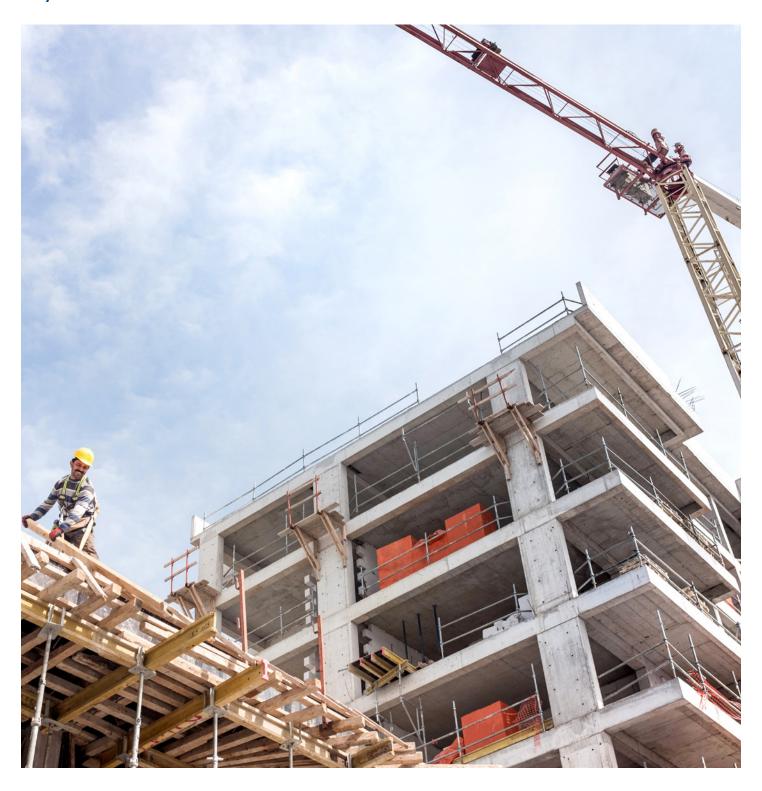


Participant guide

Commercial New Construction Program

July 2025



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Partners in energy efficiency

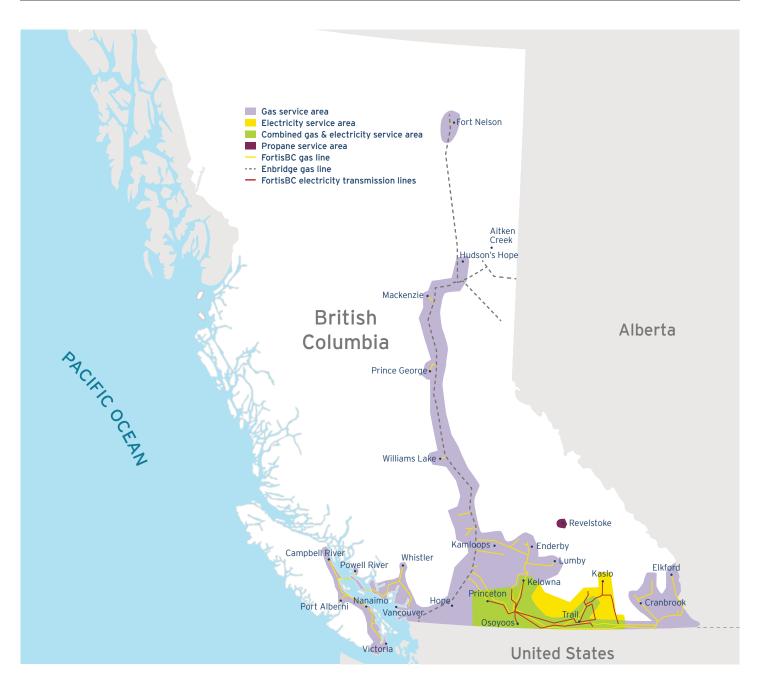
We're committed to helping customers lower energy use and associated emissions and support the province's roadmap to 2030. One way to achieve this goal is to encourage builders and commercial customers to construct high-performance, energy-efficient buildings.

