



Electric Vehicle (EV) Readiness Requirements for All New Residential Developments

September 25, 2023

Purpose

- ▶ To amend Zoning Bylaw No. 12375 to include Electric Vehicle (EV) Readiness requirements in all new residential developments.

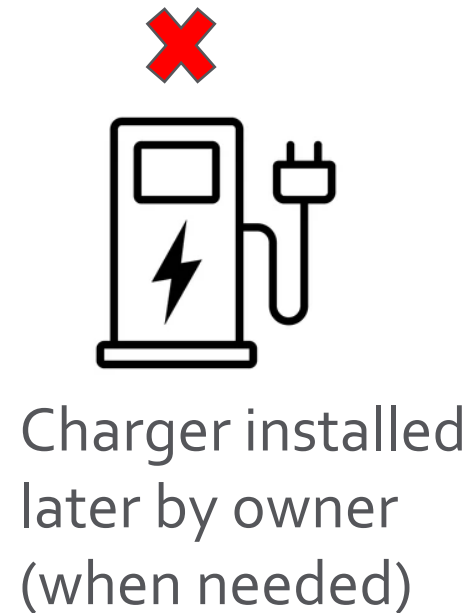
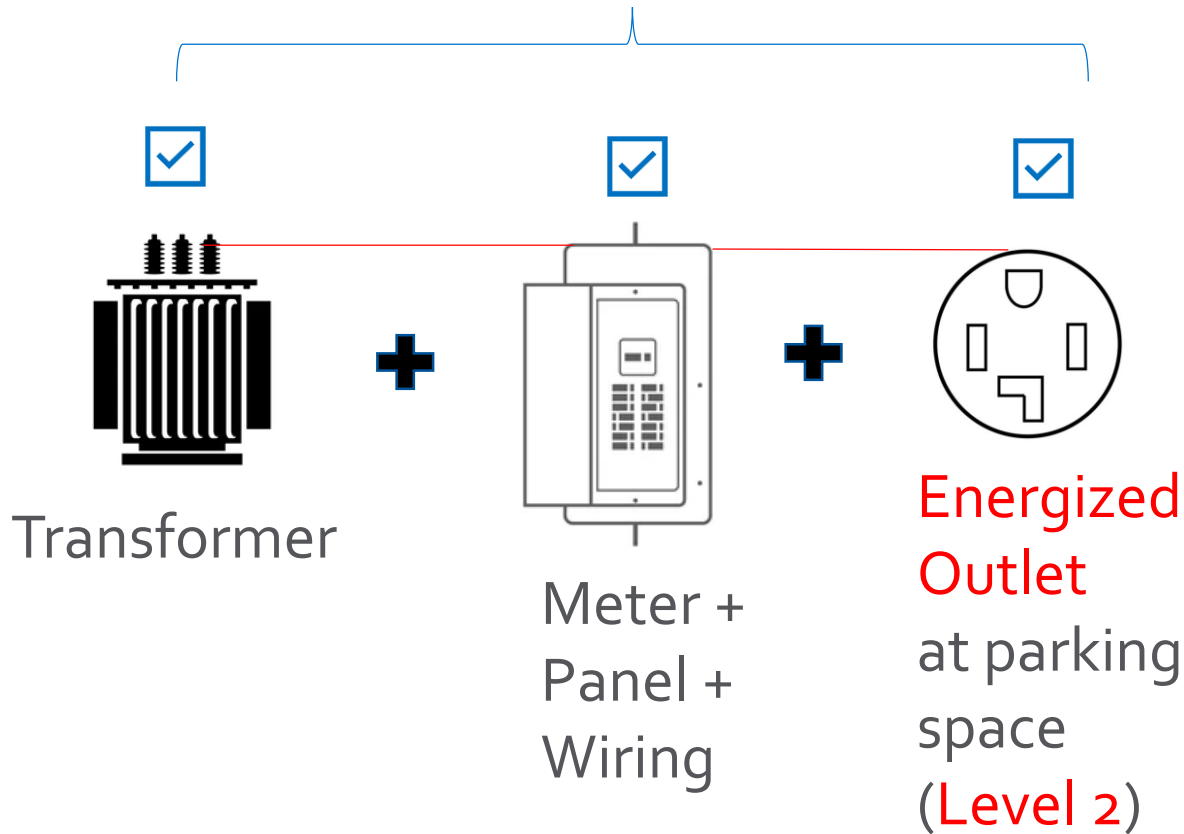
Previous Council Direction

