

Town of Edson Northwest Electric Vehicle Charging Network



Outline



- **INTRODUCTION & BACKGROUND**
- **QUICK REVIEW**
- **PREVIOUS PROJECT SAMPLES**
- **SITE SELECTION**
- **WORKING GROUP STRUCTURE**
- **KEY TO FUNDING AND PARTNERSHIPS**
- **BENEFITS**
- **NEXT STEP**



Introduction & Background



- Priority in placing Electric Vehicle (EV) Charging station at Edson facility
- Estimated cost of approximate \$100,000 for a Level 3/ Direct Current Fast Charger (DCFC) station
- The Town reviewed other mobility options with consideration on regional network to enhance tourism outcome



Community Energy Association. (2020)

Quick Review: The Charging Infrastructure



L1

level 1 charging
AC, 120V

Plugs into any wall.
Often comes with the purchase of vehicle.
Can take hours, if not days to charge.



L1 charger



L2

level 2 charging
AC, 240V

Great for overnight home or workplace charging. Also good for tourism or recreation sites. 8-12 hr charge.



L2 home charger



DCFC

dc fast charging
variable DC voltage

Requires 3-Phase power.
Good for shorter stops, either quick top ups, or generally 40 – 120 min to full.



public DC fast charger

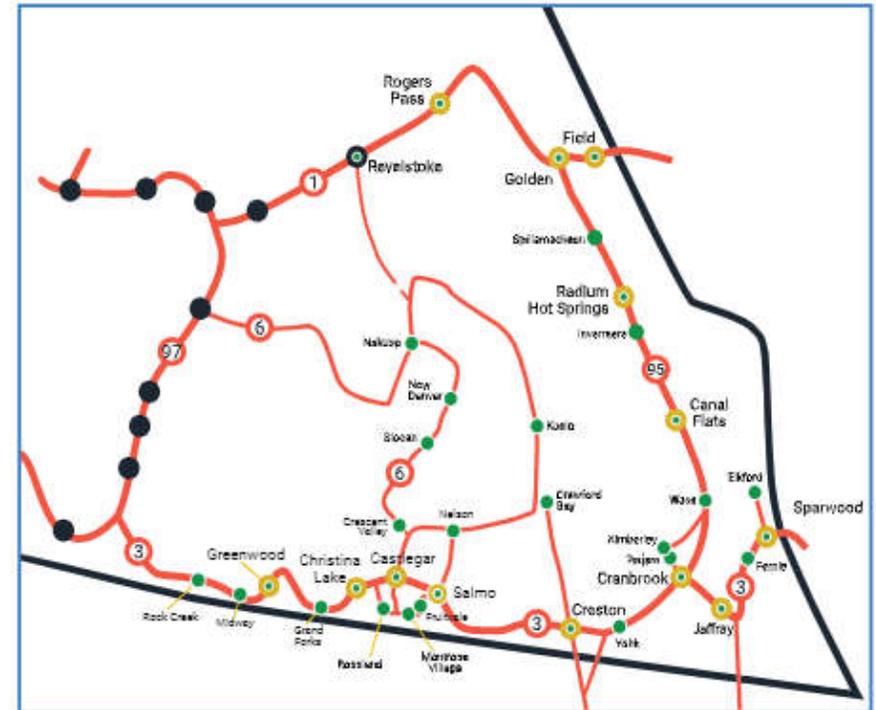


Previous Projects: Accelerate Kootenays

- Canada's 1st community driven collaborative strategy
- 3-year, \$1.89 million project partially grant funded
- 40 Communities; 13 DC Fast Charging's; 40 Level 2's



