

PROGRAM GUIDE FOR CleanBC Go Electric Public Charger Program

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Contents

		0
Abbı	reviations	2
Glos	sary of Terms	2
1.0	Program Overview (Management and Communications)	3
1.	1 Program Summary	3
1.3	2 Program Management & Administration	3
1.3	3 Program Communications	3
2.0	Program Criteria	4
2.	1 Applicant Eligibility	4
2.:	2 Installation Site Requirements	4
2.3	3 Equipment Requirements	5
2.	4 Eligible Project Costs	6
2.	5 Final Project Documentation Requirements	7
3.0	Rebate Overview	7
3.	1 DCFC Funding Tiers	8
3.	2 Level 2 Additions	9
	3.2.1	9
3.3	3 Tandem or Multi-Port DCFC Installations	10
3.4	4 Station Output Level Conditions	10
3.	5 Pilot Projects	11
4.0	Application Process	11
5.0	Interaction with Other Programs in Market	15

Abbreviations

B.C. – British Columbia

DCFC – Direct Current Fast Charger

EV - Electric Vehicle

FBC - Fraser Basin Council

EMLI - Ministry of Energy, Mines and Low Carbon Innovation

OCPP – Open Charge Point Protocol, v1.6 or higher

ZEV – Zero-Emission Vehicle

Glossary of Terms

Electric Highway – Refers to the CleanBC Roadmap to 2030 commitment to complete a geographically connected public fast-charging network in British Columbia by Summer 2024

Indigenous community - A First Nation (i.e., Band government) or its wholly owned subsidiaries (e.g., development corporations)

Interface - The controls and/or screen (as applicable) used to operate an EV charger

Multi-Port Charger – A single charger that can charge more than one vehicle simultaneously

OCPP Compatible – Property of a charger having OCPP installed, and able to be controlled by any OCPP network operator upon agreement with the charger's owner, i.e., not limited by hardware, software or contract (except for a limited, defined term) to any one network operator

Tandem Installation – A project where more than one DCFC is installed at the same location. Tandem installations also refer to a DCFC co-located with a Level 2 charger

Public EV Charger – A publicly accessible EV charger which is open for charging 24 hours per day, 365 days per year and can be used by the general public without restriction

1.0 Program Overview (Management and Communications)

1.1 Program Summary

The CleanBC Go Electric Program is intended to encourage and accelerate the adoption of zero-emission vehicles (ZEVs) in British Columbia (B.C.) for both their environmental and economic benefits. The CleanBC Go Electric Public Charger Program (Program) is a sub-program of the CleanBC Go Electric Program and is intended to increase the number of public Direct Current Fast Chargers (DCFCs) throughout B.C. to support the growing number of ZEVs on the road. The Program aims to target current gaps in the public DCFC network in B.C. such as Indigenous communities, rural and northern areas, and city centers experiencing long queues for DCFCs due to high ZEV uptake.

The Program will provide varying rebates of up to \$80,000 per charge port depending on charger output, to a maximum of 50% of project costs, with enhanced rebates of up to \$130,000 per port, to a maximum of 90% of costs for Indigenous communities (see section 3.1). The Program will also provide rebates for Level 2 stations (co-located with DCFCs only, or by meeting requirements in section 3.2.1), up to \$5,000 per station, to a maximum of 50% of costs (\$7,500 to a maximum of 90% of costs for Indigenous communities). The target number of DCFC ports to be installed from the Program is 450 and for Level 2 stations is 200.

This Program Guide serves as direction for the CleanBC Go Electric Public Charger Program, and identifies the requirements for administration, implementation, and oversight of the Program. The document may be periodically updated as needed to clarify Program requirements and improve Program effectiveness.

1.2 Program Management & Administration

The Ministry of Energy, Mines and Low Carbon Innovation (EMLI) is responsible for overall CleanBC Go Electric Public Charger Program management. Fraser Basin Council (FBC) will administer the Program on behalf of EMLI.

In order to meet CleanBC Go Electric Program targets, EMLI may modify any component of the Program. Program modification may include but is not limited to:

- Rebate eligibility criteria; and,
- Funding caps

The Program will be regularly reviewed and evaluated by EMLI staff. EMLI reserves the right to change or terminate the Program at any time without notice.

