Participants guide:

CleanBC Commercial Express Program

MARCH 2023

BC Hydro Power smart | cleanBC BETTER BUILDINGS

CS-2965-2

Contents

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1. Program Overview

The CleanBC Commercial Express program is part of the Province of British Columbia's CleanBC Better Buildings portfolio, which offers incentives for reducing greenhouse gas (GHG) emissions from the Commercial, Institutional, and Multi-Family (CIM) building sectors.

The program is funded by the Province of British Columbia through the Ministry of Energy, Mines and Low Carbon Innovation (EMLI), and administered by BC Hydro.

This guide provides existing BC Hydro commercial account customers with information on eligibility requirements, capital incentive information and the application process for the CleanBC Commercial Express Program.

The CleanBC Commercial Express program is a streamlined, prescriptive program intended to provide owners and operators of small and medium-sized businesses with a simple program process to facilitate fuel switching electrification opportunities. A minimum threshold for GHG emissions reductions is not required to be eligible, and participants are not required to submit an energy study for review, which is a requirement of the Custom and Custom-Lite programs for larger-scale, more complex projects.

CleanBC's Commercial Express does not have a minimum threshold of GHG emissions reduction.

For further information and to help guide you through the process please contact the CleanBC Small Buildings Energy Coach at **smallbuildings@betterbuildingsbc.ca**. Alternatively, you can contact your BC Hydro Key Account Manager (KAM) or the Energy Savings Business Help Desk at **incentives@bchydro.com** if you do not have a KAM.

2. Program Eligibility Criteria

To receive capital incentive funding, you must meet the following eligibility criteria and agree to the terms and conditions in the Application Form.

The building* must be a Commercial Building as per Part 3 of the BC Building Code and one of the following building types:

- Small and mid-size offices ~22,000 ft² (2,000 m²)
- Strip mall retail ~11,000 ft² (1,000 m²)
- Big box retail ~75,000 ft² (7,000 m²)
- Restaurant-food service ~5,400 ft² (500 m²)
- Warehouse ~13,000 ft² (1,200 m²)
- School gymnasium ~7,500 ft² (700 m²)
- Classroom ~24,000 ft² (2,200 m²)
- Multi-unit residential building (MURB) and common area
    - High rise (5-13 storeys ~140,000 ft² (13,000 m²)
    - Low rise (1-4 storeys ~65,000 ft² (6,000 m²)
- Community centre ~5,000 ft² (465 m²)
- Hospital services ~11,000 ft² (1,000 m²)

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*The building must be located in the BC Hydro service territory, including New Westminster.

*Area (m2) listed above is for guidance only and is not a program requirement.

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The electrification measure(s) selected for the project 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;
- Provide net electrical load growth;
- Involve a technology that is not covered by other utility demand side management (DSM) programs (e.g. FortisBC's Commercial Performance Program);
- Involve a technology that is accessible/viewable for site inspection and/or measurement and verification if required;
- Replace existing fossil fuel heating, ventilation and air conditioning (HVAC) equipment; and
- Be purchased and installed after receiving the Pre-Approval email from the program administrator.

2.1 Eligible Building Types And Electrification Measures

CleanBC Commercial Express Incentives by building type can include:

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
Mid-size office			
Packaged rooftop dedicated outdoor air unit with gas-fired heating serving fan coil units Fan coil units with heating water provided by a central gas-fired boiler and chilled water provided by an air-cooled chiller Gas-fired water heater for domestic hot water	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	**NECB 2020** Table 5.2.12.1-A Gas supplemental heating must have a thermal efficiency ≥ 80%; and only enabled to operate at ambient temperatures below -3°C	**NRCan searchable product list**
	Air-to-water heat pump serving hot water and chilled water loop	**NECB 2020** Table 5.2.12.1-A	**NRCan searchable product list**
	Very high efficiency dedicated outdoor air system: Centralized high efficiency heat recovery ventilator (HRV/ERV) fully decoupled from heating and cooling; Decentralized air source variable refrigerant flow (VRF) heat pump	HRV/ERV: SRE ≥ 82% see compliant product list VRF: **NECB 2020** Table 5.2.12.1-I	**Equipment and Design Best Practices for Optimal Energy Efficiency** **HRV: Compliant product list**