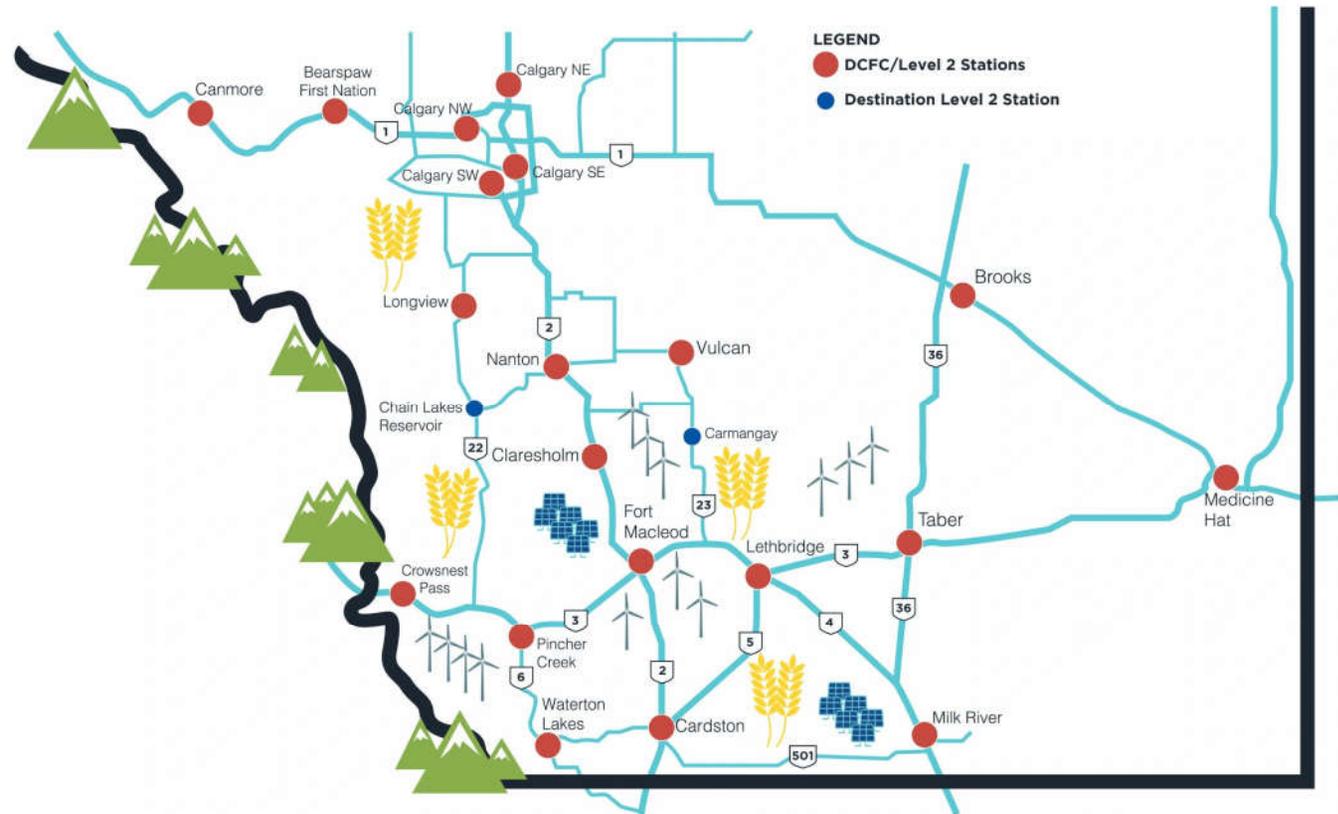
- Existing DCFC
- Accelerate Kootenays DCFC & Level 2
- Accelerate Kootenays Level 2



