



## EV CHARGING GUIDE

# A ZERO-EMISSIONS ROADMAP WITH CHARGE FORWARD

The Canadian government is determined to achieve net-zero greenhouse gas emissions by 2050. To reach this goal, they aim to make all new light-duty vehicles emissions-free by 2035. As part of this effort, the government has already invested over \$1 billion to establish a coast-to-coast network of charging stations in local communities.

Currently, there are more than 7,000 public charging stations with over 20,000 charging ports available throughout Canada.

## **DID YOU KNOW?**

There are over 3,000 public charging stations with over 600 fast-charging stations in Western Canada.

Canada is expected to deploy more than 80,000 new EV charging stations by 2027.

This number is expected to grow in the future due to the government's continue investment in charging infrastructure, incentives and tax credits to encourage consumers to purchase zero-emission vehicles, and investing in research and development.

For more information visit nrcan.gc.ca





1

## TYPES OF CHARGING STATIONS

## **Level 1 - Slow Charging**

Level 1 EV chargers are the slowest and most basic type. They use a standard 120-volt household outlet, a J1772 standard connector, and can charge an EV at a rate of about 5 km of range per hour. It can take up to 24 hours to fully charge an EV, depending on battery size.

This level is ideal for drivers who have a low daily driving range, or who don't have access to Level 2 or 3 chargers. It's typically used for overnight charging at home or in a workplace.



## **Level 2 - AC Fast Charging**

The most common type of EV charger is Level 2, which provides a faster charging rate than Level 1. Level 2 chargers—known for their convenience and speed—use a 240-volt AC power supply, which can charge an EV at a rate of about 40 km of range per hour, and a J1772 standard connector on the other end. They take around four to eight hours to fully charge an electric car, depending on battery size. These chargers are often found in workplaces, public parking garages, and some residential settings. They're for drivers who need a faster charging rate, or who don't have access to a Level 3 charger.



## **Level 3 - DC Fast Charging**

Also known as DC fast chargers, Level 3 EV chargers are the fastest and most expensive option. They use a 480-volt DC plug, which can charge an EV at a rate of up to 200 km of range per hour, and a CCS or CHAdeMO connector.

These chargers are typically found along highways, at rest stops, and in urban areas where quick charging is needed. Depending on battery size and the station's capacity, they can charge an EV in just 30 minutes. Level 3 charging stations often require payment or membership to use.



## Level 2 vs. Level 3 EV charging

Level 2 chargers provide AC power to the vehicle which is converted to DC power by the onboard charger and stored in the battery.



Level 3 chargers convert AC to DC within the charger itself, supplying DC power directly to the battery.



## LEVEL 2 - RESIDENTIAL CHARGERS



## **Flo Home Series**

- X3 and X6 are 6-50A Adjustable
- X8 is 6-80A Adjustable
- Output Power: 12kW and 19.2kW
- SAE J1772 Connector
- 25' Cable
- Integrated Cable Management
- NEMA Type 4X, IK10 Rating
- Operating Temperature: -40°C to 50°C
- FLO Mobile App
- 5-Year Limited Warranty





## **Electric Avenue Watti Home Gen2**

- 16A, 32A, 40A, and 48A Adjustable
- Pre-Installed NEMA 14-50P Plug
- Output Power: Up to 11.5kW
- SAE J1772 Connector
- 25' Cable
- Integrated Cable Management
- NEMA Type 4 Rating
- Operating Temperature: -40°C to 50°C
- Electric Avenue App
- 3-Year Limited Warranty





✓ In stock

• 32A, 40A, 48A, and 80A Models

LEVITON

- Output Power: 7.6kW, 9.6kW,
   11.6kW, and 19.2kW
- SAE J1772 Connector
- 18' and 25' Cable
- NEMA Type 3R Rating
- Operating Temperature: -30°C to 50°C
- My Leviton Mobile App
- 2-Year Limited Warranty





- 40A and 48A Models
- Output Power: 9.6kW, 11.5kW
- SAE J1772 Connector
- 20' Cable

✓ In stock

- Integrated Cable Management
- NEMA Type 4, IK10 Rating
- Operating Temperature: -35°C to 50°C
- Siemens Versicharge App
- 3-Year Limited Warranty

**SIEMENS** 

## LEVEL 2 - COMMERCIAL CHARGERS



## **FLO CoRe+**

- 6-32A Selectable
- Output Power: Up to 7.2kW
- SAE J1772 Connector
- Integrated Cable and Pistol Holder
- Aluminum Type 4X enclosure
- Operating Temperature: -40°C to 50°C
- Cellular: 4G/LTE Connectivity
- 1-Year Warranty