1.3 Program Communications

The application forms, eligibility requirements and applicable rebate amounts will all be accessed online. The CleanBC Go Electric Public Charger Program and application

process will be added as a page/subpages on FBC's Plug In BC website (https://pluginbc.ca/publiccharger/), using the CleanBC Go Electric branding. The Program page will link back to the CleanBC - Go Electric website (https://goelectricbc.gov.bc.ca/). FBC will use internal capacity to support the initial design and creative work to help with the set-up of the key marketing elements in a timely way. Ongoing updates will be done by FBC staff.

Enquiries related to the administration of the Program including, but not limited to, eligibility requirements, and application processing, should be directed to FBC at: PublicCharger@pluginbc.ca

Enquiries related to the overall design of the Go Electric B.C. Public Charger Program can be directed to EMLI at: <u>ZEVprograms@gov.bc.ca</u>

2.0 Program Criteria

2.1 Applicant Eligibility

Applicants must apply and be approved for Program rebate(s) before any costs are incurred. Any costs incurred before approval was received will not be eligible for a rebate(s) and cannot be counted toward eligible expense totals. After approval is received, applicants will have 18 months to complete projects and submit final documentation.

To be eligible for the Program an applicant must:

- Be the current site owner or have approval (in writing) from the site owner to install the charging infrastructure for a minimum ten-year period; and,
- Be a business, not-for-profit, local government, Indigenous community, utility or public sector organization located and operating in B.C. (excluding core government entities, i.e. Provincial Ministries, but including non-core entities, e.g. utilities, health authorities, school districts, universities, crown corporations, etc.).

2.2 Installation Site Requirements

To be eligible for the Program a project's charger installation site must be:

- Located within B.C.;
- Publicly accessible 24 hours per day, 365 days per year; and Accessible by those using mobility aids (wheelchairs, canes, etc.), including:
 - A space of at least 1.2 m between any protective bollards in front of the charger, such that they do not obstruct interface (i.e. screen and/or controls);

- A rise not exceeding 9 cm above grade for any concrete footing;
- Fonts that are clear and easy to read on any signage;
- Located on a paved level surface; and
- All projects must include at least one accessible charging space. Along with the requirements listed above, to be considered accessible, the charging space must:
 - 1. For stalls: Not be less than 2.4 m wide and provided on one side with an access aisle not less than 1.5 m wide; and
 - 2. For pull-through sites: Not be less than 3.9 m wide and the charging cable must be able to charge vehicles positioned at least 1.5 m away.
- Pull-through sites must:
 - Have adequate ingress and egress space to accommodate larger electric vehicles and trailers.

2.3 Equipment Requirements

To be eligible for the Program all equipment must:

- Be new, and purchased after program launch date;
- Remain operational by the original owner for a minimum of five years, or be replaced with a charger of equal or higher output that remains operational for five years from the date of the original project installation. Changes in equipment ownership within the five year period may be considered in extenuating circumstances (e.g. due to sale of a business) and must be approved to maintain Program funding;
- Contain appropriate certification marks (CSA, cUL, cETL, etc.) for use in B.C.;
- Have charging port holsters and the top of interface not exceeding 1.2 m above grade;
- Remain accessible to the public for use 24 hours per day, 365 days per year;
- Include an Operating and Maintenance Plan;
- Not replace an existing charger;
- Prospective installation locations greater than 500m from the nearest public charger (Level 2 or DCFC) will be required to install at least two ports per site: either tandem DCFC stations, a DCFC and Level 2, or two Level 2 stations meeting requirements in section 3.2.1 (minimum 32 A; higher power preferred) to provide redundancy to the site. Installation of both multiple DCFCs and one or more Level 2s per site will also be supported. A multi-port station on its own does not fulfill this requirement.
- If payment is required, the charging station must meet the following criteria:

- Provide a contactless payment method on-site that accepts major credit and debit cards;
- Provide one additional payment method that allows customers to initiate a charging session and submit payment (e.g., QR code that directs to an online payment portal, payment through membership or app, or toll-free phone number); and
- Payment methods must be accessible to persons with disabilities and not affect the power flow to vehicles.

To be eligible for the Program DCFC equipment must:

- Have 25% or more of the connector types installed at the same project site be Combined Charging System (CCS) Combo plug connectors. Other connector types, such as the North American Charging Standard (NACS), may represent up to 75% of all charging connectors installed per site;
- Have a minimum of one CHAdeMO plug connector per site only if the charging site is located more than 50km driving distance from the nearest public CHAdeMO DCFC. The distance to the nearest DCFC with a CHAdeMO plug will be determined using https://PlugShare.com.
- Be networked and be OCPP compatible by the date of installation; and
- Have a minimum power output of 20 kW.