- ▶ Sept 27, 2021: Council endorsed the EV and E-Bike Strategy
- ▶ Feb 7, 2022: Council directs staff to include the EV readiness requirements as part of forthcoming Kelowna Zoning Bylaw updates:
 - ▶ All new residential developments have a minimum of 1 energized electric vehicle outlet per dwelling unit



Key Terms

“EV Ready”

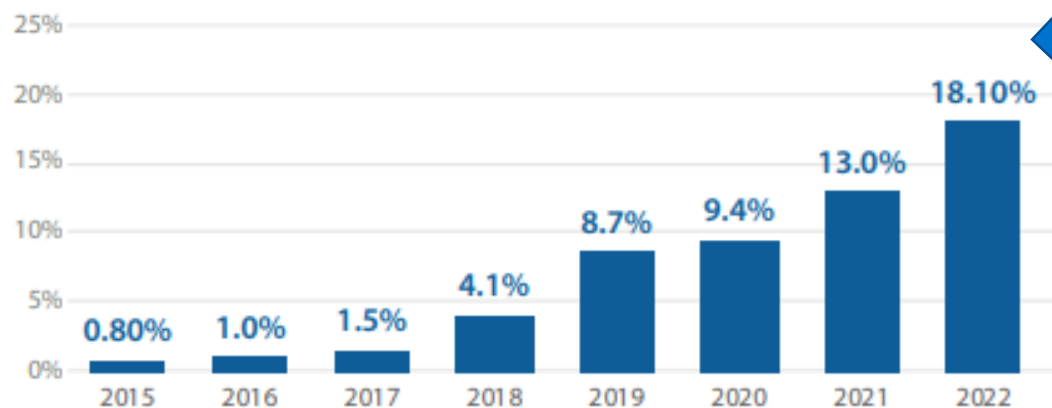


BC Leading the EV Charge

- ▶ Rapidly increasing EV adoption rates in BC
 - ▶ Now approx. **1 in 5 cars sold**

- ▶ Federal and provincial EV sales mandate of **100% of new sales by 2035**

British Columbia Light-Duty Vehicle ZEV Sales Rates




Legislated Sales Requirement

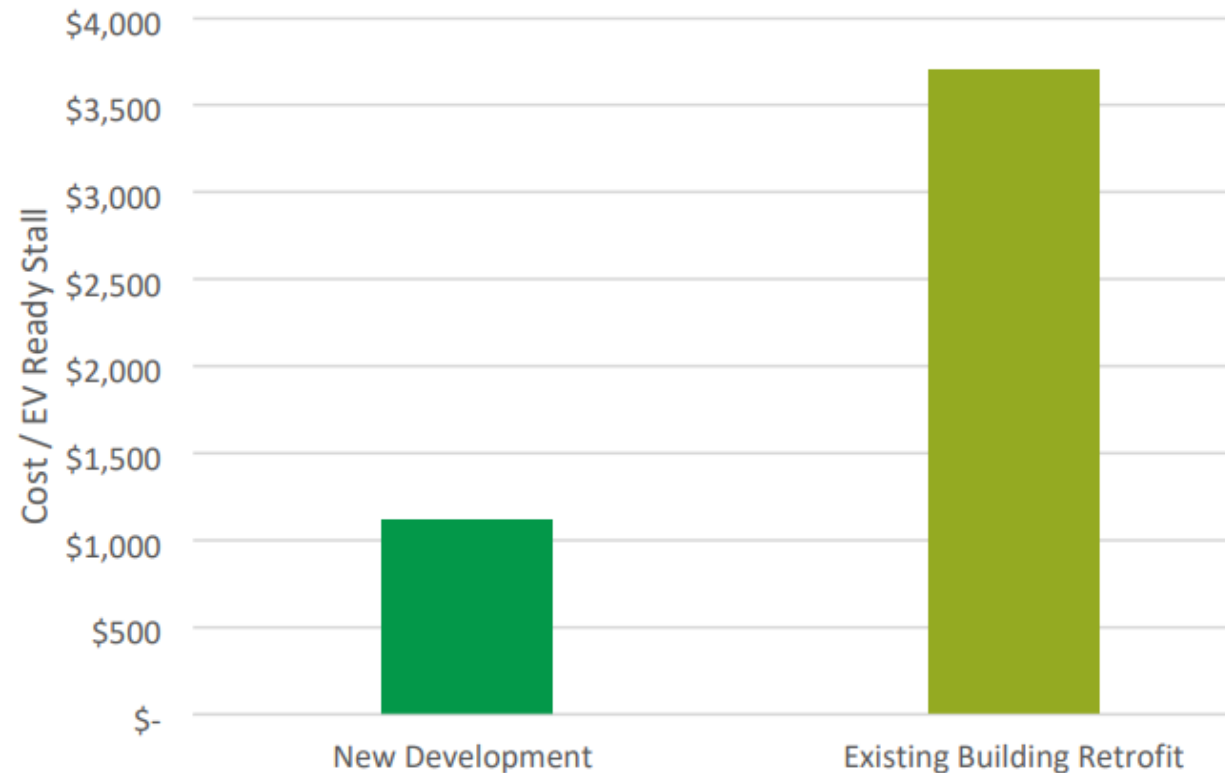
- 26% by 2026
- 90% by 2030
- 100% by 2035