We understand that standard energy-efficiency measures are not always sufficient for the complex and specialized requirements of commercial buildings. The Commercial New Construction Program addresses this by encouraging you to develop innovative, energy-efficient solutions tailored to the design of your new building or facility.

This guide provides an overview of the program, including details about the incentives, as well as the type of projects most suited for the program.

Step-by-step instructions on how the program works are also provided, along with answers to frequently asked questions. For full program details, we encourage all builders and commercial customers to review the eligibility requirements and terms and conditions available at fortisbc.com/newconstructionfunding.

FortisBC service areas



When does saving energy and emissions require a customized approach?

The Commercial New Construction Program encourages the construction of high-performance, energy-efficient buildings in British Columbia, helping you reduce energy use and associated emissions, lower operating costs, enhance occupant comfort and help B.C.'s climate action goals.

The program provides financial incentives for projects that either meet the requirements of the highest applicable levels of the BC Energy Step Code or demonstrate significant performance improvement over the British Columbia Building Code (BCBC). The incentive is based on a targeted level of energy performance, as measured by the building's total energy use intensity (TEUI) and leaves it to you and the design and building team to decide on how to achieve it, using energy conservation measures (ECMs) customized to your new building's design.

Participants must use the whole-building energy modelling to demonstrate that their design meets the targeted level of energy performance, and may use any materials, equipment or construction methods to do so, that meet the local code and this program's requirements.

To participate in the program, you must hire an energy modeller to perform a detailed energy model study to identify measures that will reduce gas and/or electricity consumption within your new building. Please visit for more information about energy modeller qualification.

Benefits:

- Take a direct role in reducing energy use and associated emissions.
- Improve the performance of your new building.
- Save money on operating costs.

ECMs may include:

- eliminating unnecessary energy use by shutting off idling or unneeded equipment through control systems
- implementing passive design strategies
- reducing the rate of energy consumption in low-occupancy periods
- using more efficient lighting, equipment and mechanical systems
- airtightness and high-efficiency heat recovery ventilation and energy recovery
- improving building envelope performance

Although this is not a complete list of the potential ECMs that can be included, it's easy to see how these types of measures can deliver energy and cost savings throughout a building's lifecycle.

This program may be modified or cancelled by FortisBC at any time. Visit fortisbc.com/newconstructionfunding for up-to-date information and full terms and conditions.

TEUI is a measure of the total amount of energy a building uses over the course of a year, per unit of building area. The metric considers all energy used in a building, including plug loads (e.g. lighting, appliances), mechanical loads (e.g. elevators, mechanical systems, fans) and other building loads (e.g. parking lighting and fans, commercial kitchens and pool loads). TEUI is measured and expressed in kWh/m²/year.



Is this program right for you?

We offer the following programs to encourage high-performance commercial new construction:

- The Commercial New Construction Program provides performance incentives for Part 3 buildings, with targets based on the building's major occupancy classification(s):
 - Buildings/major occupancies subject to the BC Energy Step Code must achieve the highest step available:
 - · Retail/office = Step 3, Multi-unit residential building (MURB)/hotel/motel = Step 4.
 - · Passive House Certification also satisfies this requirement.
 - Other buildings/major occupancies must demonstrate at least 30 per cent performance improvement over National Energy Code of Canada for Buildings (NECB) 2020 or BCBC or higher, using a reference building.
 - · Other modelling standards (e.g. ASHRAE) are not permissible.
 - Mixed-use buildings must meet blended requirements.
- Commercial product rebates for advanced-efficiency gas and electrical equipment are available for buildings not pursuing a whole-building approach to energy efficiency.

Projects where electricity will NOT be supplied by FortisBC, or the municipal utilities of Summerland, Penticton, Grand Forks or Nelson Hydro, should use gas as the primary energy source (e.g. more than other sources such as electricity) for two or more of these end uses:

- space heating
- ventilation heating
- domestic hot water (DHW)

Use of gas systems can mean one of the following:

- If the only fuel is gas, it must be used in gas absorption heat pumps for heating, DHW or ventilation (e.g. gasfired heating or DHW boilers, make-up air units, air handling units, etc.)
- For dual fuel systems (electricity and gas hybrid systems), both of these conditions must be followed:
 - · Gas heating equipment must be sized to be capable of operating the building/facility in the absence of the other system, (e.g. gas energy systems are sized for peak load)
 - · Under the assumption of a normal weather year, the gas-based heating system will be required to operate to some capacity.