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
	Domestic hot water: Heat pump water heater (HPWH) sized to meet the full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **Northwest Energy Efficiency Alliance (NEEA) Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**
	Domestic hot water: wastewater heat recovery with water source heat pump(s) sized to meet full load	Products must be certified for use in Canada	N/A
Small office			
Packaged rooftop unit with gas–fired heating Gas–fired water heater for domestic hot water	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	**NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**NRCan searchable product list**
	Very high efficiency dedicated outdoor air system: Centralized high efficiency heat recovery ventilator (HRV/ERV) fully decoupled from heating and cooling; Decentralized air source variable refrigerant flow (VRF) heat pump	HRV/ERV: SRE ≥ 82% see compliant product list VRF: **NECB 2020** Table 5.2.12.1–I	**Equipment and Design Best Practices for Optimal Energy Efficiency** **HRV: Compliant product list**

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
	Domestic hot water: Heat pump water heater sized to meet the full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **NEEA Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**
	Domestic hot water: wastewater heat recovery with water source heat pump(s) sized to meet full load	Products must be certified for use in Canada	N/A
Strip mall retail			
Packaged rooftop unit with gas–fired heating Gas–fired water heater for domestic hot water	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	**NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**NRCan searchable product list**
	Very high efficiency dedicated outdoor air system: Centralized high efficiency heat recovery ventilator (HRV/ERV) fully decoupled from heating and cooling mini–split heat pumps	HRV/ERV: SRE ≥ 82% see compliant product list Mini–Split Heat Pumps: See CleanBC Better Homes Heat Pump Rebate eligible product list	**Equipment and Design Best Practices for Optimal Energy Efficiency** **HRV: Compliant product list** **Mini–Split: CleanBC Better Homes QPL**
	Domestic hot water: heat pump water heater sized to meet full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **NEEA Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
	Domestic hot water: wastewater heat recovery with water source heat pump(s) sized to meet full load	Products must be certified for use in Canada	N/A
Big box retail			
Packaged rooftop unit with gas–fired heating Gas–fired water heater for domestic hot water	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	**NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**NRCan searchable product list**
	Very high efficiency dedicated outdoor air system: Centralized high efficiency heat recovery ventilator (HRV/ERV) fully decoupled from heating and cooling; Decentralized air source variable refrigerant flow (VRF) heat pump	HRV/ERV: SRE ≥ 82% see compliant product list VRF: **NECB 2020** Table 5.2.12.1–I	**Equipment and Design Best Practices for Optimal Energy Efficiency** **HRV: Compliant product list**
	Domestic hot water: heat pump water heater sized to meet full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **NEEA Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**
	Domestic hot water: wastewater heat recovery with water source heat pump(s) sized to meet full load	Products must be certified for use in Canada	N/A

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
Warehouse			
Packaged rooftop unit with gas–fired heating Gas–fired water heater for domestic hot water	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	**NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**NRCan searchable product list**
	Very high efficiency dedicated outdoor air system: Centralized high efficiency heat recovery ventilator (HRV/ERV) fully decoupled from heating and cooling; Decentralized air source variable refrigerant flow (VRF) heat pump	HRV/ERV: SRE ≥ 82% see compliant product list VRF: **NECB 2020** Table 5.2.12.1–I	**Equipment and Design Best Practices for Optimal Energy Efficiency** **HRV: Compliant product list**
	Domestic hot water: heat pump water heater sized to meet full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **NEEA Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**
Restaurant			
Packaged rooftop unit with gas–fired heating Gas–fired water heater for domestic hot water Electric water heater for dishwasher booster Gas cooktop	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	**NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**NRCan searchable product list**

