

## **ELECTRIC VEHICLES**

Charging Station Pilot and Eco-Pass Permit Program Updates





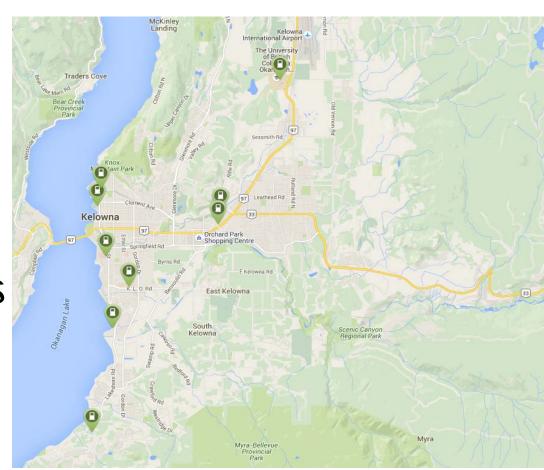
#### BACKGROUND

- Electric vehicles emerging sector in auto industry
- OCP and Community Climate Action Plan aims to reduce greenhouse gas emissions by 33% from 2007 levels by 2020
- Opportunity to support EV adoption as preferred mode of transportation



## EXISTING EV CHARGING STATIONS

- Wineries
- Educational Institutions
- KGH
- Car Dealerships
- Hotels





#### FORTISBC PARTNERSHIP

- City provides:
  - prominent location in downtown core
  - Minor equipment maintenance
- FortisBC provides:
  - Design expertise
  - Existing underground infrastructure
  - Charging Stations and installation works



## CONCEPTUAL VIEW FROM ELLIS STREET

- Meter pedestal cobranded with FortisBC and City logos
- New signage and asphalt markings identifies stalls for electric and OGO car share vehicles only





#### GE WATT STATION

- Preferred charging station equipment chosen by FortisBC and the City
- Key Features
  - Retractable cord
  - Level 2 charging station
    - approximate charge time of 2 to 4 hours
  - Tracks usage/performance for assessment





#### **ECO-PASS PERMIT PROGRAM**

- Established in 2005 to reward owners of hybrid and fuel efficient vehicles
- Initially 7 specific models qualified
- Today, over 35 hybrid models and 39 plugin electric models qualify
- Over 1000 active Eco-Passes issued



#### EXISTING ECO-PASS PERMIT PROGRAM

- Any hybrid or electric vehicle and all gas/diesel powered vehicles with a city fuel consumption rating less than 5.9 I/100km qualify
- Permits can be renewed
- Eco-Pass allows no charge on-street parking up to the posted time limit



#### PROPOSED CHANGES

- New qualification standards only plug in electric vehicles qualify
- Eco-Pass permit would be valid for one year and cannot be renewed
- Permits issued only for vehicles registered within RDCO



#### NEW QUALIFICATION STANDARDS

- In support of reducing GHG emissions, new qualification standards are proposed:
  - Vehicles would be either:
    - Battery Electric
    - Plug-in Hybrid Electric Vehicle



## COUNCIL POLICY SUMMARY

- Policy outlines how staff will administer the program and determine which vehicles are
  - Existing Eco-Pass permits would no longer be renewed indefinitely
  - Eco-Pass permits would be issued only to vehicles registered in the RDCO
  - Only qualifying vehicles would be issued a permit



#### **NEXT STEPS**

- Communications
  - News release
    - indicating location of EV charging stations
    - advise changes to Eco-Pass program
- Finalize partnership with FortisBC and move forward with installation
- Changes to the Eco-Pass program take effect on March 1, 2016



#### STAY INFORMED

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# **QUESTIONS?**



## PLUG-IN HYBRID ELECTRIC VS. HYBRID

Make / Model	Year	L / 100 km	CO <sub>2</sub> Emissions (g/km)	Make / Model	Year	L / 100 km	CO <sub>2</sub> Emissions (g/km)
Chevrolet Volt	2016	2.2	32	Toyota Prius	2016	4.4	104
Ford C-Max Energi	2016	2.0	80	Ford C- Max	2016	5.6	140
Ford Fusion Energi	2016	2.0	80	Toyota Camry	2016	5.5	134
BMW i3 REX	2016	2.0	22	Ford Fusion	2016	5.4	130
Hyundai Sonata Plug-in	2016	2.4	63	Lexus CT200h	2016	5.5	132



## BATTERY ELECTRIC VEHICLES

Make/ Model	Year	L <sub>e</sub> / 100 km*	CO <sub>2</sub> Emissions (g/km)
BMW i3	2016	1.7	0
Chevrolet Spark EV	2016	1.8	0
Ford Focus Electric	2016	2.1	0
Nissan Leaf	2016	1.9	0
Tesla Model S	2016	2.5	0

 $<sup>^{*}</sup>$  L $_{\rm e}$  is gasoline litre equivalent. One litre of gasoline contains the energy equivalent to 8.9 kWh electricity