Charging availability at home critical to enable transition to EVs



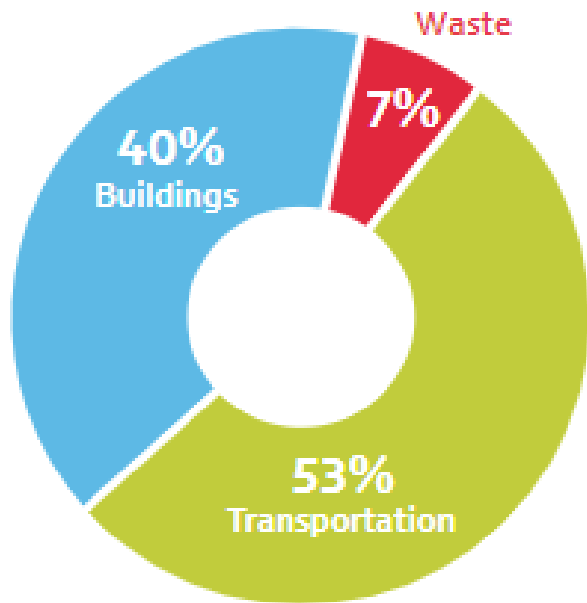
Retrofitting multi-family buildings is costly and complicated

- ▶ Estimated cost at construction: \$930 to \$1,550 per EV ready stall
 - ▶ studies show common configuration is less than \$1,800 per stall
- ▶ Cost of retrofit: three or more times per stall and much more complex