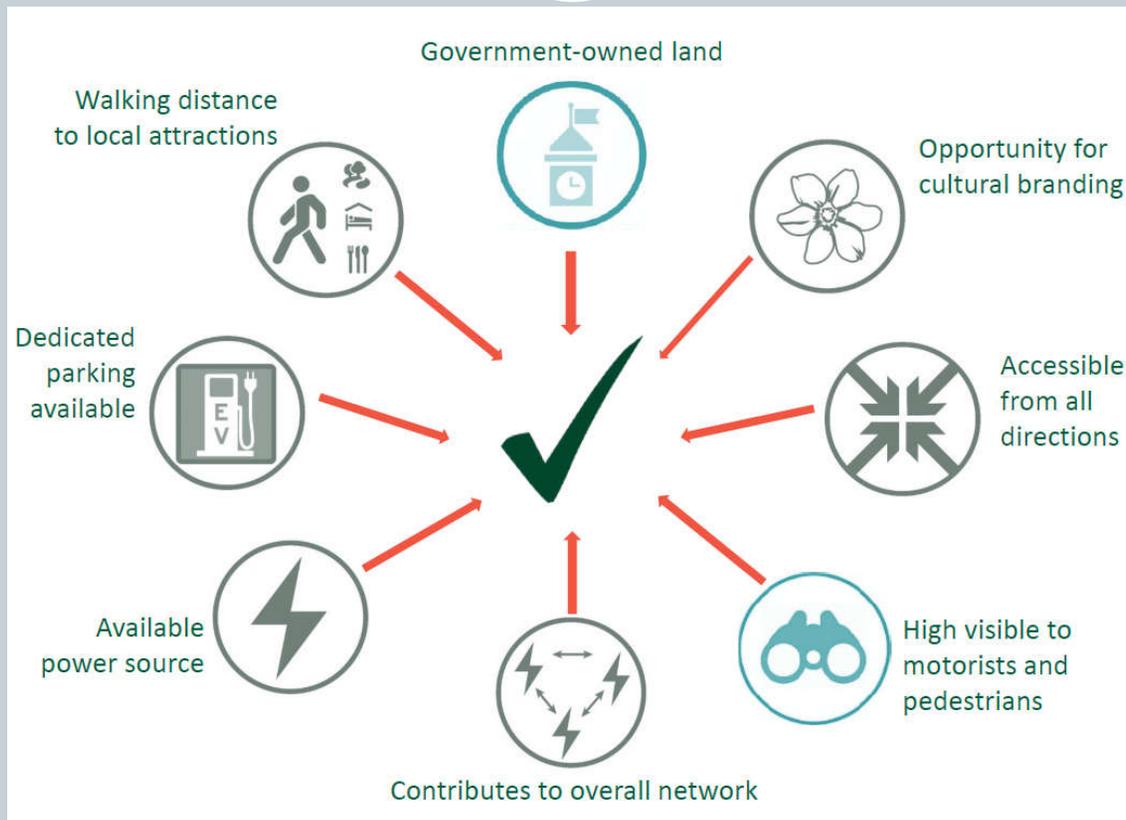


Previous Projects: Peaks to Prairies

- Community-driven initiative to support EV travel to and within Southern Alberta
- Install 20 fast charging/ Level 2 stations throughout the region



