

## Electric Vehicle Charging Stations

When it comes to electric vehicles, important considerations include operating range and availability of infrastructure – charging facilities in the case of plug-in models.

The City of Pitt Meadows obtained funding from the BC Province's Community Charging Infrastructure (CCI) Fund to help build the network of electric vehicle charging stations across BC.

The City of Pitt Meadows obtained partial funding to support the purchase and installation of two new level 2 electric vehicle charging stations that are accessible to the public. The charging stations are located beside the Pitt Meadows City Hall, at **12007 Harris Road**. These charging stations are becoming part of a network of 570 electric vehicle charging stations across BC.



## Electric Vehicles *in the* City of Pitt Meadows



The electric vehicle is claiming its rightful place on the road – as a cleaner, greener, quieter choice that is efficient, dependable and available in a range of makes and models.



Information and pictures from Fraser Basin Council's Plug in BC website: [www.e3fleet.com/plugin\\_bc.html](http://www.e3fleet.com/plugin_bc.html)



## Types of Electric Vehicles

### Hybrids or HEV

Hybrids use a combination of an internal combustion engine, powered by gasoline or other fuel, and an electric motor, powered by a large rechargeable battery, for propulsion and onboard accessories. The battery in a hybrid is recharged either from the engine or from energy captured while braking, or both. Passenger vehicle hybrids emerged in the Canadian market around 2000. Given fuel reductions of 25-50%, fleets quickly took note, and the BC taxi industry became an early adopter of the technology. Fleets in various sectors now use hybrid SUVs and light, medium and heavy duty vehicles, including delivery vans, school and urban buses, ambulances, utility trucks and Class 8 long haul trucks.



### Plug-in hybrid electric vehicles (Plug-in hybrids, PHEV or PHV)

Another variation of the hybrid vehicle is the plug-in hybrid, which features a larger battery – recharged principally by plugging the vehicle into the electrical grid – and an internal combustion engine. The result is more fuel savings and emission reductions. The “all electric” operating range varies by vehicle; the newly released Chevy Volt, for example, has an all-electric electric range of 56 km under EPA tests, with the internal combustion engine extending the range to over 600 km when fully fuelled and charged.



### Plug-in electric/Battery electric (PEV or BEV)

In 2011 several major auto manufacturers began rolling out their first-release 100% plug-in electric vehicles for fleets, including the Nissan LEAF, Mitsubishi iMiEV, and Ford Transit Connect Electric. Plug-in electric cars feature large batteries

charged entirely by plugging into the electrical grid, meaning no tailpipe emissions. The EPA report on the Nissan Leaf found an operating range of 100 miles (160 km) in city driving conditions tested.



### Fuel cell vehicles (FCV)

Hydrogen fuel cell technology is also being geared up for transportation. Hydrogen fuel cells convert chemical energy into electricity to power an electric motor. Fuel cells in cars can be refueled with hydrogen, and additional energy can also be captured in a battery. Demonstration models are in operation and being tested by such manufacturers as Honda, Toyota and Mercedes-Benz. Close to home, BC Transit is operating a fleet of hydrogen fuel cell buses.