## **⊘** In stock

## **FLO CoRe+ MAX**

- 6A-80A Selectable
- Output Power: Up to 19.2kW
- SAE J1772 Connector
- 19' and 25' Cables Available
- Aluminum Type 3R enclosure
- Operating Temperature: -40°C to 50°C
- Cellular: 4G/LTE Connectivity
- 1-Year Warranty





## Electric Avenue Watti Pro Lite

- 6A-48A Selectable
- Output Power: Up to 11.5kW
- SAE J1772 Connector
- 18' and 25' Cables Available
- NEMA Type 4, IK10 Rating
- Operating Temperature:
   -40°C to 50°C
- Enterprise Software subscription
- WiFi/LAN/4G Connectivity

Electric

3-Year Warranty



## **Leviton EV Series Pro**

- 48A and 80A Models
- Standard Face and LED
   Screen Models
- Output Power: 11.6kW and 19.2kW
- SAE J1772 Connector
- 18' Cable
- NEMA Type 3R Rating
- Operating Temperature:
   -30°C to 50°C
- 2-Year Warranty (3-year for S Models)



## Siemens VersiCharge

- 40A and 48A Models
- Output Power: 9.6kW and11.5kW
- SAE J1772 Connector
- 20' Cable
- Integrated Cable Management
- NEMA Type 4, IK10 Rating
- Operating Temperature: -35°C to 50°C
- 3-Year Warranty



**SIEMENS** 

## FLO ULTRA SERIES NOW IN STOCK!

The FLO Ultra series EV charger is a high-powered, reliable charging solution designed to meet the growing demands of electric vehicle drivers. Built for speed and efficiency, it delivers ultra-fast charging, making it ideal for commercial locations and highway corridors where drivers need to recharge quickly. FLO Ultra chargers are equipped with state-of-the-art technology to provide a seamless user experience featuring dual charging ports, dynamic power management, and a durable, weather-resistant design.



## **FLO Ultra Series**

- Output Power: 320kW
- CCS Type 1 Connector
- Two Independent Charger Ports in a Single Enclosure
- Up to 500kW when Paired with a Second FLO Ultra via FLO UltraConnect
- Highly Visible Lighting Canopy with Intuitive State of Charge Indicators
- 12.1" Colour LCD Touchscreen
- 18' Cable
- FLO EZLift Motorized Cable Management
- Operating Temperature: -40°C to 50°C
- Credit Card Reader: Tap (NFC), Insert, Swipe
- 1-Year Warranty



## LEVEL 3 - DC FAST CHARGERS



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### **FLO SmartDC Series**

- 50kW and 100kW
- CCS1 and CHAdeMO Connectors
- 20' and 12' Twisted Steel Cables
- Integrated Cable
   Management Available in the 50kW Version
- Credit Card Reader: Tap (NFC), Insert, Swipe
- Aluminum Type 3R Enclosure
- Operating Temperature:
   -40°C to 50°C
- FLO EV Charging App
- 1-Year Limited Warranty

## **Electric Avenue Watti Direct 30kW Portable**

- Perfect for Fleets, Service Bays and EV Dealers
- 13' CCS Charging Cable
- Includes 30' Pin and Sleeve Cable Providing 43' Total Reach
- Integrated Cable Management
- OCPP 1.6 JSON and OCPP 2.0
- LAN/WiFi/4G Connectivity
- 7" LCD Screen with Userfriendly Interface
- NEMA 3R, IK10 Rating
- Operating Temperature:
   -30°C to 50°C
- Stainless Steel/Black and White Models
- 2-Year Limited Warranty

## Electric Avenue Watti Direct

- 30kW, 60kW, 120kW,180kW, and 360kW
- CCS1 and CHAdeMo Connectors
- 15' and 23' Cables Available
- Integrated Cable

  Management
- LAN/WiFi/4G Connectivity
- 7" LCD Screen
- NEMA 3R, IK10 Rating
- Operating Temperature:
   -30°C to 50°C
- 2-Year Limited Warranty







## LOAD MANAGEMENT DEVICES

Load management devices are systems or technologies designed to control and optimize the charging of multiple electric vehicles at a location with limited power capacity. These devices are particularly useful in scenarios where multiple EVs are charging simultaneously, such as public charging stations, commercial parking lots, or residential complexes with a high number of EV owners.

## RVE's DCC

The DCC is an Electric Vehicle Energy
Management System that enables a charger
to connect directly to an electrical panel, even
when the panel lacks the necessary capacity for
a standard connection. This innovative system
allows for safe and efficient charging of electric
vehicles in various settings, ensuring optimal
energy management without compromising
performance.