For MURBs, corridor ventilation may serve as the ventilation heating end use.

The Demand Side Management regulation criteria should be met for all equipment. For more information, please visit <u>fortisbc.com/accountmanager</u> to find an energy solutions manager, key account manager or technical advisor to discuss your project.



To help determine if our Commercial New Construction Program is right for you, consider the following:

☐ Is your project one of the following types of Part 3 buildings?

- commercial
- institutional
- light industrial (excludes buildings where manufacturing or industrial process occur)
- MIIRR

Note: While this program primarily supports Part 3 buildings, some Part 9 buildings—such as low-rise MURBs and small mixed-use buildings—may also be eligible, provided they meet all other program requirements, including modelling using Part 3 methodology.

Will the building receive gas from FortisBC and/or receive electricity from FortisBC, the District of Summerland,
City of Grand Forks, City of Penticton or Nelson Hydro?

Are you still in the pre-design or design phase (e.g. construction has not yet begun)?

Are you planning to design a building that will either meet the requirements of the highest applicable level of the
BC Energy Step Code (Step 4 for most, Step 3 for office and retail) or exceed BC Building Code performance or
NECB by more than 30 per cent?

Are you planning on, or considering completing, a whole-building energy model study to evaluate how your
proposed building will perform?

If you checked off each question, this program may be right for you. Review terms and conditions at fortisbc.com/newconstructionfunding.

If **NOT**, you may want to consider the various product rebates we offer for advanced-efficiency space heating, water heating, commercial kitchen equipment and more, at **fortisbc.com/findrebates**.

Visit <u>fortisbc.com/accountmanager</u> to connect with a key account manager, energy solutions manager or technical advisor for more information.

Rebates to encourage high-performance buildings

Improve energy efficiency. Optimize overall performance. Achieve cost savings.

This program provides capital financial incentives to cover a portion of the incremental cost to construct a building that meets the requirements of the top step of the BC Energy Step Code, or exceeds a 30 per cent performance improvement over the NECB 2020 or BCBC compared to a building that simply meets the minimum code requirement of the BCBC.

Projects must meet or exceed the targets outlined below. Mixed-use buildings are still eligible, and must follow the protocol outlined in the BCBC, its associated modelling guidelines and this program's guidelines.

The capital incentives are based on the target energy performance of the building and the square footage of the indoor floor area. Additional rebates are available for having an energy model completed and for mid-construction airtightness testing.

Capital incentives

Building type	BC Energy Step Code performance target	Incentive factor	Maximum rebate
Step Code			
MURB or hotel/motel	Step 4	\$2.50/sq. ft v.sq. ft	\$800,000 per project
Office or retail	Step 3	\$2.50/sq. ft. x sq. ft.	\$600,000 per project
Non-Step Code			
Other Part 3 buildings	NECB 2020 (minimum 30 per cent better than NECB 2020)	\$2.50 /sq. ft. x sq. ft.	\$800,000 per project



Additional rebates

Energy model rebate

The energy model rebate is intended to help offset the additional cost of adapting your energy model to meet the specific requirements of the program. This rebate supports the extra effort required to align the model with program compliance and review expectations.

Paid upon completion and approval of the energy model, the rebate is 50 per cent of the associated energy modelling costs for program participation, to a maximum of \$15,000.

Mid-construction airtightness rebate

The mid-construction airtightness rebate encourages you to identify air leaks early on, allowing for timely repairs and improvements to energy efficiency and comfort before the building is completed. The test should be performed after the installation of the air barrier component of the building envelope to help identify any problem areas while they're still accessible and lead to a more energy-efficient and comfortable building.

You may be eligible to receive 75 per cent of the cost of the mid-construction airtightness test, to a maximum of \$5,000. (Note: If multiple tests are performed in this stage while an issue is being investigated and remediated, the total cost of all tests can be submitted for reimbursement to a maximum of \$5,000.)