To be eligible for the Program Level 2 equipment must:

- Have a J-1772 port;
- Have input power at 208 or 240 volts;
- Have a minimum power output of 32 amps; and
- Be networked and be OCPP compatible by the date of installation.

2.4 Eligible Project Costs

Costs eligible for rebates through the Program will be:

- DCFC equipment;
- Level 2 stations (co-located with DCFCs only, or meeting requirements in section 3.2.1;
- Installation costs such as labour and materials, including:
 - Necessary electrical equipment (e.g. cabling and conduit, transformer)
 - Earthworks:
 - Paving of one parking space per charger;
 - Curb and/or protective bollards around chargers;
 - Lighting directly above or adjacent to chargers (within 5 m);

- Network equipment (e.g. cellular booster);
- Way finding and on-site signage pertaining to the chargers (e.g. location, output, time limits, instructions for use);
- Site markings (e.g. pavement painting);
- One security camera per charger;
- Canopy (up to a maximum of \$20,000 per application can be claimed as an eligible project cost);
- Project management and engineering design fees;
- Utility provider fees for electrical connection;
- Network service provider initial sign-up fees;
- Equipment warranty; and
- For stations along highway 37 and 97 critical for the completion of the Electric Highway initiative, that are also participating in this program through the pilot stream, operations and maintenance costs up to a maximum of 3 years.

Applicants must apply and be approved for Program rebates before any costs are incurred. Any costs incurred before approval will not be eligible for any rebates, except for costs of a project pre-assessment. Project assessments costs incurred prior to pre-approval are considered eligible project costs. No rebates would be given for project pre-assessment if the project is not pre-approved.

Note: GST/PST and other taxes are not eligible costs under this program.

2.5 Final Project Documentation Requirements

To receive rebate funds applicants must submit the following documentation after DCFC and/or Level 2, if applicable equipment is installed and operational:

- Invoice for DCFC equipment and/or Level 2 equipment, if applicable;
- Itemized invoice for DCFC and/or Level 2, if applicable installation;
- Copy of network agreement;
- Photo of installed DCFC and/or Level 2, if applicable equipment;
- Photo of installed contactless credit card payment system; and,
- Proof all eligible equipment, DCFCs and Level 2s, as applicable is/are operational.

3.0 Rebate Overview

Applicants are eligible for three rebate tiers to cover up to 50% of the eligible costs of DCFCs with power outputs of ≥20kW (but less than 50 kW), ≥50kW (but less than 100 kW), and ≥100kW. Indigenous communities will be eligible for higher rebates at each

tier, to a maximum of 90% of total project costs. Level 2 chargers installed as part of a funded DCFC project or meeting the requirements in section 3.2.1 are eligible for a rebate of up to 50% of the additional cost or 90% for Indigenous communities. Indigenous communities refer to a First Nation (i.e. Band government) or its wholly owned subsidiaries (e.g. development corporations). To receive an Indigenous community rebate, the Indigenous community must own the equipment; a third-party that owns and installs equipment on Indigenous lands is not eligible for the enhanced rebates.

Prospective installation locations greater than 500 m from the nearest public charger (Level 2 or DCFC) will be required to install at least two ports per site: either tandem DCFC stations, a DCFC and Level 2, or two Level 2 stations meeting requirements in section 3.2.1 (minimum 32 A; higher power preferred) to provide redundancy to the site. Installation of both multiple DCFCs and one or more Level 2s per site will also be supported. A multi-port station on its own does not fulfill this requirement.

The applicant will be responsible for ongoing operation and maintenance costs associated with the chargers and will be required to prepare an Operating and Maintenance Plan for its charger(s).

Rebates may be capped at 10 per organization to reserve funds for other organizations.

The Province reserves the right to limit the number of chargers funded per project.