✓ In stock

## DCC

- DCC-12, DCC-10 and DCC-9 Models In Stock
- NEMA 3R Rating for Indoor and Outdoor Use
- DCC-12 and DCC-10 for Single-Family Homes
- DCC-9 for Multi-Residential Buildings
- CSA and UL Listed
- Approved for use with Various Appliances including Electrical Patio Heater, Snow Melting Systems, Generator, Hot Tub, Solar Panel, HVAC, AC, Heat Pump, Sauna, and more.



Originally developed for residential EV charging, the DIVVEE gives you access to the power needed for level 2 EV charging, without having to upgrade your home's electrical panel. Not only is DIVVEE great for home EV charging, it is also rated for other load-sharing purposes, such as hot tubs, heating, AC, workshops, and more.

## **Loadshare DIVVEE**

The DIVVEE is a device that intercepts a circuit that is already included in your electrical breaker panel (usually the range breaker) and splits the power supply between that and the EV charger. When the range turns on, DIVVEE automatically shuts off the EV charger until the range stops operating, then turns the charger on again.



## Loadshare DIVVEE 40A & 60A

- 208/240 AC Volts Single Phase
- Frequency 50-60Hz Phase
- NEMA 1 Rating
- Relay Sensitivity: 1 Amp
- Relay Response Time: 200ms
- CQAIUS Listed
- Approved for use with Various
   Appliances including Hot Tub,
   HVAC Systems, Workshops, Heated
   Flooring, and more.



## FEDERAL AND PROVINCIAL REBATE PROGRAMS

## **BRITISH COLUMBIA**



## Fortis BC and BC Hydro: CleanBC Go Electric

Funded by the Government of B.C.'s Ministry of Energy, Mines and Low Carbon Innovation, and with financial support from the Government of Canada, Fortis BC and BC Hydro administers the CleanBC Go Electric electric vehicle (EV) charger rebate program. The program provides rebates for the purchase and installation of electric vehicle (EV) chargers and infrastructure to get homes and workplaces across B.C. ready for EVs.

This program is part of the province's CleanBC plan to make clean transportation more affordable and accessible for British Columbians. Visit Go Electric to learn more about the plan and read the full strategy.

## Single family homes

Single-family homes, row homes, duplexes or townhouses can get a rebate of up to 50% of the purchase and installation costs of an eligible Level 2 EV charger, to a maximum of \$350. For a limited time Fortis BC and BC

### E.B. Horsman & Son Disclaimer

The information provided in this document on available federal and provincial rebate programs is shared directly from the Fortis BC, BC Hydro and the Government of Canada website on October 20th, 2024. E.B. Horsman & Son is not liable for any outdated, mis-interpreted, false, or mis-information regarding the rebate programs, its eligibility, qualified products, or the rebate amounts. For the most up-to-date information, please fortisbc.com and electricvehicles.bchydro.com

Hydro is offering additional funding of up to \$250 for single family home customers who install an eligible smart EV charger. Visit the single family home page to learn more.

## **Apartment and condo buildings**

## 1. EV Ready Rebates

You could apply for these rebates together to streamline the EV-related upgrades to your building, or you could apply for them one at a time as your project progresses.

- EV Ready plan rebate: A rebate of up to \$3,000 for the creation of an EV Ready plan

   a professional strategy for your building to make at least one parking space per residential unit EV Ready.
- EV Ready infrastructure rebate: A rebate of up to 50% of costs to install the electrical infrastructure required to implement your EV Ready plan, to a maximum of \$600 per parking space, and a project maximum of \$120,000.
- EV charger rebate: A rebate of up to \$1,400 per to purchase and install Level 2 networked EV chargers to implement your building's EV Ready plan, to a maximum of \$14,000.

## 2. Standalone EV charger rebate

EV charger rebate: Get up to \$2,000 in rebates, up to 50% of costs, per charger to purchase and install Level 2 networked EV chargers at your building's residential parking spaces, to a maximum of \$14,000.

## Workplaces

Workplaces can get a rebate of up to \$2,000 per charger to purchase and install eligible Level 2 networked EV chargers for employee use, to a maximum of \$14,000. To be eligible, pre-approval from BC Hydro is required prior to purchasing and/or installing chargers.

Eligible workplace organizations can have separate applications for different locations, up to a maximum of four.

Interested in learning about rebates available in Alberta and Saskatchewan?

Get in touch with our team of specialists for expert guidance.

## FEDERAL AND PROVINCIAL REBATE PROGRAMS

## **ZEVIP**

The Zero Emission Vehicle Infrastructure Program (ZEVIP) provides funding towards the deployment of electric vehicle (EV) chargers and hydrogen refuelling stations across Canada.

