

Retrofit Assist opens the door for rebates by attracting contractors to small BC towns.



Owner: Dave and Carolyn Reynolds

Dave and Carolyn Reynolds had done their research and knew rebates were available to replace the old HVAC system at their Rossland home. The only catch? The incentive programs all required a pre-retrofit EnerGuide evaluation—and at that time there were no energy advisors servicing the area.

“It was very difficult to arrange EnerGuide evaluations in Rossland back then,” says Dave. “Then I heard that the City of Rossland had partnered with Retrofit Assist and they were making them available. Once we had that EnerGuide evaluation, we were eligible for a whole series of rebates and eventually got \$21,000 back!”

Dave and Carolyn decided to replace their 1990s mid-efficiency gas furnace with a dual-fuel heat pump and to upgrade to a more efficient (but still natural gas) tankless water heater. They also installed a heat recovery ventilator for better air circulation and completed some air sealing themselves.

Energy use

↘ **40%**

Air leakage

↘ **9%**

Greenhouse gas emissions

↘ **74%**

Rebates Earned

\$21,000

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Retrofit Reassurance

It reassured Dave to know that Retrofit Assist's Authorized Contractors would meet all the requirements to qualify for rebates and were primed to expect work in the community after the program opened.

"They gave me a list of contractors and they were at the house within a week to provide a quote. My experience previously with contractors in the area is they're busy and it is difficult to get them to show up.

"We had the EnerGuide evaluation in January, and by October, Micah's Plumbing had installed the heat pump and hot water heater," says Dave.

On completion of the work, Retrofit Assist's experts were able to help arrange the post-retrofit EnerGuide evaluation and submit the correct rebate documentation. In the end, they were refunded \$21,000 by FortisBC, Canada Greener Homes and the City of Rossland.

Dave and Carolyn's energy bills are now a few hundred dollars lower each year. And they really enjoy the heat pump's cooling capabilities in summer. They're also proud to have reduced their home's energy consumption by 40 per cent and its greenhouse gas emissions by 74 per cent.



"A/C would have cost less but had more of a carbon hit. It felt worth putting in the extra dollars to get that environmental benefit."

— Dave Reynolds

Key Upgrades

Feature

**DIY
air sealing**



Weather stripping external doors and electrical receptacles reduced air leakage by 9% at low-cost.

Feature

**36k Btu/h
capacity**



This ultra efficient heat pump replaces a furnace and introduces air conditioning.

Dave & Carolyn's Journey with Retrofit Assist

Evaluation	Dave applied to Retrofit Assist, who arranged for an energy advisor to carry out the EnerGuide evaluation.
Contractors	Dave received a list of Retrofit Assist Authorized Contractors. He contacted Micah's Plumbing and Heating and soon had a quote for a Bosch Heat Pump and Bosch Condensing Gas Furnace and Boiler. The equipment was installed.
Post-project evaluation	A post-retrofit EnerGuide evaluation showed the house had dropped in energy usage from 123 to 74 GJ per year.
Rebates	After some delay due to "life getting busy", Dave was able to get support from Retrofit Assist to complete his rebate application package, helping him to receive \$21,000 in incentives from FortisBC, Canada Greener Homes and the City of Rossland.

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— Dave Reynolds



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.

Scott Hilder and **Raven Atherton**, Retrofit Assist designated energy advisors, conducted the EnerGuide evaluations.

F28o: Know Your Numbers

Every Retrofit Assist journey begins with an EnerGuide evaluation by an Energy Advisor, a report detailing the home's energy efficiency and which upgrades are recommended.

A key benefit of an EnerGuide evaluation is that it gathers most of the data needed to complete a Heat Loss Heat Gain calculation (known as an "F28o-12"). This allows an energy advisor and HVAC contractor to determine the house's energy performance and is crucial to optimizing the new HVAC system. It is also now required to access certain rebates in BC.

Dave and Carolyn's F28o-12 results showed their natural gas furnace was 40% larger than the house needed. This meant they could switch it for a smaller, more affordable heat pump that would be even more efficient to run.

Micah Pilipishen, co-owner of Micah's Plumbing, says this is often the case for customers replacing old furnaces.

"We require all our customers to have the heat loss and heat gain calculations now. Typically what happened in years previous is that everybody just went for oversized systems. Nobody did an actual load calculation, so now people can get smaller, more efficient furnaces and save themselves even more energy and money.

"That's the great thing about Retrofit Assist—participants already have the EnerGuide evaluation so we know how to size their furnace and ductwork appropriately."

— Micah Pilipishen

