# Participants guide:

# Social housing offers

#### FEBRUARY 2023

- O CleanBC Social Housing Incentive Program
- BC Hydro Low Carbon Electrification Incentives



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# 1. Program overview

BC Hydro and the Province are focused on addressing affordability while making it easier for customers in the social housing sector to access energy efficiency and low carbon electrification opportunities.

The CleanBC Social Housing Incentive Program (SHIP) provides support for energy equipment retrofits in existing buildings by offering incentives for energy studies, implementation support, and retrofit equipment. The funding will target projects that can demonstrate a strong potential to reduce greenhouse gas (GHG) emissions by at least 500 tonnes of CO2 equivalent (tCO<sub>2</sub>e) over the lifetime of the measures installed—this is roughly equivalent to 500 GJs of natural gas per year.

CleanBC SHIP is part of the Province's Better Buildings suite of programs, which offers efficiency incentives for the Commercial, Institutional, and Multi-Family (CIM) building sector. These programs help building owners and operators reduce greenhouse gas (GHG) emissions in their existing and new buildings. Better Buildings is funded by the Province of British Columbia, overseen by the BC Ministry of Energy, Mines and Low Carbon Innovation (EMLI) and administered by BC Hydro.

Complementary to CleanBC's Social Housing Incentive Program, BC Hydro is offering top-up funding to conduct electrical load analysis and offset capital costs related to electrical system upgrades in service of Low Carbon Electrification (LCE) projects.

This guide is designed to provide social housing customers<sup>1</sup> with the details of CleanBC's Social Housing Incentive Program and BC Hydro's LCE top-up funding, including its objectives, funding levels, eligibility requirements, and application process.

For further information please contact **socialhousing@bchydro.com** or the Energy Savings Business Help Desk if you do not have a BC Hydro Key Account Manager. Customers interested in reducing their GHG emissions but maintaining natural gas as their primary heating source should contact FortisBC's Social Housing Retrofit Support Program (SHRSP).

# 2. Program eligibility

#### 2.1 BC Hydro LCE Program:

The BC Hydro LCE Program is offering top-up funding to conduct electrical load analysis and offset capital costs in service of Low Carbon Electrification (LCE) projects. To be eligible to receive an Electric Load Analysis incentive and associated Electrical System Upgrade incentive, you must meet all the below eligibility criteria as well as be in the BC Hydro service territory, including New Westminster.

### 2.2 CleanBC Social Housing Incentives:

To receive funding for either an energy study, implementation support or capital incentives, you must meet the eligibility criteria below. Note that additional funding criteria and terms and conditions will apply, and will be reviewed between you, your consultant, and BC Hydro during preliminary meetings. For additional program information and detailed requirements, contact BC Hydro Key Accounts or socialhousing@bchydro.com if you do not have a Key Account Manager.

- O The project must demonstrate the potential to implement measures at a single facility that will lead to at least 500 tCO<sub>2</sub>e of lifetime savings.
  - O In some cases, CleanBC may support projects which result in less than 500 tCO<sub>2</sub>e of lifetime savings if the project's proponent can demonstrate that the measure is a relatively low cost and easily replicable approach for reducing GHG emissions.

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<sup>1 &</sup>quot;Customer" is defined to include a parent company or umbrella organization that is the owner of the building where the measures are being installed.





- You are a non-profit housing society, housing co-operative or municipal housing authority that operates multi-unit residential, buildings.
   You are a customer in BC Hydro service territory, or FortisBC electric territory.
   To qualify as an energy measure, projects must:

   Provide a net decrease in greenhouse gas emissions;
  - O Result in energy impacts that are measurable and verifiable;
  - O Result in energy impacts that can be estimated using standard engineering calculations;
  - O Involve a technology that is not covered by other utility DSM programs (e.g., FortisBC's Social Housing Retrofit Support Program).<sup>2</sup>
- O Projects must involve a technology that is accessible/viewable for site inspection and/or measurement and verification if required.
- O Project must be hardwired or permanent in nature.
- O Project must provide net electrical load growth.
  - O Projects with Gas Savings only, without incremental electric load should first contact Fortis BC about eligibility in its gas DSM program.
- O Proposed projects must be proven technologies which are commercially and readily available in the market with a reasonable adoption rate.
  - O Demonstration projects may be considered if they are innovative technologies that are commercially available but not widely used in BC or for testing emerging technologies that are relatively new. Such projects must seek approval from program administrators.
  - O Projects looking to displace diesel generated electric power with electricity from the grid will be considered.
- O Equipment cannot be purchased before finalizing and signing the Capital Incentive Agreement.
- O Potential Incentive measures can include:
  - O Air-to-Water Heat Pump Water Heater
  - O Air-to-Air Rooftop Heat Pump
  - O Sewage Heat Recovery Heat Pump
  - O High-efficiency (>75%) HRV\*
  - O Electric Water Heater\*\*
  - O Air Source VRF
  - O Electrical Cooking Equipment

<sup>2</sup> The one exception is building envelope measures for buildings heated by natural gas, oil, propane or diesel. In certain cases, these buildings may be eligible for CleanBC funding as well as DSM funding for envelope upgrades.