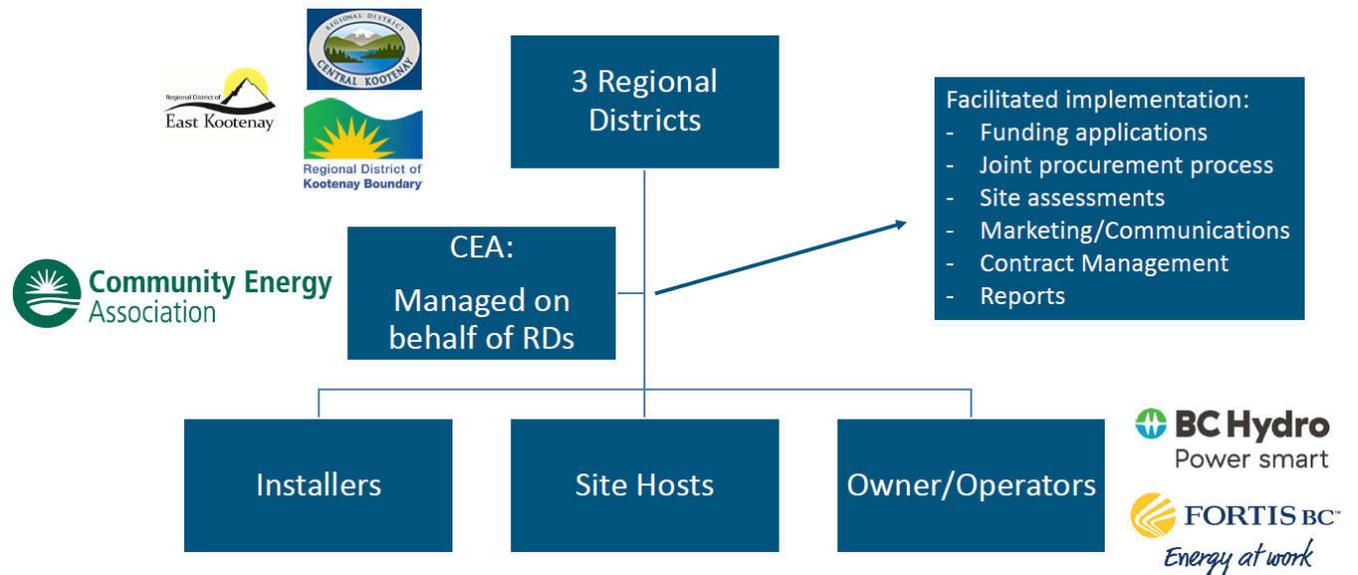
Site Selection





Previous Project Working Group Structure

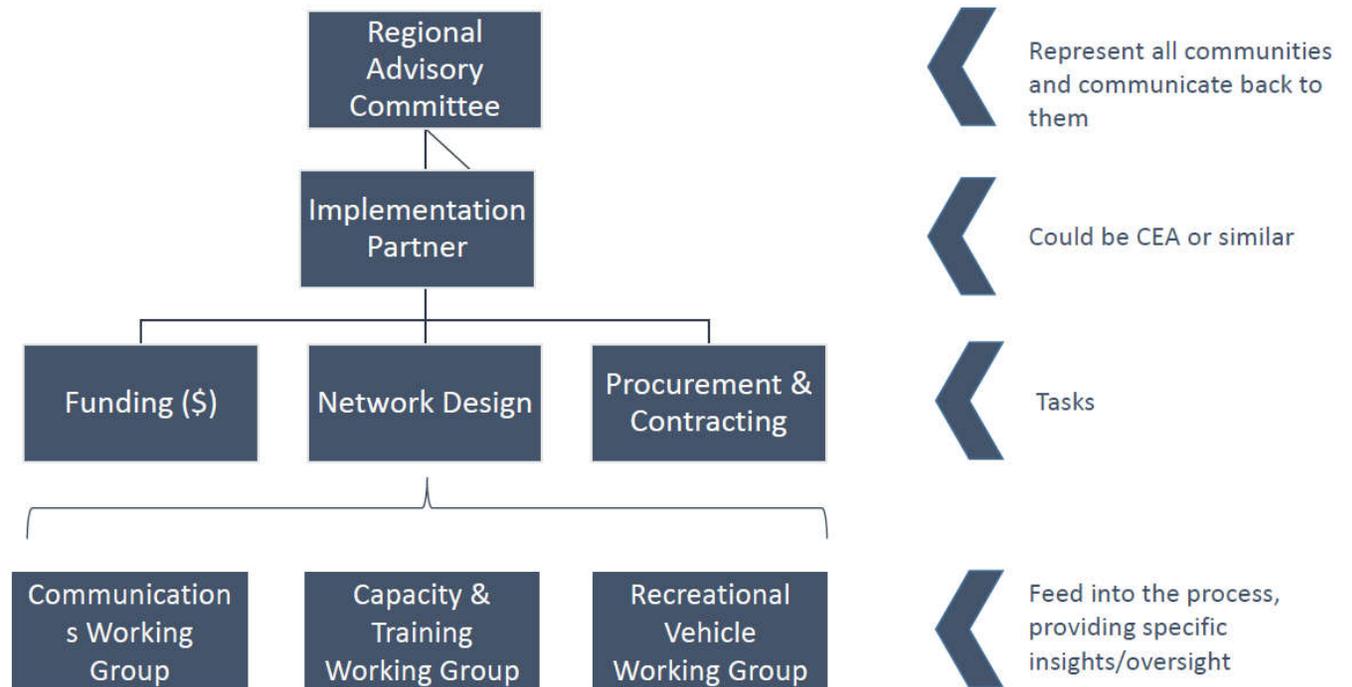
This structure was used for the Accelerate Kootenays Project





Proposed Working Group Structure for NW Alberta

This structure was proposed for the Northwest Electric Vehicle Charging Network.



