reviewed quotes and invoices to ensure they were reasonable and they could successfully apply for rebates.</p>
Wrap Up	<p>The work was completed in a year. A post-project EnerGuide evaluation confirmed the energy savings.</p>

“We desperately needed cooling. We're loving this heat pump! It's a massive difference to our quality of life, being cool and not breathing in wildfire smoke.”

— Kathy

Key Upgrades

Solar Panels

**10.92 kW
capacity**



Generating clean electricity lowers utility bills. Kathy & David could save up to \$1,500 on their 2024 utilities.

Heat Pump

at -8°C **244%
efficient**



Heat pumps are ultra efficient, replace both a furnace and AC, and this model pre-heats hot water.



“It is a timber frame, with all the beautiful structural components inside. My husband and I did all of the external siding ourselves.”

— Kathy

Contractors Spotlight



Micah's Plumbing, Heating & Cooling is a family-run company in Nelson, BC. An HPCN-registered contractor, they were hired to install the heating and ventilation equipment.

Infinity Solar began as **Kootenay Solar** in 2019 and has grown rapidly to serve Western Canada. They were hired to design and install the solar photovoltaic system.

Scott Hilder and **Raven Atherton** conducted the home energy evaluations, as Retrofit Assist in-house energy advisors.

“Micah’s crew was super respectful—of both your home and your time. You know they care about their work.”

— *Kathy*

The City of Rossland is an unassuming mountain town with golden ambitions.

An adventurous spirit helps explain why Rossland became one of the first cities to offer Retrofit Assist—part of the city’s commitment to go net-zero by 2050.

Over 100 residents have applied to Retrofit Assist. On average, homes become 30% more energy efficient after the program.

With heritage housing from the era of railways, gold mining and whiskey runners, deep energy retrofits will help ensure Rossland’s building stock is thriving for another century.

CITY OF
ROSSLAND