3.1 DCFC Funding Tiers

Applicants are offered three tiers of rebates for DCFC stations with: 1) output of 20kW or greater, but less than 50 kW; 2) output of 50 kW or greater but less than 100 kW, and 3) output of 100 kW or greater. Rebate amounts are as follows:

Charger Output	Maximum Rebate Amount	Maximum Rebate Amount for Indigenous Communities
DCFC: ≥20 kW, but <50 kW;*	\$20,000; up to 50% of project costs	\$50,000; up to 90% of project costs
DCFC: ≥50 kW, but <100 kW;	\$50,000; up to 50% of project costs	\$100,000; up to 90% of project costs
DCFC: ≥100 kW	\$80,000; up to 50% of project costs	\$130,000; up to 90% of project costs
Level 2: ≥32 amps	\$5,000; up to 50% of	\$7,500; up to 90% of costs

costs	
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^{*} Under conditions identified in section 3.4

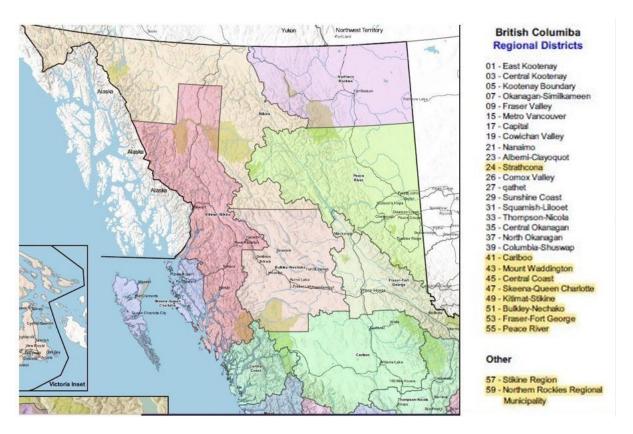
3.2 Level 2 Additions

To provide contingency charging in the case a station is occupied or not functioning, Level 2 chargers installed in tandem with DCFCs as part of the Program will be eligible for an additional maximum of \$5,000 (\$7,500 for Indigenous communities) in project funding per Level 2 charger (≥32 A), to a maximum of \$10,000 (\$15,000 for Indigenous communities) per installation site (percentage caps still apply).

3.2.1 Level 2 Only Locations

This Program is intended to primarily support public fast charging. Public Level 2 stations not required to be co-located with a DCFC station will be supported only in specific instances. Locations must meet the following criteria:

- No public Level 2 stations (without co-located DCFCs) are eligible in Metro Vancouver or the Capital Regional District through this Program, except for any of the Gulf Islands with one or fewer public charging stations or for Indigenousowned stations;
- There must be one or fewer public Level 2 or DCFC within 10 km of the location;
- Campgrounds and RV sites may be considered for Level 2 only projects, providing the above criteria is met. Campgrounds or RV sites that are not publicly accessible overnight or accessible 24/7/365 will be considered on a case-by-case basis;
- Particular focus will be on identified geographic gaps in the <u>B.C. Light-Duty Public Zero-Emission Vehicle Infrastructure Study (2021)</u> which have one or fewer public charging stations (Level 2 or DCFC);
 - Priority will be given to:
 - Strathcona Regional District
 - Cariboo Regional District
 - Regional District of Mount Waddington
 - Central Coast Regional District
 - North Coast Regional District (previously known as Skeena Queen Charlotte Regional District)
 - Regional District of Kitimat-Stikine
 - Regional District of Bulkley-Nechako
 - Regional District of Fraser-Fort George
 - Peace River Regional District
 - Stikine Region
 - Northern Rockies Regional Municipality



htps://www2.gov.bc.ca/gov/content/data/geographic-data-services/land-use/administrative-boundaries/census-boundaries

3.3 Tandem or Multi-Port DCFC Installations

Tandem and multi-port DCFCs are eligible for one rebate for each vehicle that can charge simultaneously at a given output level. For tandem DCFC stations a 75% funding limit will apply while the combined dollar cap will remain the same. The funding amount of multi-port stations will be based on the maximum simultaneous output level of operating ports.

For example, if the total cost for two tandem 50 kW stations is \$180,000, the applicant is eligible for $2 \times 50,000$ rebates = \$100,000.

Multi-port stations must be accompanied by an additional charging station (DCFC or Level 2) on the same site.

3.4 Station Output Level Conditions

In order to ensure effective deployment of charging stations under the Program, the following are guidelines for DCFCs with charging output levels of <50 kW.

Stations with less than 50 kW output would be eligible under the following conditions:

• In urban centres (i.e. within Census Agglomerations or Census Metropolitan Areas with a population of 100,000 or greater);

- In areas not located on or near primary, secondary highways or major roads, as defined by the B.C. Ministry of Transportation and Infrastructure;
- As part of a tandem installation with a ≥50 kW DCFC;
- Where an electrical service extension (and/or service upgrade, as applicable) to accommodate a ≥50 kW station would be cost prohibitive.

