



# 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

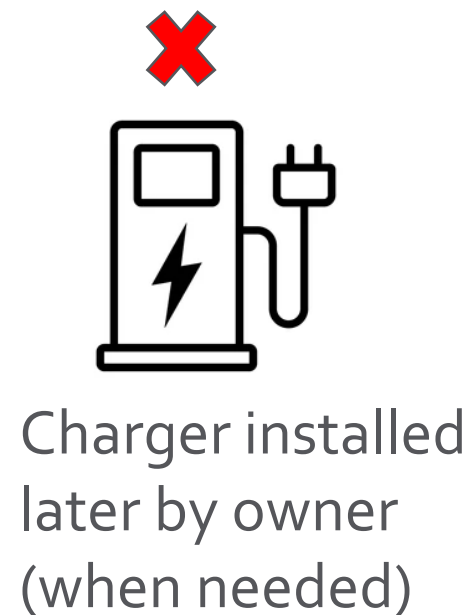
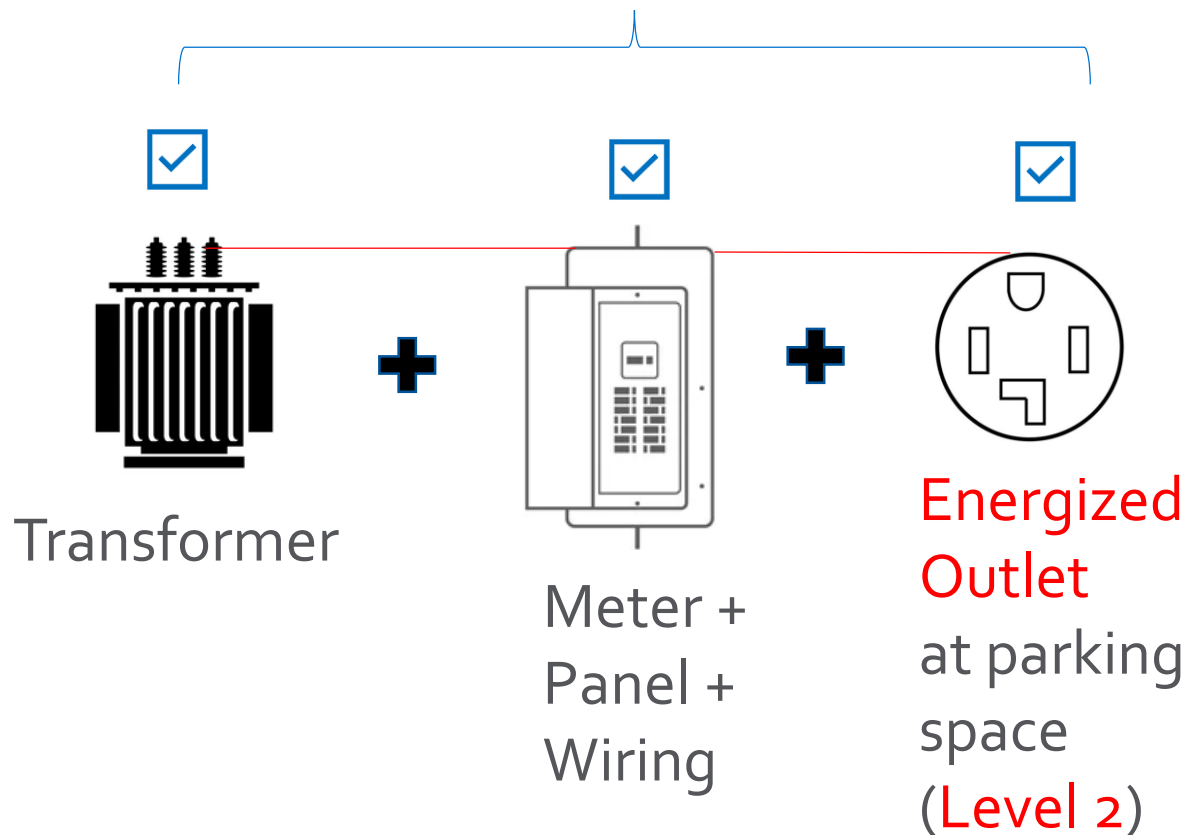