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
	Domestic hot water: heat pump water heater sized to meet the full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **NEEA Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**
	Domestic hot water: wastewater heat recovery with water source heat pump(s) sized to meet full load	Products must be certified for use in Canada	N/A
	Electrify food preparation equipment	Induction cooktop	N/A
School gym			
Packaged rooftop unit with gas–fired heating	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating Supplemental hydronic heating coil served by a mid efficiency (80%) gas fired boiler	**NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**NRCan searchable product list**
	Packaged rooftop unit equipped with an air source heat pump with gas supplemental heating and either integrated heat recovery or a dedicated heat/energy recovery ventilator (HRV/ERV) Supplemental hydronic heating coil served by a mid efficiency (80%) gas fired boiler	RTU: **NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C HRV/ERV: SRE ≥ 65%	**RTU: NRCan searchable product list**

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
Classroom			
Packaged rooftop unit with gas–fired heating	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	RTU: **NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**NRCan searchable product list**
	Packaged rooftop unit equipped with an air source heat pump, gas–fired supplemental heating coil and either integrated heat recovery or dedicated heat/ energy recovery ventilator (HRV/ERV)	RTU: **NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C HRV/ERV: SRE ≥ 65%	**RTU: NRCan searchable product list**
Multi–unit residential building (MURB)—High rise (5–13 storeys) Low rise (1–4 storeys)			
Packaged rooftop unit with gas–fired heating for corridor pressurization. Hydronic baseboard convectors connected to gas–fired boiler. Gas–fired water heater for domestic hot water	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	**NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**RTU: NRCan searchable product list**
	Air–to–air mini–split heat pumps for heating and cooling (supplemental heating provided by existing hydronic baseboards)	Mini–Split: See Better Homes Heat Pump Rebate eligible product list Gas supplemental heating must only be enabled to operate at ambient temperatures below –3°C	**Mini–Split: CleanBC Better Homes QPL**
	In–suite packaged heat pump and in–suite HRV providing heating, cooling and ventilation (backup heating provided by existing hydronic baseboards) Rooftop unit downsized for reduced ventilation requirements	In–suite HP: Variable Capacity Packaged Terminal Heat Pump (PTHP) or Single Packaged Vertical Heat Pump (SPVHP) Gas supplemental heating must only be enabled to operate at ambient temperatures below –3°C HRV: ENERGY STAR Qualified	In–suite HP: N/A **HRV: searchable product list**

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
	Domestic hot water: heat pump water heater sized to meet full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **NEEA Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**
	Domestic hot water: wastewater heat recovery with water source heat pump(s) sized to meet full load	Products must be certified for use in Canada	N/A
Community centre			
Gas-fired furnace, no cooling or direct ventilation. Gas-fired water heater for domestic hot water	Distributed mini-split or VRF heat pump for heating and cooling	Mini-split: See Better Homes Heat Pump Rebate eligible product list VRF: **NECB 2020** Table 5.2.12.1-I	**Mini-Split: CleanBC Better Homes QPL**
	Domestic hot water: heat pump water heater sized to meet full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **NEEA Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**
	Domestic hot water: wastewater heat recovery with water source heat pump(s) sized to meet full load	Products must be certified for use in Canada	N/A

Eligible existing equipment	Eligible electrification measure	Performance requirement	Eligible product lists
Hospital services			
Packaged rooftop unit with gas–fired heating and DX cooling coil; Gas–fired water heater for domestic hot water	Packaged rooftop unit equipped with an air source heat pump with gas or electric resistance for supplemental heating	**NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C	**NRCan searchable product list**
	Packaged rooftop unit equipped with an air source heat pump, heating coil and integrated heat recovery ventilator (HRV)	RTU: **NECB 2020** Table 5.2.12.1–A Gas supplemental heating must have a thermal efficiency ≥ 80% and only enabled to operate at ambient temperatures below –3°C HRV/ERV: SRE ≥ 65%	**NRCan searchable product list**
	Domestic hot water: heat pump water heater sized to meet full load	Products must be certified for use in Canada	**Residential: ENERGY STAR product finder** **NEEA Residential Unitary HPWH qualified products list** **Commercial: ENERGY STAR Certified Commercial Water Heaters** **NEEA Commercial HPWH qualified products list**
	Domestic hot water: wastewater heat recovery with water source heat pump(s) sized to meet full load	Products must be certified for use in Canada	N/A

Equipment must meet the prescribed performance requirements above. Failure to do so will impact your energy consumption and utility energy operating costs and result in ineligibility for program incentives.