3.5 Pilot Projects

DCFC or Level 2 pilot projects (e.g., for battery storage, off-grid, curbside, and other innovative public charging applications) may be considered through this Program if they are able to demonstrate public benefit. Specific eligibility criteria may be developed for pilot projects.

Pilot projects are eligible for the following funding amounts*:

	Maximum rebate amount per charging port	Maximum rebate amount per charging port for Indigenous Communities
DCFC: ≥20 kW**	\$80,000; up to 50% of project costs	\$130,000; up to 90% of project costs
Level 2: ≥32 amps	\$5,000; up to 50% of costs	\$7,500; up to 90% of costs

*Pilot project applications to the Public Charger Program for the completion of the Electric Highway are not subject to these maximum rebate amounts. Up to \$10M from the Public Charger Program may be allocated for the Electric Highway initiative to fill remote gaps that are otherwise not logistically or financially feasible. Please see the 2022 Zero Emission Vehicle Update at gov.bc.ca/zeroemissionvehicles for more information on the Electric Highway Initiative. The 2023 Zero Emission Vehicle Update will be published on this page on or before April 30, 2024.

**Pilot project rebate amounts are not solely based on power output; each project will be assessed on an individual basis. However, a minimum output of 20 kW is required to access DCFC rebate amounts. The DCFC funding tiers in Section 3.1 will generally apply unless the project can demonstrate the potential for significant technological advancement or public benefit in B.C.

4.0 Application Process

Applicants can find Program information, criteria, application forms and other relevant information on FBC's Plug In BC website (https://pluginbc.ca/publiccharger/). Applications will be submitted online and must receive approval before any works begin. Any costs incurred before approval was received will not be eligible for a rebate(s) and

cannot be counted toward eligible expense totals. Applicants who do not own the site they plan to install a DCFC at will need to include a written agreement demonstrating right to use the site with their application for a ten-year period.

Applications will be reviewed on a minimum three-month cycle, or more frequently depending on application volume. Once a decision has been made, applicants will be notified by email if they have been successful; remaining applications will be retained for future review periods.

EMLI reserves the right to pause application reviews at its discretion for any period of time.

Preference will be given to applications that:

- Fill existing DCFC network gaps and/or underserved areas (e.g. Indigenous communities, rural and northern areas, communities with high ZEV uptake, high concentrations of existing multi-unit residential buildings, etc.);
- Are co-located with primary amenities (lighting, washrooms, non-cellular wireless (i.e. WiFi) internet available at all times);
- Are co-located with one or more additional DCFCs;
- Are located near secondary amenities, such as restaurants, shopping and attractions (e.g. parks, libraries, community centres, etc.);
- Include stations ≥75 kW when located on primary and secondary highways, where feasible;
- Include stations able to deliver ≥120 A of electricity, if proposing DCFCs with output ≥50 kW but <100 kW;
- Include Level 2 stations with a higher output than 32 A, if Level 2 stations are proposed;
- Utilize pull-through charger site design;
- Enable curbside EV charging;
- Include capability to add of future DCFCs (e.g. space on site, oversized conduit, etc.)
- Agree to provide data on charger usage;
- Include site design drawings; and
- Include an operating and maintenance plan as part of the original application;
 - for more guidance see BC Hydro's EV Fast Charging Design & Operational Guidelines at https://www.bchydro.com/powersmart/electric-vehicles/industry/fast-charging.html).

Once approval is received, applicants will have an 18-month window to install their DCFC(s) (and/or Level 2(s) if applicable) and submit final project documentation. FBC will review the final documentation for completeness and will then issue rebates. The

items below lay out the steps for applying, receiving approval, and receiving the rebate:

 Application for station(s): Applicant creates an online profile and applies for the number of stations desired, including information on organization type and documentation, site description, proof of site ownership or permission of the landowner, charger type(s) and output(s), capital budget/quotation (including site acquisition/lease (if applicable), permits, design, electrical service extension, site preparation/civil works, electrical equipment, charger, lighting, and signage), and site design drawings (optional). The submission of a completed operations and maintenance calculator and an operations and maintenance plan is required.

<u>Note:</u> Budget quotations should be fully itemized and from a qualified electrical contractor/engineering firm/consultant/an entity qualified to provide quotations related to EV chargers and related infrastructure. The budget quotations and the EV charger specifications are used by the program to calculate and determine the pre-approved rebate amount for approved applications.