## Community Electric Vehicle & E-Bike Strategy

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# Key Terms

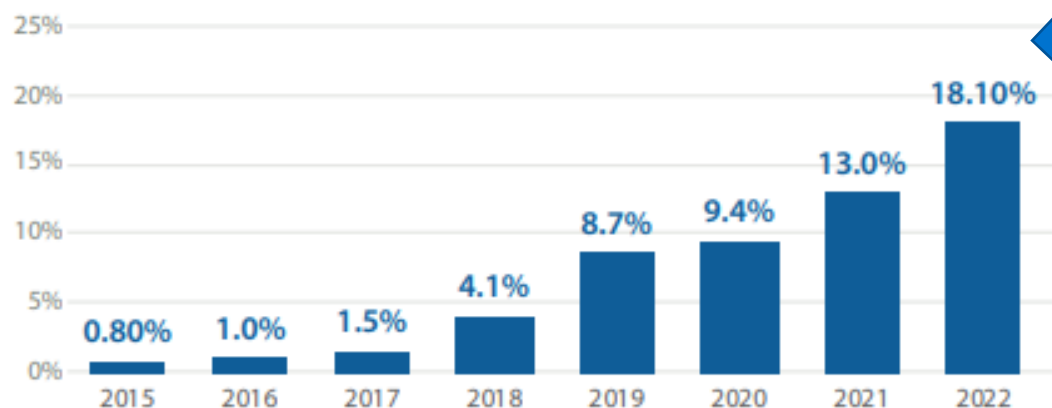
“EV Ready”



# 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**

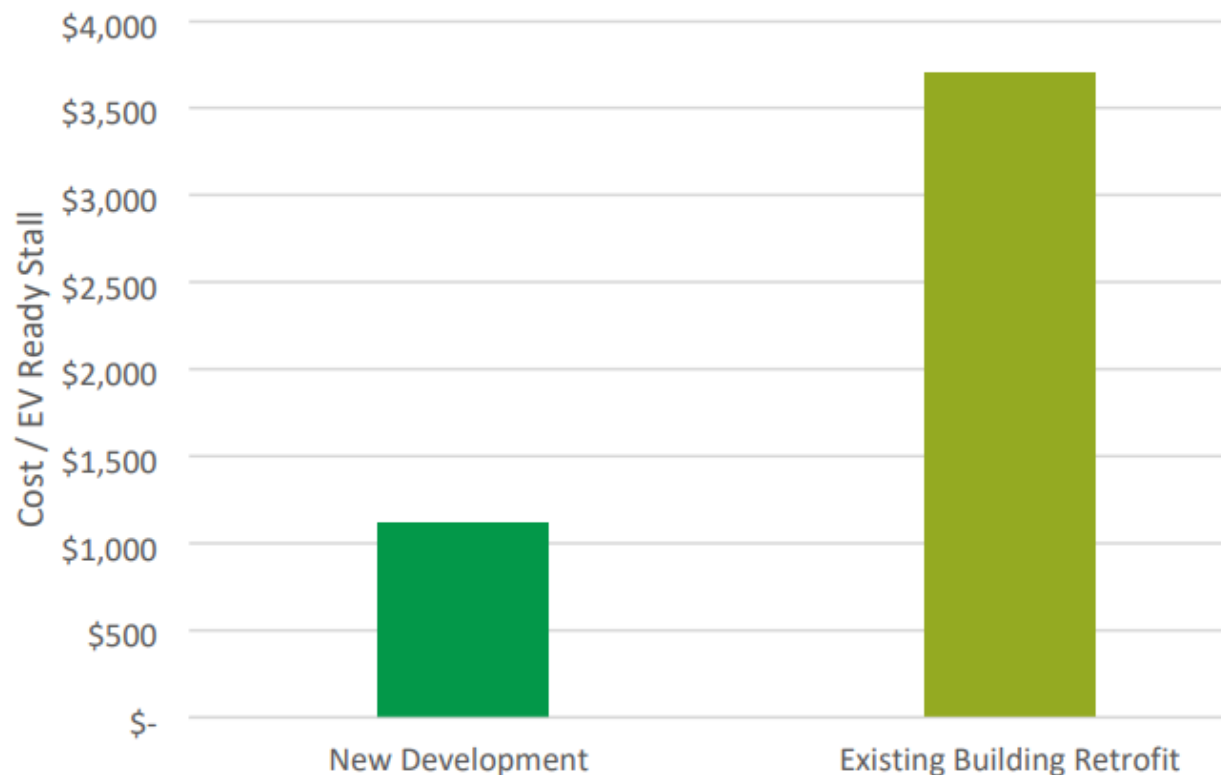
- 26% by 2026
- 90% by 2030
- 100% by 2035