Airtightness testing requirements:

- Airtightness tests must be performed in accordance with BCBC Part 10 .2 .3 .5: ASTM E 779, "Standard test method for determining air leakage rate by fan pressurization" or, USACE Version 3, "Air leakage test protocol for building envelopes."
- Tests must use an induced air pressure of not less than 75 Pa.
- Results of the airtightness tests must be reported to FortisBC, not just whether it passed or failed requirements.
- Post-construction airtightness tests are mandatory under the BC Energy Step Code but are not eligible for a rebate. However, as a reminder, post-construction airtightness test results must be included in the final energy model using the procedure outlined in the City of Vancouver Energy Modelling Guidelines.

For more information about these additional rebates, visit fortisbc.com/newconstructionfunding.

How rebates are paid

Once eligible customers have met the required terms and conditions, and had their project approved by FortisBC, rebates will be paid in two or more instalments.

1. Energy model review and invoice submission

Once an energy model is reviewed and approved by FortisBC, the energy model rebate is paid based on the submitted invoice. You may receive 50 per cent of the cost of additional effort required to adapt the energy model to meet program requirements up to a maximum of \$15,000. This fee should be directly associated with the additional effort required for adopting the energy model to the program requirements and should be invoiced per program instructions.

2. Project progress - first instalment of the capital incentive

Once above-ground construction begins, the first instalment of the capital incentive—equal to 10 per cent of the total approved incentive, up to a maximum of \$25,000—is paid. This payment is issued after the completion of a model review, an attestation letter is submitted and approved and a detailed site review report, including photographic evidence of below ground completion, is submitted to FortisBC.

3. Airtightness testing

If mid-construction airtightness testing has been completed, you may submit the test results and the invoice(s) or progress draw for FortisBC review. If multiple tests are performed as part of mid-construction airtightness test, the total cost of all tests can be submitted for reimbursement in one submission.

These should be submitted after the mid-construction test for an airtightness rebate equivalent to 75 per cent of the test cost, up to a maximum of \$5,000.

4. Project completion - final instalment of the capital incentive

The remaining 90 per cent of the capital incentive is paid after the building construction and commissioning are complete, subject to a successful site inspection by FortisBC to confirm that the ECMs were installed as described in the energy modelling submission.

Capital incentive rebate calculation examples

Example 1

A 120,000 sq. ft. office building is constructed in Burnaby and is subject to the BC Energy Step Code. The plan for the building is to use distributed fan coil units connected to a central hydronic loop supplied by a combination of air source heat pumps with gas absorption heat pumps sized for peak loads, delivering space conditioning and DHW. The proposed building achieves Step 3 of BC Energy Step Code.

Area = 120,000 sq. ft. **Incentive factor** = \$2.50/sq. ft. (Step 3)

Calculation = 120,000 sq. ft. X \$2.50/sq. ft. = \$300,000

Beginning of above ground construction (10 per cent of total - capped at \$25,000) **\$25,000**

Project completion (remaining 90 per cent) \$275,000 Office building 120,000 sq. ft. Step Code 3 (\$2.50/sq. ft.)



Example 2

A 100,000 sq. ft. commercial building is built in Kelowna and is not subject to the BC Energy Step Code. Gas and electricity will be supplied by FortisBC. An energy study is conducted that suggests that it will be built to 52 per cent better than BCBC by implementing heat recovery chillers, LED lighting with advanced occupancy controls and heat recovery.

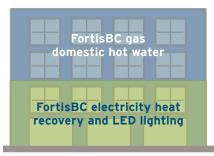
Area = 100,000 sq. ft. **Incentive factor** = \$2.50/sq. ft.

Calculation = 100,000 sq. ft. x \$2.50/sq. ft. = \$250,000

Beginning of above ground construction (10 per cent of total - capped at \$25,000) **\$25,000**

Project completion (remaining 90 per cent) \$225,000

Commercial building 100,000 sq. ft.



