

FortisBC Dual Fuel Heating System Offer

FortisBC Conservation and Energy Management

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July 2024

Agenda

- Introduction
- Offer Overview
- Rebate Requirements
- Documentation Requirements
- DSMally Mobile Commissioning App
- TAN Benefits
- Questions



FortisBC Dual Fuel Heating System Offer

- Adheres to the amended Demand Side Management (DSM) regulation that came to effect on January 1, 2024.
 - Enabled incentives for dual fuel space heating systems, with some regulatory parameters for certain Climate Zones.
- Aligns with the CleanBC roadmap.
- Supports FortisBC decarbonization and diversified pathway goals.
- Target audience: Natural gas customers looking to replace older, inefficient furnaces (10+ years old).

Program period: July 1, 2024, to December 31, 2027.



What is an energy efficiency program?

- Programs that contribute to reducing energy consumption through customer education and incentives for installing high-efficiency equipment, while also helping British Columbia achieve its climate action goals.
- FortisBC is investing \$627 million in natural gas energy efficiency programs from 2024-2027.
 - Including: gas heat pumps, dual fuel heating system offer, appliance maintenance, connected thermostats and more.
- Investing \$68 million in electricity energy efficiency programs from 2023-2027.





What does it mean to be regulated

- As a regulated utility, FortisBC must seek approval from the BC Utilities Commission for expenditures related to its energy efficiency and conservation programs, also known as Demand Side Management (DSM). This is a transparent, public process.
- Our role as a regulated utility includes:
 - Obtain necessary regulatory approvals
 - Comply with Commission orders
 - The amount of energy savings we achieve, impacts on the programs we offer
 - Evaluate Programs, submit annual reports, and document all data we get

DSM regulations parameters for Dual Fuel:

• COP of 1.5 in climate zones 4 and 5.





Rebate Offer

| Equipment Incentive | Incentive Amount |
|--|------------------|
| Home Renovation Rebate Program (HRR) | \$10,000 |
| Income Qualified Rebates Program (IQP) | \$15,000 |
| Indigenous Communities Conservation Program (ICCP) | \$15,000 |
| Northern Offer Top-up (CleanBC)* | \$3,000 |
| Municipal Top Ups | varies |
| Contractor Incentive | |
| Per install (paper commissioning sheet) | \$100 |
| Per install (mobile app commissioning sheet) | \$300 |
| Additional Incentives | |
| Certified Connected Thermostat | \$150 |

For any bonus offer, this is considered one upgrade.

*Eligible homes must be located north of and including the District of 100 Mile House (latitude 51.628°N)



Dual Fuel Rebate Requirements

Eligibility requirements:

- Must be a FortisBC residential gas customer.
- Must be replacing a natural gas furnace that is at least ten years old.
- Must be sized to function as the primary heating system of the home and serve the main living area.
- Invoices must be dated on or after July 1st 2024.
- Full replacement of the existing system with a qualifying dual fuel system.
 - The addition of an air source heat pump to an existing high efficiency furnace is not eligible.
- Installation with a **maximum** switchover temperature of:
 - Vancouver Island and Lower Mainland: 5°C
 - Southern Interior and Northern BC: 2°C and
- An eligible system must have:
 - minimum HSPF \geq 10.00 or HSPF2 \geq 8.5
 - minimum SEER \geq 16.00 or SEER2 \geq 15.2
- System installed by a Technical Safety BC licensed gas contractor who is a member in good standing of the Home Performance Contractor Network.
- Available for Revelstoke residential customers receiving piped propane supplied by FortisBC.



Mechanical Requirements – Heat Pump

The air source heat pump must:

- a. be sized to meet the heat demand at or below the required temperature set points,
- b. be installed in accordance with the <u>Heat Pump Best</u> <u>Practices Installation Guide for Existing Homes</u>,
- c. be a central ducted heat pump,
- d. undergo commissioning, and
- e. be included in the qualified systems list (must match all components).





Mechanical Requirements – Gas Furnace

The natural gas furnace must:

- a. be installed with a two-pipe direct vent system,
- b. be installed in accordance with the <u>High-Efficiency Furnace</u> Installation Guide for Existing Houses,
- c. undergo commissioning, and
- d. be included in the qualified systems list.





Mechanical Requirements - Thermostat

The thermostat must:

- a. be compatible with both the Heat Pump and the Furnace, and
- b. be capable of automatically switching between the heating systems based on programmable logic.





Documentation Requirements

- Customers must submit the following documentation during the application process:
 - Installation invoice
 - Heat Load calculation
 - Commissioning sheet
 - A photo of the two-pipe direct vent system (gas furnace) must be made available upon request.





Installation invoice

Must include:

- 1. Installation address
- 2. Installation date
- 3. Equipment model information, including system **AHRI number**
- 4. Gas permit number
- 5. Thermostat make and model
- 6. Cost of upgrades and installation
- 7. Confirmation of zero balance





Commissioning Sheet

Must be completed by the installation contractor upon completion of the install.

- All required data must be filled in.
- Commissioning sheet must be provided to customer.

Home Renovation Rebate

Dual fuel heating system pre-changeout and commissioning sheet (Keep this completed sheet with your dual fuel system)



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Why is commissioning important?