Key to Funding and Partnerships



Accelerate Kootenays	Seed Funding (\$30,000) \$30,000, approximately RDEK Energy Management	Match Funding (\$90K) \$30,000 – Regional District of Kootenay Boundary \$30,000 – Regional District of Central Kootenay \$30,000 – Regional District of East Kootenay	Implementation Funding (\$1.94 M) Teck, Columbia Basin Trust, BC MEM and MOTI, Fortis BC, BC Hydro, Government of Canada- FCM + Match	DCFC Owner/Operators BC Hydro Fortis BC
Peaks to Prairies	Seed Funding (\$30,000) \$15,000 – City of Calgary \$5,000 – REDA –SouthGrow \$5,000 – REDA Alberta SW \$5,000 – REDA – Calgary Region	Match Funding (\$210K) \$60,000 – 2 local REDAs \$30,000 – MH College and City of MH \$120K – City of Calgary	Implementation Funding (\$2.2 M) \$750K – FCM \$1.2 M – G of A + Match	DCFC Owner/Operators ATCO

Key to Funding and Partnerships



- Key to the current stage

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Key to Funding and Partnerships



- Seed Funding Used for:

Stand-alone as part of a collaborative contribution from local partners



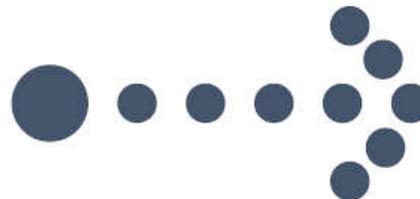
Stand-alone from a funder or other partner



Leveraged with match funding for implementation



Seed
Funding
(~\$30,000)



Used for:

- Preliminary network planning
- Formalizing Advisory Committee
- Proposal development and grant applications
- Initial messaging/brand and marketing design

Benefits on Regional Collaborations



- ✓ **FUNDING OPPORTUNITIES**
- ✓ **REDUCE SINGLE COMMUNITY IMPACT**



- ✓ **STIMULATE LOCAL ECONOMY**
- ✓ **CAPTURE NEW ECONOMIC OPPORTUNITY**



- ✓ **INCREASE REGIONAL TOURISM**
- ✓ **CONNECT NW ALBERTA TO SURROUNDING JURISDICTIONS**

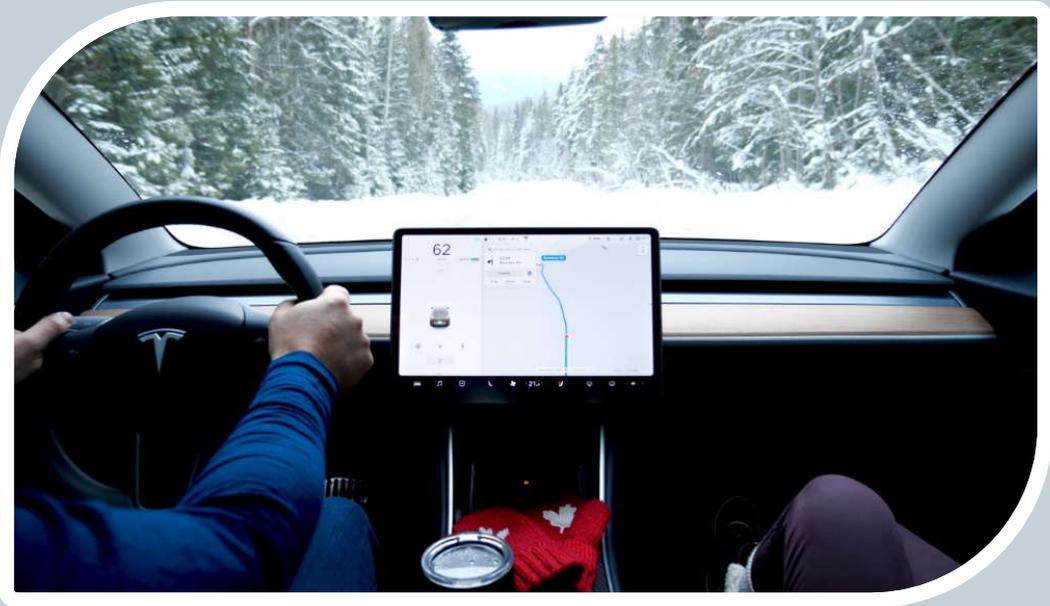


- ✓ **RELATIONSHIP BUILDING**
- ✓ **FUTURE PROJECTS COLLABORATION OPPORTUNITIES**

Next Step



- Request Council provide support for the initiative
- Seek Council to endorse a letter to neighbour municipalities seeking partnership to gain seed and/or grant funding
- Administration Initiate a technical working committee for the partnership



