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Participants Guide:
CleanBC Custom Incentives

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1. Program Overview

CleanBC's Custom Incentives ("Custom Incentives") are part of the Province's Better Buildings program, which offers efficiency incentives for the Commercial, Institutional, and Multi-Family (CIM) building sector. Specifically, Custom Incentives help building owners and operators reduce greenhouse gas (GHG) emissions in their existing building portfolio.

The program is funded by the Province of British Columbia and Government of Canada, overseen by the BC Ministry of Energy, Mines and Petroleum Resources (MEMPR), and administered by BC Hydro.

This guide is designed to provide existing BC Hydro commercial customers with the details of CleanBC's Custom Incentives, including their objectives, funding levels, eligibility requirements, and application process.

CleanBC Custom Incentives target GHG reductions from fuel-switching and other electrification measures (such as heat reclaim systems) that result in significant reductions in current fossil fuel use. Incentives are open to customers that can demonstrate a strong potential to reduce their GHG emissions by at least 1,200 tonnes of CO² equivalent (tCO²e) over the lifetime of a measure – this is roughly equivalent to 1,200 GJs of natural gas per year.

Incentives have been designed to offer solutions across a variety of customer sites and market segments utilizing an array of technologies. As such, incentives are offered for both energy studies and capital equipment replacement.

For further information please contact your BC Hydro Key Account Manager (KAM). Customers interested in reducing their GHG emissions but maintaining natural gas as their primary heating source, should contact FortisBC's energy efficiency and conservation program.

2. Program Eligibility

To receive funding for both the energy study and 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, refer to your KAM for further details.

- Customer has a KAM
- The project must demonstrate at the pre-screening phase the potential to implement measures at a single facility that will lead to at least 1,200 tCO²e of lifetime savings.
- Buildings must be in the BC Hydro service territory, including New Westminster.
- To qualify as an energy measure, projects must:
 - Provide a net decrease in greenhouse gas emissions
 - Result in energy impacts that are measurable and verifiable
 - Result in energy impacts that can be estimated using standard engineering calculations
 - Involve a technology that is not covered by other utility DSM programs (e.g. FortisBC's Commercial Performance Program).
- Projects must involve a technology that is accessible/viewable for site inspection and/or measurement and verification if required.
- Project must be hardwired or permanent in nature.

- Project must provide net electrical load growth¹.
 - Projects with Gas Savings only, without incremental electric load should first contact Fortis BC about eligibility in its gas DSM program.
- Proposed projects must be proven technologies which are commercially and readily available in the market with a reasonable adoption rate.
 - 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.
- Equipment cannot be purchased before finalizing and signing the Capital Incentive Agreement.
- Potential CleanBC Custom Incentive Measures can include:

1. Heat Recovery Chiller*
2. Air-to-Water Heat Pump
3. Air-to-Water Heat Pump Water Heater
4. Ground Source Heat Pump
5. Air-to-Air Rooftop Heat Pump
6. Water-to-Water Heat Pump
7. Exhaust Air Heat Recovery Heat Pump
8. Sewage Heat Recovery Heat Pump
9. Electric Boiler**
10. Electric Water Heater**
11. High-efficiency (>75%) HRV***
12. Air Source VRF
13. Water Source VRF

**Depending on the specific heat recovery chiller project circumstance, customers should first contact FortisBC to inquire about eligibility in its natural gas DSM program.*

***Electric boiler only will be accepted if all other more efficient heat pump options are not feasible*

****Stand Alone High Efficiency HRV projects should contact FortisBC first. If an HRV measure is combined with an all-electric heating system (i.e. VRF System) this project should apply for CleanBC Custom Incentives administered by BC Hydro.*

- Depending on their application, certain heat recovery chillers may not be eligible for CleanBC Custom Incentives, and may be a better fit in FortisBC’s [Commercial Performance Program](#). For example:
 - Building cooling chillers that will be retrofitted with a heat recovery chiller that operates during simultaneous cooling/heating conditions during shoulder and summer seasons are eligible with FortisBC, however the building level natural gas consumption must remain > 50% existing natural gas consumption following the retrofit
 - Heat recovery chillers used as a supplemental heating source to a dominant gas or gas-based district energy heating system are eligible with FortisBC, however the building level natural gas consumption must remain > 50% existing natural gas consumption following the retrofit.

¹ Exception: New/added heat recovery chillers may in some cases improve the efficiency of the existing chillers and reduce cooling tower operation time such that additional electrical load may not be added. These will be accepted on a case by case basis pending review by MEMPR Coordinator and BC Hydro

3. Program Incentives

3.1 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 energy efficiency measures for implementation.

- CleanBC will support up to 50% of an energy study's cost, up to a maximum of \$20,000. Any remaining balance will be funded by the customer.
- A [BC Hydro Alliance of Energy Professionals](#) member must complete the energy study
 - If your preferred vendor is not an Alliance member, the vendor may contact the BC Hydro Alliance team for assistance in gaining membership.
- The system under review in the energy study must:
 - Demonstrate the potential to implement measures at a single facility that will lead to at least 1,200 tCO₂e of lifetime savings
 - Involve a technology that is not covered by other utility DSM programs
 - Involve a technology that must provide net electrical load growth²
 - Involve a technology that is accessible/viewable for site inspection and/or measurement & verification if required.
 - Be hardwired or permanent in nature.

3.2 Capital Incentive

Custom incentives are offered to support the implementation of energy conservation measures, as identified in the energy study.