- Screening and pre-approval: FBC staff screen applicants for eligibility and move forward applicants that meet mandatory criteria.
- <u>Station approval</u>: in consultation with EMLI staff, FBC approves applications based on a diversity of geographic and usage types. Upon receiving notice from FBC that a project has been approved for funding, applicants will have 60 days from the date of this notice to sign the funding agreement. Applicants then have 18 months from the date of signing this agreement to complete the approved project. FBC staff will check in periodically to assess progress.
 - Projects that may require advance payments to manage the cashflow, might have the option to be funded through an up-front contribution agreement. To be considered for advanced funding, applicants must submit a request in writing including the quote of expenses from a qualified electrical contractor.
- Completion report: Applicant provides completion report including documentation, photos, a financial report, and copies of all invoices to verify costs. These will be submitted online via the application platform. FBC will reserve the right to make on-site audits for projects if required. An Operating and Maintenance Plan must be submitted at this stage. An Operating and Maintenance report template is available on FBC's Program website (https://pluginbc.ca/publiccharger/) but an alternative format may be used, as long as it contains the following elements:
 - Service stability

- Charger up-time targets
- Performance monitoring (e.g. testing, remote, crowdsource, etc.)
- Ensuring access
 - Cleaning interface
 - Clearing/plowing area
 - Lighting
 - Preventing blocking by vehicles not charging
- Regular maintenance/warranty
- Staff training
 - Customer service (on site/remote)
 - Operation/signup walkthrough
 - Resetting device
 - Nearby charging locations
 - Local towing companies
- Incident response plan (e.g. for device failure, vehicle impacts, tampering/vandalism, etc.), including:
 - Response procedures (e.g. shutdown, fire department, repair/replacement, etc.)
 - Service provider and/or warranty service
 - Response time targets
 - Public notification of failure
 - Spare parts supply/inventory
 - Graffiti removal
- Cost of electricity (including demand charges)
- Network fees
- Revenue collection strategy (if applicable)
- Insurance

<u>Station utilization data:</u> Successful applicants are encouraged to provide usage data for DCFCs funded under the Program, for a minimum period of five years from the date of installation. Usage data includes information related to charging sessions (i.e.: start/end time, duration, energy, power per minute, peak power) but excludes personally

identifiable data. Successful applicants will work with the Ministry of Energy, Mines, and Low Carbon Innovation to determine the best tools and methods for data sharing.

For example, successful applicants can send station utilization data in the format of an annual report that includes a record for each charging session during the year, its start and end time, the maximum charging rate (kW), the energy delivered (kWh), and the charging connector type. It should not contain any personally identifiable information of users (names, membership numbers, credit card numbers). Acceptable formats are .xls, .xlsx, and .csv.

Final documentation will also be submitted online. Printable or paper application forms may be requested from FBC in extenuating circumstances. New stations funded under the Program will be entered into charging station databases (e.g. Chargehub, Plugshare, etc.) with a link to the Program webpage.

5.0 Interaction with Other Programs in Market

There are two other programs currently in market that offer rebates for DCFCs and can be accessed for B.C. based DCFC projects. The two programs are:

- Natural Resources Canada (NRCan) Zero Emission Vehicle Infrastructure Program (ZEVIP); and,
- NRCan Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative (EVAFIDI).

Both programs provide maximum federal funding of 50% of total project costs to a maximum of \$50,000 per DCFC. Currently EMLI has partnered with NRCan on both programs to provide additional funding for B.C based DCFC projects. Successful applicants completing DCFC projects in B.C. are automatically eligible for B.C. funding. EMLI funding provides a maximum of \$25,000 per DCFC to a max of 25% of the total project costs (on top of the federal \$50,000 funding). Any station that receives EMLI funding through the ZEVIP or EVAFIDI will not be eligible for funding through the CleanBC Go Electric Public Charger Program.

The stacking of provincial funding with ZEVIP, EVAFIDI, and other CleanBC Programs is not permitted. Stacking of funding from other government funding programs with the Public Charger Program will be limited to 75% of eligible project costs, except in the case where the applicant is a local or Indigenous government or their department or agency in which case the stacking limit for government funding is 100% of the total project costs. Funding from other sources will be allowed as long as funding amounts do not exceed total project costs. Reporting of application for other government funding for the use toward a project funded under the CleanBC Go Electric Public Charger Program is mandatory.