# Charging availability at home critical to enable transition to EVs



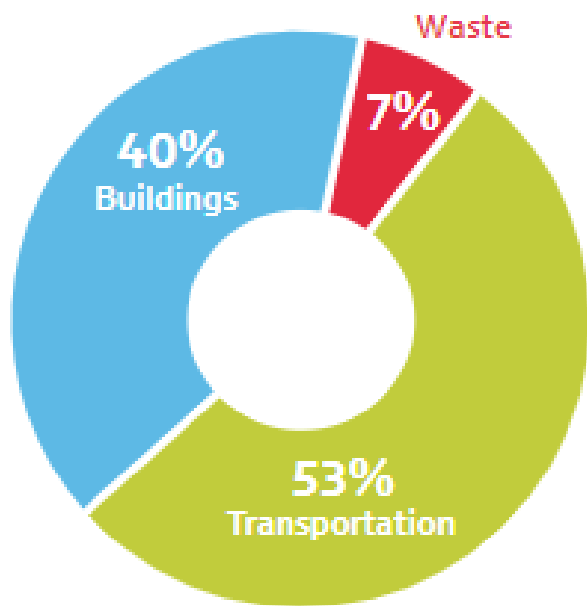
# Retrofitting multi-family buildings is costly and complicated

- ▶ 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

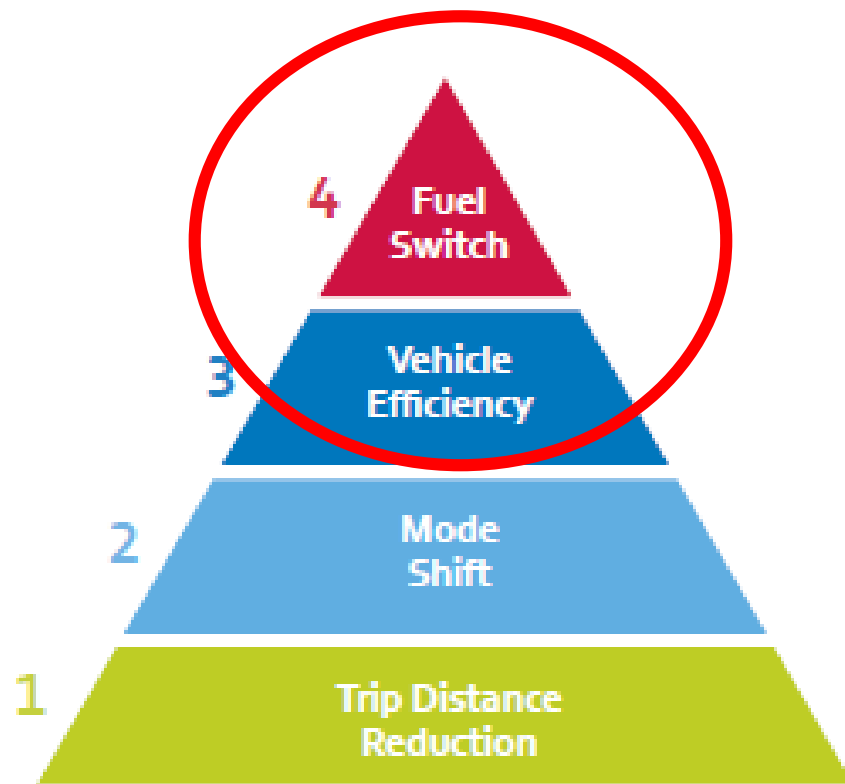


Mid-rise building example (140 units)

# EVs Unlock Significant GHG Reductions



*Kelowna GHG Emissions Profile*



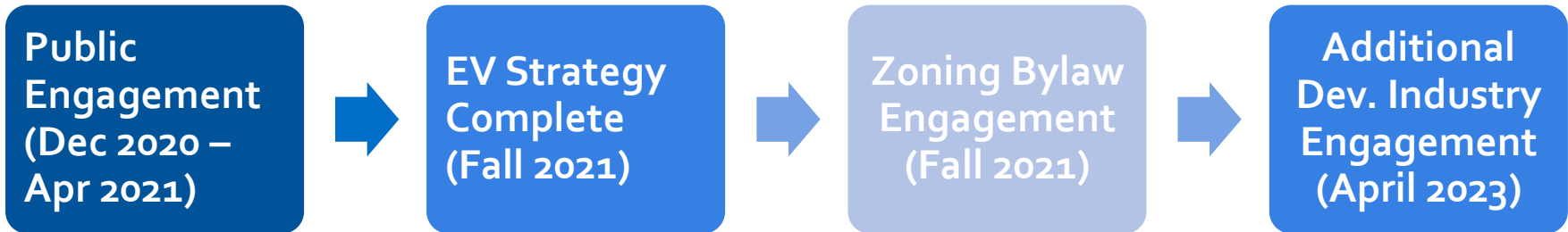


# Many Local Governments in BC Have Adopted EV Readiness



Example Municipality (year)	EV Readiness Level (MURBs)
Vancouver (2018)	100% of stalls
Burnaby (2018)	100% of stalls
Surrey (2019)	100% of stalls
New Westminster (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?*