



Did you know...

There are three different levels of charging an electric vehicle?

Level 1 Charging

- The most common type of charging is Level 1, which is included when you buy your EV. This method provides charging through 120V AC or the standard household outlet.
- Level 1 charging generally takes 8 to 12 hours to completely charge a fully depleted battery. Other factors that may affect the charging time include the battery technology used and the ambient temperature while charging.
- The standard charge coupler is the SAE J1772, as maintained by the Society of Automotive Engineers.
- The most common place for Level 1 charging is the owner's home. Typically, charging takes place overnight.

Level 2 Charging

- Level 2 charging provides charging through 240V AC on a dedicated circuit (from 32A to 80A).
- Charging time generally takes 4 to 6 hours to complete. Similar to Level 1, charging time may vary depending on battery technology and ambient temperature.
- Level 2 chargers use the same SAE J1772 charge coupler.
- Other than residential settings, Level 2 chargers are also found in public parking areas and commercial settings.
- The following are useful links to EV charging station locations:
 - CAA: caa.ca/evstations
 - Sun Country Highway: suncountryhighway.ca/ev-trip-planner/#.VQhPuo7F98E

Level 3 Charging

- Level 3 charging provides charging through 480V DC on a dedicated circuit (from 100A to 200A)
- Most Level 3 chargers can provide an 80% charge in 30 minutes.
- Level 3 chargers use CHAdeMO technology charge couplers, also commonly known as DC Fast Charging.
- Level 3 charging is not available with all vehicles, as there is currently no industry standard for this level. At present, the Mitsubishi i-MiEV and Nissan LEAF can accept a Level 3 charge.





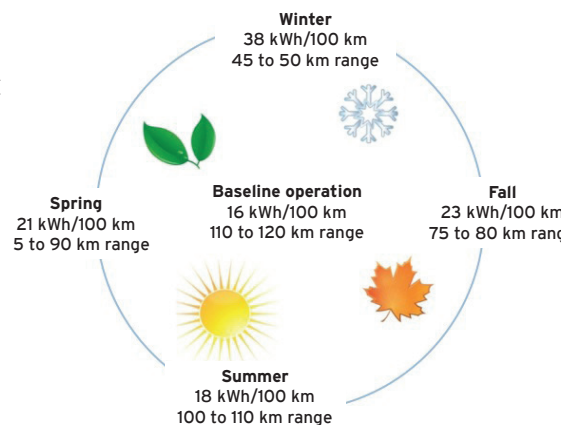
Did you know...

- Red River College's Electric Vehicle Technology & Education Centre has completed demonstration and testing of all-electric (Mitsubishi i-MiEV and Nissan Leaf) and extended hybrid vehicles. Annual operational reports can be found at the following link: rrc.ca/evtec

Source: All-electric Mitsubishi i-MiEV first year report, pg 11, blogs.rrc.ca/ar/wp-content/uploads/2013/11/imievreportfinal.pdf

- The average energy consumption of an all-electric vehicle is between \$1.75 to \$2.50 per 100 kilometres, as compared to a conventional car, which costs \$15 per 100 kilometres.

Assumptions: Gasoline price of \$1 per litre; electricity price of 7 cents per kWh



Comparative Current Energy Costs

Vehicle	Fuel Consumption per 100 km	Energy Cost per 100 km
Mitsubishi i-MiEV	25 kWh	\$1.75
Nissan Leaf	35 kWh	\$2.50
Average conventional car	15 litres	\$15.00
Efficient conventional car	8 litres	\$8.00