<sup>\*</sup>Proposed measures leading to a gas dominant heating system (i.e. Gas heating equipment with greater than 50% share in total building heating energy consumption) should first contact Fortis BC to inquire about eligibility in its gas DSM program.

<sup>\*\*</sup>Electric boiler/water heater only will be accepted if all other more efficient heat pump options are not feasible.

## 3. Program workbook

The Program Workbook ("Workbook") is an Excel Spreadsheet with information on preliminary building and/or equipment information, electrical capacity assessment, project cost and GHG estimates, as well as relevant contact and project team information for CleanBC incentives. By completing the Workbook, both customers and program administrators will be able to determine if there is a viable opportunity for Incentives.

The Workbook is mandatory for all customers wishing to apply for energy study, implementation and capital incentives and is the main component of the Program application. The Workbook is a free tool that can be obtained on the Better Buildings BC website.

# 4. Program incentives

#### 4.1 BC Hydro—Electrical Load Analysis Incentive

An Electrical Load Analysis (ELA) is part of the CleanBC SHIP Energy Study and provides a high-level understanding of potential upgrades required on an existing building electrical system resulting from implementation of LCE measures into the system's power distribution. The ELA is fully funded by BC Hydro and is only available to customers in BC Hydro's service territory.

BC Hydro will fund 100% of costs up to \$7,000 for the ELA that includes the following scope of work:

- O Review of the physical electrical set up in building, identifying points of interconnection;
- O Analysis of existing electrical demand (kW) and energy (kWh) consumption including annual peak demand (kW);
- O Identification of potential design options for up to 100% electrification;
- Analysis of incremental electrical demand (kW) and energy (kWh) consumption including annual peak demand (kW) as a result of implementing LCE measures;
- O Identification of any future additional proposed loads excluding the LCE measures including their load (kW) size;
- Review of panel capacity identifying any potential issues of existing electrical system that may impact the LCE measures;
- Identification of necessary upgrade of the electrical system (at customer side of the BC Hydro meter) to accommodate the LCE measures, including scope of work and high-level cost (excluding interconnection costs).

# 4.2 CleanBC Energy Study Incentive

An energy study provides detailed technical information, quantified energy information, and expected implementation costs. The study can be used to determine the most effective electrification measures for implementation.

- Applicants may wish to first complete a ASHRAE Level 1 audit to identify any opportunities for electrification in their building.
   The B.C. Non-Profit Housing Association (BCNPHA) is available to assist with this work.
- O CleanBC will provide up to \$5,000 towards the cost of an energy study.
  - O To qualify for an CleanBC energy study incentive, the energy study must also include an electrical load analysis (or updating a previously performed one);<sup>3</sup>
- A BC Hydro Alliance of Energy Professionals member must complete the energy study.
  - O If your preferred vendor is not an Alliance member, the vendor may contact the BC Hydro Alliance team for assistance in gaining membership.





<sup>3</sup> Customers outside of BC Hydro territory are still required to complete an Electrical Load Analysis

- O The system under review in the energy study must:
  - O Demonstrate the potential to implement measures at a single facility that will lead to at least 500 tCO<sub>a</sub>e of lifetime savings;
  - O Involve a technology that must provide net electrical load growth (incremental energy in kWh and demand in kW);
  - O Involve a technology that is accessible/viewable for site inspection and/or measurement & verification if required;
  - O Be hardwired or permanent in nature;
  - O Projects looking to displace diesel generated electric power with electricity from the grid will be considered for Custom– Lite Incentives.
  - O Be included on the list of electrification measures.

#### 4.3 CleanBC Implementation Support Incentive

Implementation support funding is offered to help ensure retrofits are safe, permitted and meet quality standards. The funding will help offset the costs of retaining a consultant to navigate various aspects of the retrofit such as project management, preparing a request for proposal, engaging contractors to install equipment (actual installation costs are not included in implementation support funding) and preparing required documentation and invoices for submission.

- CleanBC will provide up to \$7000 toward implementation support for electrification projects.
- O Eligibility for an implementation incentive is dependent on approval for a CleanBC Capital incentive. Applicants must sign an incentive agreement which stipulates the terms for receiving their implementation incentive.
- To receive an implementation incentive, you must use an approved engineering consultant belonging to the BC Hydro Alliance of Energy Professionals.

#### 4.4 CleanBC Capital Incentive

Capital Incentives are offered to support the implementation of energy savings measures, as identified by the customer in the energy study and/or Program Workbook. The CleanBC Social Housing Incentive program offers both fuel-switching incentives and building envelope incentives.