- Based on a rate of \$40/tCO₂e of lifetime GHG savings, CleanBC will support up to \$200,000 per customer.
 - For heat pump rooftop units, the rate will be \$60/tCO₂e
- Incentives will be capped at the lesser of 50% of a project's incremental cost, or to the point where the payback for the measure is less than 4 years after the incentive.
- If you have already received funding from CleanBC's gas conservation stream administered by FortisBC, the same technology will not be eligible for funding from this offer.
- Eligibility for custom incentives is dependent on an approved energy study.
 - It is possible for an energy study to be submitted that did not receive CleanBC funding and/or was completed prior to the launch of the Custom Incentives. These studies need to be approved by BC Hydro's Conservation and Efficiency Management (CEM) Engineering before they are considered eligible for Capital Incentives.
 - If approved the customer/consultant is responsible for completing the inputs in the Custom Workbook

² Exception: New/added heat recovery chillers may in some cases improve the efficiency of the existing chillers and reduce cooling tower operation time such that additional electrical load may not be added. These will be accepted on a case by case basis pending review by MEMPR Coordinator and BC Hydro

- Each customer³ is limited to a total of \$500,000 in incentives, subject to program administrator approval and available funding, which can be spread over multiple projects and locations.
- Equipment cannot be purchased before finalizing and signing the Capital Incentive Agreement.

4. Custom Workbook

The Custom Workbook (“Workbook”) is an Excel Workbook containing tabs with information on preliminary building and/or equipment information, project cost and GHG estimates, as well as relevant contact and project team information. By completing the Workbook, both customers and program administrators will be able to determine if there is a viable opportunity for further funding.

The Workbook is mandatory for all commercial customers wishing to apply for energy study funding through CleanBC. The Workbook is a free tool that can be requested through your KAM.

5. Building Energy Benchmarking

Building energy benchmarking is the ongoing review of your organization's energy consumption to determine if your building's energy performance is getting better or worse. Energy benchmarking can be an internal process, measuring your building's performance against its own past performance or against other buildings in your portfolio, or it can be an external process, comparing your building to similar buildings outside your organization.

Natural Resources Canada (NRCan) supports building energy benchmarking through the ENERGY STAR Portfolio Manager, a free online tool developed by the US Environmental Protection Agency. Setting up an account is easy, and is fully integrated with your local utility to enable easy data transfer of electricity or gas bills.

Recipients of CleanBC Custom Incentives are required to have a Portfolio Manager account containing the building where the incented measures will be implemented. Participants will also be required to share access to their Portfolio Manager in ‘Read Only’ mode with BC Hydro and the Ministry of Energy, Mines and Petroleum Resources’ (MEMPR) Program Administrator. This will enable program administrators to easily verify that your account has been properly set up before administering the incentive payment.

6. Program Process

6.1 Energy Study Incentives

1. Contact your BC Hydro Key Account Manager (KAM) to discuss your project and complete the ‘Pre-Screen’ tab of the Workbook.
2. BC Hydro will review the Pre-Screen and if the project is considered eligible, a kick-off meeting is held between you, your selected consultant, and BC Hydro's CEM Engineering team.
3. You complete the ‘Proposal’ tab of the Workbook that is approved by BC Hydro CEM Engineering.
4. Your KAM submits the Energy Study application.
5. Once the application is reviewed and approved by CEM Engineering, subject to budget availability, an Energy Study Agreement is created and signed by you.

³ “Customer” is defined as a parent company or umbrella organization.

6. Your engineering consultant completes the energy study and completes the 'Study Results' tab of the Workbook. You have 6 months from the date of the signed energy study agreement to complete the energy study.
7. Submission of the energy study report and Workbook with invoices and proof of payment to your KAM.
8. Once the review is completed and the energy study is approved, payment for the study will be issued.

6.2 Capital Incentives

1. You submit a completed energy study that is approved by BC Hydro CEM Engineering. This can either be a CleanBC funded study, or a non CleanBC funded study.⁴
2. Your KAM submits the Incentive Application.
3. Once the application is reviewed and approved by CEM Engineering, subject to budget availability, a Capital Incentive Agreement is created and signed by you.
4. Project is implemented. You have 18 months from the date of the signed Capital Incentive Agreement to complete the project.
5. Submission of proof of project implementation (i.e. invoices and proof of payment) to your KAM.
6. A Post Implementation Review is conducted to verify that the agreed measures were installed as proposed. Once completed, the respective incentive payment is issued.
7. Prior to issuance of the final incentive payment, participants in the Program are required to have a Portfolio Manager account containing the building where the incented measures will be implemented. Details found at: <https://www.energystar.gov/buildings/tools-and-resources/portfolio-manager-quick-start-guide>
 - a. Participants will also be required to share access to their Portfolio Manager in 'Read Only' mode with BC Hydro and the MEMPR Program Administrator. This will enable program administrators to easily verify that your account has been properly set up before administering the incentive payment.
 - b. Details found at https://www.energystar.gov/sites/default/files/tools/Print_Resource_Sharing_Properties_080514_508.pdf

6.3 Measurement and Verification

1. For projects that meet M&V criteria, an M&V plan will be included in the Capital Incentive Agreement before project implementation.
2. Projects selected for M&V, will be issued 75% of their incentive payment at project completion and approval. The remaining 25% will be issued at the completion of the M&V Report.

This program is funded by the Province of British Columbia and Government of Canada.

⁴ 'Direct to Incentive' energy studies must be submitted with the 'Pre-Screen' and 'Study Results' tabs of the Workbook and be approved by CEM Engineering before being eligible for capital incentives. The Energy study must have been completed no later than two-years prior to the Capital Incentive application, and no major changes to the respective energy-use equipment should have occurred.

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