Program phases

The program comprises five distinct phases that, when successfully completed, will help your new building achieve enhanced energy efficiency, improved building performance, reduced associated emissions and long-term cost savings. Here's how it works:

Phase 1

Opportunity assessment

- contact FortisBC
- schedule kick-off meeting and receive application form
- sign incentive estimate letter to confirm participation

Phase 2

Energy modelling

- complete and submit energy model and supporting documentation to FortisBC for review (Note: At this stage, the building permit should be complete, or nearing completion.)
- · receive energy model rebate
- · receive final capital incentive rebate offer

Phase 3

Construction mobilization

- · begin site mobilization and below ground work
- submit attestation letter, detailed site review report and photographic evidence to FortisBC demonstrating project progress
- receive first instalment of capital incentive rebate (10 per cent)

Phase 4

Above-ground construction

- · construct building above ground
- · complete mid-construction airtightness testing
- notify FortisBC of project completion

Phase 5

Completion & site inspection

- FortisBC inspection and project review
- receive second instalment of capital incentive at project completion (90 per cent)
- start ENERGY STAR® Portfolio Manager® benchmarking

Phase 1: Opportunity assessment

- Step 1: Contact your FortisBC key account manager, energy solutions manager or technical advisor to discuss your project. See the Contact us section for details.
- Step 2: Have your consultant or design team prepare initial estimates of building performance. Submit a thermal energy service provider form to FortisBC, if applicable.
- Step 3: Schedule a project kick-off meeting between you, your design team (including the engineering consultant who is conducting the energy model study) and FortisBC.
- Step 4: During the kick-off meeting you'll review the program, submission requirements, initial project details and receive rebate estimates. We'll provide you with an application form.
- Step 5: You decide whether or not to proceed. If participating, sign the incentive estimate letter. Construction must be completed within five years.

Phase 2: Energy modelling

- Step 1: Your consultant completes the energy model in accordance with the program guidelines, City of Vancouver Energy Modelling Guidelines and NECB 2020, as appropriate to the building type.
- Step 2: Your consultant completes the FortisBC Commercial New Construction Program energy model workbook for your project, and forwards it, along with the energy model report, to FortisBC. Supporting materials such as thermal bridging calculation, drawings (architectural, mechanical and electrical) and other energy model input source materials are also required.
- Step 3: FortisBC completes a final review of the energy modelling results and upon approval issues the incentive commitment letter along with the energy model rebate.

Phase 3: Construction mobilization

- Step 1: Begin site mobilization and below-grade work in line with your submitted energy model and design documents.
- Step 2: Once the building below-grade work is complete, submit an attestation letter, detailed site review report and photographic evidence to FortisBC.
- Step 3: Upon FortisBC approval, you will receive 10 per cent of your capital incentive, up to a maximum of \$25,000.

Note: This payment milestone confirms construction progress prior to above-ground work.

Phase 4: Building construction

Step 1: Construct your building according to the design represented by the energy model. The building must be completed within five years of signing the incentive estimate letter.

The project completion rebate is provided within 90 days of FortisBC completing the site inspection and reviewing all related documentation from Phase 3.

- Step 2: Complete mid-construction airtightness testing, if applicable, and submit invoices and results to FortisBC.
- Step 3: When the building is completed and commissioned and the mandatory post-construction airtightness test has been completed, schedule a site inspection with FortisBC.

Phase 5: Completion and site inspection

- Step 1: FortisBC conducts a site inspection, and reviews construction documentation. The goal is to verify that the building's key energy-efficiency features were installed as per the design represented by the energy model. If any of the key energy-efficiency features or other major inputs to the energy model are found to have changed substantially, we may require additional modelling to assess the final building performance and will amend the project completion incentives accordingly. Program participants will be responsible for completing the additional energy modelling.
- Step 2: Upon approval, FortisBC provides the remaining project completion capital incentive rebate (remaining 90 per cent).
- Step 3: Report the building's energy use to ENERGY STAR Portfolio Manager at fortisbc.com/energyusetools, for three years post commissioning.
- **Step 4:** FortisBC may also conduct periodic inspections for up to three years after building commissioning.

Frequently asked questions

Q. Why does FortisBC want us to reduce energy use?

A. We're committed to helping our customers improve their energy efficiency and develop innovative energy solutions to help reduce associated emissions and support the province of B.C.'s climate action goals.