3. Program Capital Incentives

Incentive amounts vary and depend on building type, age, location, square footage, hours of operation, and electrification measure. BC Hydro and EMLI, at their sole discretion, determine the incentive amount.

Capital Incentives are offered to support the implementation of electrification measures/equipment, as identified by the customer in the Application Form.

- The maximum incentive available is $100,000 per customer project.
- All eligible Northern customers will receive an additional $10/tonne incentive on all eligible measures installed. The total maximum incentive including the top-up offer is $125,000 per project.
    - 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).
- Incentives are based on calculated tCO2e of lifetime GHG savings and consider various factors specific to your building, including building type, age, location, square footage, hours of operation and the type of equipment being considered.
- Incentives will not exceed 100% of the total applicable project cost as provided in your invoice submission. The overall customer[3] cap for combined Commercial Express Incentives, Custom-Lite incentives and energy studies, and Custom energy studies and incentives is $750,000 which can be spread over multiple projects at different locations.
- Eligibility is dependent on review of the Commercial Express application form by the CleanBC Small Buildings Energy Coach and BC Hydro.
- Equipment purchased before receiving the Pre-Approval email from the Program Administrator/Operations would be deemed ineligible for Commercial Express Program Incentives.

4. Program Process

4.1 Application

Before starting your application, determine:

1. The heated area of your building (ft^2 and m^2). In the case of MURBs you will require the total number of residential units;
2. The age of your building or the date of the latest building envelope retrofit (e.g. upgrades to the wall and roof assemblies, new windows etc.);
3. Your total average weekly operating hours;
4. Fossil fuel heating source (Natural Gas, Propane, etc);
5. The type and number of existing equipment being considered for replacement;
6. The type and number of electrification measures being installed with the specific technical criteria indicated in Section 2.1.
7. BC Hydro Electricity Service Rate (SGS, MGS, LGS).

[3] "Customer" is defined as a parent company or umbrella organization.

4.2 Steps For Commercial Express Capital Incentives

- Read all program materials and download the Commercial Express Application Form from the CleanBC website.
- Contact the CleanBC Small Buildings Energy Coach, Business Help Desk, Business Account Rep or Key Account Manager, if you have any further questions.
- Complete the Application form.
- A BC Hydro Alliance of Energy Professionals member may complete the application on your behalf, however this is not a program requirement.
    - If the consultant/contractor you have chosen to work with is not an approved member of BC Hydro's Alliance of Energy Professionals, the consultant may contact BC Hydro for assistance with gaining membership.
- Recommendation: Submit the Application to the CleanBC Small Buildings Energy Coach for review.
    - Your application will be reviewed for accuracy and completeness.
    - The CleanBC Small Buildings Energy Coach will contact you to verify information, provide an estimated incentive amount and provide additional assistance as needed.
- Customer to submit the application to BC Hydro.
- Once the application is reviewed and approved by BC Hydro, subject to CleanBC budget availability, a Pre-Approval Email is created and sent to you within 15 business days.
- Upon receipt of this email, you may order and purchase your equipment.
- You have 9 months from the date of the Pre-Approval Email to complete and implement the project.
- Upon or nearing completion of the project you need to provide the required Project Closing documentation
    - Schedule B and Schedule C, Equipment Specification, Invoicing, Reconciliation Spreadsheet and Proof of Payment.
- BC Hydro Operations will review and verify documentation to ensure accuracy and that all program conditions are met.
- If all conditions are met, the Incentive payment will be issued to the customer.
- As per the Pre-Approval Email and attached Schedule B and C, BC Hydro may conduct a Post Implementation detailed Engineering review either on site or virtually. The post implementation review is conducted to verify that the approved electrification measures were installed as proposed.

This program is funded by the Province of British Columbia.