References

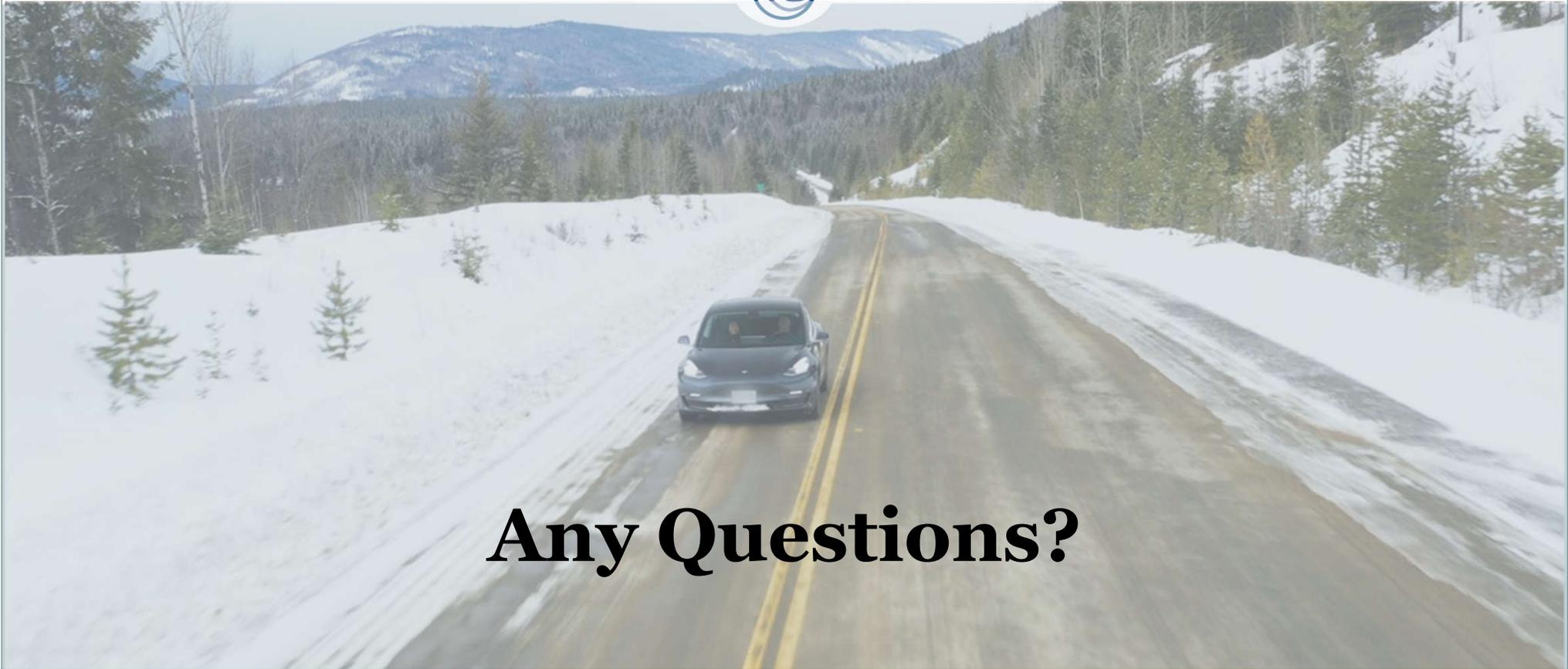


Accelerate Kootenays. (2020). *Accelerate Kootenays*. Retrieved from <http://acceleratekootenays.ca/>

Community Energy Association. (2020). NW Alberta EV Network [PowerPoint presentation]

Peaks to Prairies. (2020). *Electric Vehicle Travel From Peaks to Prairies*. Retrieved from <https://peakstoprairies.ca/>

Thank you!



Any Questions?