Q. Can I receive FortisBC product rebates if I'm participating in the Commercial New Construction Program?

A. You may either participate in the Commercial New Construction Program or receive rebates through our individual product rebate programs for your project if these measures are not included in your energy model (e.g. foodservice equipment).

Q. What happens if I want to change any of the ECMs and/or building features or add a new one to my project?

A. First, notify us. The program requires you to advise us promptly of any proposed changes to the ECMs that either eliminate or substantially change their design during the course of the design, tender or construction of such measures. Second, as long as the ECMs still target the same end uses and achieve the same or greater energy savings, no changes will be necessary to the final incentive commitment letter. If, however, the changes target different end uses or result in different energy savings, the approved energy model may need to be updated to reflect these changes.

The remaining post-completion incentive will only be paid if the updated energy model confirms that the project continues to meet the required energy performance level. If the updated model indicates that the performance requirements are no longer met, the participant will be required to repay any incentive amounts already disbursed under this program. You are responsible for the cost of revising the energy model and incentive adjustments may be made at FortisBC's sole discretion.

Q. I've applied for additional funding to support energy efficiency through another funding program (e.g. federal grant, another utility or government program). How does this impact the funding I will receive from FortisBC?

A. You must notify us in writing if you receive contributions or contribution commitments from a third-party organization. In the event the combined total of FortisBC funding and third-party contributions exceed 100 per cent of the FortisBC-approved amounts, we will adjust the funding or, if already paid, you will be required to repay us for the full amount of the excess within 30 days of receiving the notice to repay.

Q. What modelling software can I use to develop the energy model?

A. Consultants are free to choose the modelling software as long as it meets the <u>City of Vancouver Energy Modelling Guidelines</u> (for both BC Energy Step Code and non-BC Energy Step Code buildings) and its requirements. **Note:** Energy models and energy model outputs need to be provided to us for review.

Q. How accurate are the energy models in predicting actual energy performance?

A. The energy performance outlined in energy models serves as a standardized comparison between similar buildings for regulatory purposes. Actual energy performance may vary significantly from the energy model based on occupancy, occupant behavior, tenant end-uses, operation and maintenance and weather, among many other factors.

Q: How is the incentive administered for multi-phase projects?

A: For projects with multiple phases that may be completed in different years, each building permit is considered a separate project. The incentive and scope of the energy model will be based on all the phases and occupancy permits issued in a calendar year, or completion of all phases if one energy model is used. In all cases, the incentive is limited to one incentive per project (building permit) to a maximum of \$800,000.

Q: Are projects connected to district energy systems eligible?

A: Projects with district energy systems will be accepted on a case-by-case basis. They must use gas as the primary heating source, per the program's definition.

Q: How large does my building need to be to participate in the program?

A: The program doesn't have a minimum size threshold and all Part 3 buildings and some Part 9 buildings, regardless of size, may be eligible if they meet the required performance targets and other program requirements. For more information, visit fortisbc.com/energymanagers to contact your key account manager, energy solutions manager or technical advisor.

Q: What are duplicate program incentives and what happens if FortisBC determines that a participant has received them?

A: Duplicate program incentives refer to any funding, rebates or other incentives that participants have received under the Commercial New Construction Program or Small Commercial New Construction Program. Participants who have received these duplicate incentives will not be eligible for any program rebate or incentive under the current program.

If FortisBC determines that a participant has received duplicate incentives, the participant agrees to return the funds received for all program rebates or incentives to FortisBC. The participant will remain liable to FortisBC for all program incentive amounts until such funds are returned. Additionally, the participant may be excluded from participating in any current or future rebate and incentive programs by FortisBC. If a participant is required to return any duplicate incentives, they will also be required to return any incentives they have received linked to the application under this program.





Contact us

We're here to work with you to achieve better energy efficiency and reduce associated emissions in your project, helping to build a healthier British Columbia. For more information on this or other FortisBC programs, please contact your energy solutions manager, key account manager or technical advisor to discuss your project.

Don't know who your account manager or technical advisor is?

Call 1-866-884-8833

Email CNCprogram@fortisbc.com

Visit fortisbc.com/newconstructionfunding

Connect with us @fortisbc