This \$680 million initiative addresses a key barrier to the adoption of zero-emission vehicles (ZEV)—the lack of charging and refuelling stations in Canada—by increasing the availability of localized charging and hydrogen refuelling opportunities where Canadians live, work, and play. This is administered through three key funding streams and is available until 2027.

## For owners/operators of ZEV infrastructure

Providing funding towards projects focusing on EV charger deployment in public places, on-street, in multi-unit residential buildings, at workplaces, and for vehicle fleets.

Projects are selected through a competitive process.

NRCan's contribution will be limited to fifty percent (50%) of Total Project Costs up to a maximum of 10 million dollars per project.

## For delivery organizations

Providing funding for smaller EV charging projects through organizations authorized to redistribute a component of the ZEVIP funding.

NRCan's contribution will be limited to fifty percent (50%) of Total Project Costs up to a maximum of 5 million dollars per project for delivery organizations.

## For Indigenous organizations

Providing funding to Indigenous organizations and communities for projects focusing on EV charger deployment in public places, on-street, in multi-unit residential buildings, at workplaces, and for vehicle fleets.

NRCan's contribution will be limited to seventyfive percent (75%) of Total Project Costs up to a maximum of 2 million dollars per project for Indigenous organizations.

# GENERAL QUESTIONS TO HELP QUALIFY YOUR CUSTOMER'S APPLICATION:

- What is the application (where are they being installed)?
- How many chargers are you looking to install?
- What size chargers are you looking to install? (32A, 40A, 48A, 80A, DC Fast)
- Will the chargers be wall-mounted or on a pedestal?
- How will the chargers connect to the software? (LAN/Ethernet, Wi-Fi, 4G/Cellular)
- Will you need load management capabilities?
- Are you looking to generate revenue off these chargers?
- Are you interested in any available incentive programs?

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Level 2 Residential Chargers			
Manufacturer	Part Number	Description	
FLO	HOX3F2A1A1-FL-R01	Flo Home X3	
FLO	HOX6F2A1A1-FL-P20	Flo Home X6	
FLO	HOX8F2A1A1-FL-P17	Flo Home X8	
Electric Avenue	EAWHG248-25WI0PLBL	Watti Home Gen2	
Leviton	EV320	EV Series Standard 32A	
Leviton	EV32W	EV Series Smart Home 32A	
Leviton	EV40P	EV Series Smart Home 40A (w/ Plug)	
Leviton	EV480	EV Series Standard 48A	
Leviton	EV48W	EV Series Smart Home 48A	
Leviton	EV80W	EV Series Smart Home 80A	
Siemens	8EM13124CF180FA3	VersiCharge Residential 40A	
Siemens	8EM13125CF180FA3	VersiCharge Residential 48A	

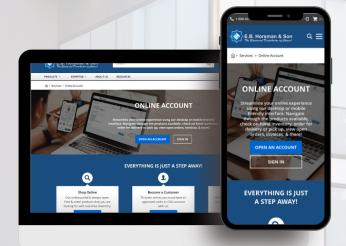
Level 2 Commercial Chargers			
Manufacturer	Part Number	Description	
FLO	COPS0001-FL-P07	Flo CoRe+	
FLO	COPS700ED2-FL-P07	Flo CoRe+ MAX (19' Cable)	
FLO	COPS100ED2-FL-P07	Flo CoRe+ MAX (25' Cable)	
Electric Avenue	EAWPLT48-18WI1HWBL	Watti Pro Lite 48A	
Electric Avenue	AXLU111001W1P1-RW	Watti Pro 48A	
Leviton	EV48S	EV Series Pro 48A Standard Face	
Leviton	EV48G	EV Series Pro 48A LED Screen	
Leviton	EV80S	EV Series Pro 80A Standard Face	
Leviton	EV80G	EV Series Pro 80A LED Screen	
Siemens	8EM13104CF140GA0	VersiCharge Commercial 40A (Child)	
Siemens	8EM13104CF141GA2	VersiCharge Commercial 40A (Parent)	

Load Management			
Manufacturer	Part Number	Description	
RVE	DCC-12	EVEMS for Single-Family Homes	
RVE	DCC-10-40A	EVEMS w/ Internal 40A Breaker	
RVE	DCC-9-40A	40A EVEMS for Multi-Unit Buildings	
Loadshare Technologies	DIVVEE-40	40A Load Sharing Device	
Loadshare Technologies	DIVVEE-60	60A Load Sharing Device	

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## Locations

## **British Columbia:**

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