HVAC contractors are responsible for selecting a dual fuel heating system based on the homeowner needs and informed by load calculations and the ductwork capacity available from a forced air distribution system. Once the selected equipment is installed, contractors will start-up and commission the dual fuel (hybrid) system to optimize performance. The benefits of a property sized, selected and fully commissioned system include lower operating costs, potentially greater equipment longevity, and less maintenance over its lifetime. Additional benefits include improved home comfort, and a system that will run smoothly and quietly. Applicant instructions:

Submit a copy or photo of this sheet with your dual fuel system rebate application online at fortisbc.com/getrebat Gas Permit Number Contractor business name Customer info Customer First Name Customer Last Name Customer Email Customer Phone Installation Address City Province Postal Code BC New system AHRI Number Installation Date (CCCC/MM/DD) System Make Indoor Model Number Outdoor Model Number Furnace Model Number Pre-changeout assessment Existing heating equipment F280-12 Calculated Information F280-12 Verified Tool Utilized Natural Gas Furnace <90AFUE F280-12 Design Heat Loss (BTU/h) TECA - Heat Loss & Heat Gain Calculator Natural Gas Furnace >=90 AFUE F280-12 Design Heat Gain (BTU/h) Wrightsoft - Right-Suite Universal Propane Furnace Avenir – HeatCAD Volta Research – Volta Snap Heat Pump Rated CFM per Ton Sufficient duct capacity for heat pump? Duct airflow Evaluation Method Yes Existing Furnace Temp Rise and Clocking 324 or less 325-349 No No 350-375 376-400 Existing Furnace Blower Tables Flow Grid or Flow Hood Duct Size Tables 401 or more Dual fuel system commissioning Heat Pump Refrigerant Charge Type of Furnace Measure/Set Manifold Gas Pressure Verified Factory Default Modulating Furnace Inlet Gas Pressure (high fire) jwc. Adjusted Single stage Furnace Manifold Gas Pressure (high fire) Two stage Furnace Manifold Gas Pressure (Low fire) Clocked Meter Input (BTU/h) External Static Pressure (ESP) Temperature Rise (at high fire) Rise Range (as per manufacturer): Return Air Static Pressure Drop iwc. Supply air F Minimum Rated Temp Rise °F Air Filter Static Pressure Drop Return air °F Maximum Rated Temp Rise °F Total rise = °F A-Coil Static Pressure Drop iwc. Supply Air Static Pressure Drop jwc. Maximum Rated Total ESP (lwc.) Furnace air flow CFM of furnace (high fire) Thermostat Switchover Switchover Method Switchover Temperature Capacity Balance Economic Balance Outdoor Temperature Sensor (°C) Manufacturer Default Program Specified Deviation from Setpoint Eiltor Homeowner Educated (thermostat Homeowner Provided Materials (owner's manuals, Media type programming, maintenance, troubleshooting) warranty documents, commissioning sheet) Yes No Yes No Measurements MERV rating

Heat Load Calculation

- Heat load calculation must be completed prior to installation.
- Must comply with the <u>CAN/CSA F280-12 standard</u>.
- Home Energy Assessments are not valid these are approximations only (see Glossary in Energy Assessment Report).

The completion of a heat load calculation is required to ensure that the contractor has selected the proper equipment size.

Recommendation for sizing and selection: Natural Resources Canada <u>Toolkit for air source heat pump sizing and selection</u>

Requirements align with the current CleanBC requirements and methodologies.



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Contractor Spiff

Contractor spiff eligibility will include prescriptive requirements including:

- Contractors must sign terms and conditions
- \$300 per install available with mobile app commissioning
- \$100 per install available with paper commissioning sheet*
- Only installs that meet all program rebate requirements, including switchover set points, will be eligible for contractor spiff.



*Paper commissioning sheet refers to a digital or printed version of the FortisBC Dual Fuel Pre-changeout and Commissioning Sheet. Paper commissioning sheets will not be accepted after Dec 31, 2024. Proprietary and Confidential 15





- FortisBC is going digital with the new commissioning sheet mobile app!
 - Free
 - **Save time**: This is a faster, more convenient way for contractors to complete the prescriptive requirement for commissioning.
 - **Receive improved support**: Participating contractors will receive a digital copy of the installation report and commissioning document.
 - **Provide better service**: Improve customer service by delivering commissioning documents in a digital format directly to your customers.
 - Download the app "DSMally Canada" today!







Trade Ally Network

Marketing support ٠

Co-op advertising program: up to 50% reimbursement, up to a max of \$5,000 per year in 2024

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Ad tiles available

• Training support

- Co-op training allowance: up to 50% reimbursement, up to a max of \$1,000 per year in 2024
- Free TECA's Quality First[™] Heat Loss/Heat Gain course and calculator*
- Small Business BC Resources, such as talk to an expert session, market research, • strategy session for business growth, etc.

*First come, first served basis. Funding is limited.

Recruitment Support

Costs association with hiring a qualified gas fitter: up to 50% reimbursement, up to a ٠ max of \$2,000 per year





\$10,000 rebate on a dual fuel heating

and cooling sytem.

serviced. Visit fortisbc.com/service.

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Thank you

Energy at work K FORTIS BC"

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