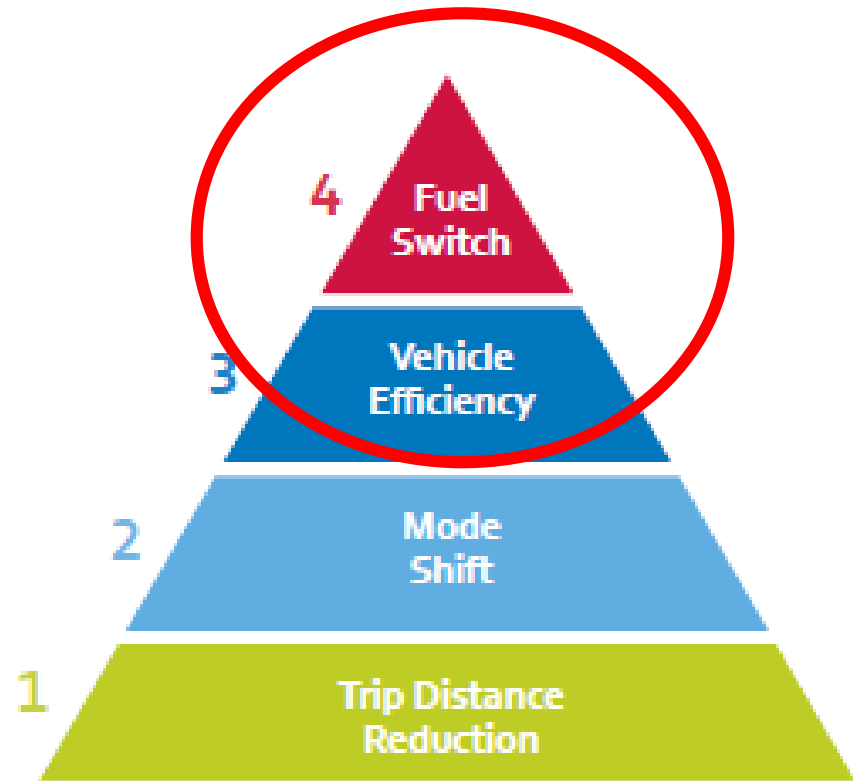


Mid-rise building example (140 units)

EVs Unlock Significant GHG Reductions



Kelowna GHG Emissions Profile

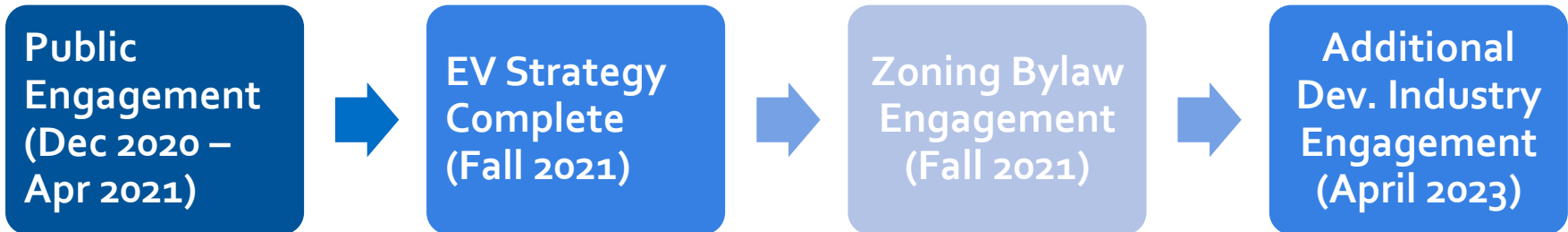


Many Local Governments in BC Have Adopted EV Readiness



Example Municipality (year)	EV Readiness Level (MURBs)
Vancouver (2018)	100% of stalls
Burnaby (2018)	100% of stalls
Surrey (2019)	100% of stalls
New Westminister (2019)	100% of stalls
City of North Vancouver (2019)	100% of stalls
Dist. of North Vancouver (2021)	100% of stalls
Richmond (2017)	100% of stalls
Port Moody (2019)	100% of stalls
Saanich (2020)	100% of stalls
Dist. of West Vancouver (2018)	100% of stalls
Victoria (2020)	100% of stalls
Nelson (2020)	1 per dwelling
Langley (2019)	1 per dwelling
Coquitlam (2018)	1 per dwelling
Penticton (2023)	1 per dwelling
Port Coquitlam (2018)	Partial infrastructure ("high")
Kamloops (2023)	Partial infrastructure ("low")

Stakeholder Engagement



Public Support:

- Predictable charging
- Future-proof new construction; avoids retrofit issues
- Increase EV purchase interest

Development Industry Feedback:

- Differentiate rental buildings
- Prefer phased approach
- Potential impact on construction costs and affordability concerns
- Electricity supply and availability

Staff Recommendation

- ▶ Amend Zoning Bylaw 12375 : Effective April 1, 2024, electric vehicle ready parking spaces shall be provided in accordance with the following EV Ready requirements :
 - ▶ For all new residential developments, require minimum of 1 energized electric vehicle outlet (“EV ready”) per dwelling unit
 - ▶ Exception for “rental only” zones, where a minimum 25% of parking spaces require 1 energized electric vehicle outlet



City of

Kelowna

Questions?