- Fuel Switching incentives are based on a rate of \$70/tCO<sub>2</sub>e of lifetime GHG savings up to a maximum of 75% of a project's incremental cost. The program will support up to a maximum incentive rate of \$200,000 per customer project.
- O Building envelope incentives<sup>4</sup> are calculated using the following formulas, up to a maximum of \$200,000 per customer project:
  - O Roof Insulation: \$0.15 x R-Value x square feet;
  - O Wall Insulation: \$0.16 x R-Value x square feet;
  - O Windows: \$50 per unit/square feet.
- Eligibility for incentives is dependent on an approved energy study, reviewed by BC Hydro's Conservation and Energy Management (CEM) Engineering.
  - O Energy studies that did not receive CleanBC funding or were completed prior to the launch of the program are eligible to be submitted. These reports need to be approved by CEM Engineering before they are considered eligible for capital incentives.
  - O If approved, the customer/consultant is responsible for completing the inputs in the Program Workbook.

<sup>4</sup> Building envelope measures are only available in buildings that are predominantly heated by fossil fuels, and outside of FortisBC gas service territory.





- If a project is receiving an incentive or grant through another third-party program (e.g. the SHRSP program), for the same measure(s), the total amount of this other funding will be subtracted from the project's incremental cost before the eligible incentive is calculated.
- O All eligible Northern customers<sup>5</sup> will receive an additional \$10/tCO<sub>2</sub>e incentive on all eligible measures installed. The total maximum incentive including the top-up offer is \$250,000 per project.
- O Equipment cannot be purchased before finalizing and signing the Capital Incentive Agreement.

#### 4.5 BC Hydro—Electrical System Upgrade Incentive

BC Hydro's Electrical System Upgrade incentives are offered to offset the cost of implementation of energy measures specifically associated with required electrical upgrades.

- BC Hydro will provide a top-up on the CleanBC Capital Incentives up to 100% of the cost of upgrading the building electrical system as part of the implementation of LCE measures.
- O Eligible costs include:
  - O Electrical upgrades required on the customer's side of the BC Hydro meter;
  - O Costs associated with BC Hydro interconnections that the customer is responsible to pay.
- Eligibility for BC Hydro's incentives is dependent on review from BC Hydro's Conservation and Energy Management (CEM) Engineering.
  - O Approval can be obtained by submitting a completed Program Workbook with either additional engineering documentation, or an approved energy study report with electrical load analysis scope.
  - O It is possible for an energy study to be submitted that did not receive CleanBC or BC Hydro incentives and/or was completed prior to the launch of the program. These reports need to be approved by CEM Engineering before they are considered eligible for capital incentives.
  - O If approved, the customer/consultant is responsible for completing the inputs in the Program Workbook

# 5. Program process

#### 5.1 Energy Study and Electrical Load Analysis Incentives

- Carefully review this Participants Guide and all other program materials (e.g. Program Workbook, Frequently Asked
  Questions) to confirm your eligibility. Contact your Key Account Manager or socialhousing@bchydro.com if you have any
  further questions.
- If you are seeking funding for an energy study or electrical load analysis, contact your BC Hydro Key Account Manager (KAM),
   socialhousing@bchydro.com, BC Housing Energy Management, or BCNPHA to begin the application process.
  - O A kick-off meeting will be scheduled between you, your KAM, your engineering consultant and your project partner at BC Housing Energy Management or BCNPHA. In this meeting you will discuss your project, program terms and conditions, your Level 1 audit (if you have one) and your available budget. At this meeting, your KAM will gather the information and submit an application on your behalf to the program.

<sup>5</sup> Eligible buildings must have a commercial utility account with BC Hydro and be located north of and including the District of 100 Mile House (latitude 51 .628°N).





- Once the application is reviewed, subject to budget availability, an Energy Study Agreement is created, and signed by you.
- Your contractor or engineering consultant completes the energy study. You have 6 months from the date of the signed Energy Study Agreement to complete the energy study.
- Once complete, you or your project partner at BC Housing Energy Management or BCNPHA will submit the completed energy study and Program Workbook with invoices and proof of payment.
- Once the review is completed and the energy study is approved, your energy study payment will be issued.

#### 5.2 Capital Funding Incentives

- O To apply for a capital funding incentive, you (or your project partner) must submit:
  - O A completed energy study approved by BC Hydro CEM Engineering. The energy study can either be funded by CleanBC and/or BC Hydro, OR a non-CleanBC/BC Hydro funded study with supporting engineering documentation approved by BC Hydro CEM Engineering.
  - O A completed Program Workbook (together, "the application").
- Once the application is reviewed and approved by CEM Engineering, subject to budget availability, a Capital Incentive Agreement is created, and signed by you.
- O Project is implemented. You have 18 months from the date of the signed Capital Incentive Agreement to complete the project.
- Once the project is completed, you must submit proof of project implementation (i. e. invoices and proof of payment, Schedule B and Schedule C).
- BC Hydro CEM conducts a Post Implementation Review to verify that the agreed measures were installed as proposed. Once
  completed, the respective incentive payment is issued.

#### **5.2** Implementation Support Incentives

- Implementation incentives will automatically be paid out upon completion of the project and BC Hydro's Post Implementation Review.
  - O To receive your implementation incentive, you must submit the required documentation (as outlined in your Capital Incentive Agreement) to satisfy the Post Implementation Review. Your consultant can help you prepare and submit this documentation.

This program is funded by the Province of British Columbia.





