



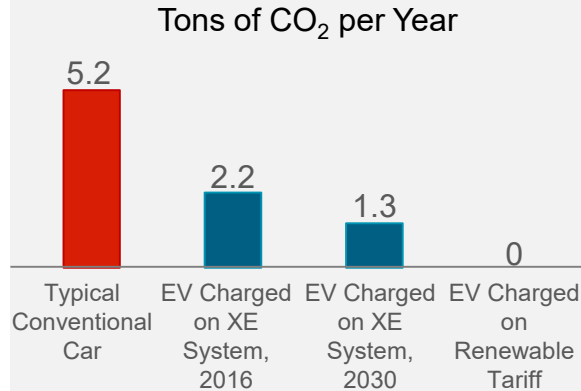
Electric Vehicles & Infrastructure

Federal Utility Partnership Working Group - 2019

Customer-centric approach to EVs

Lead the Clean Energy Transition

Significant Emission Reductions



Enhance the Customer Experience

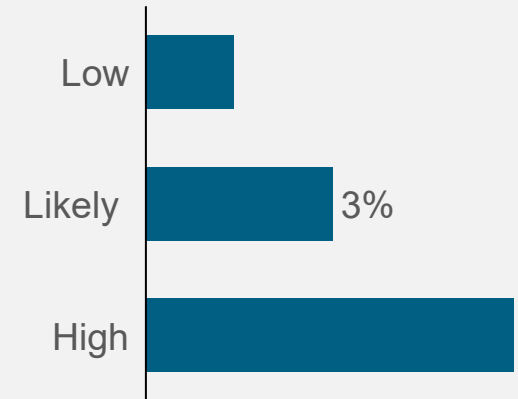
Customer barriers the Utility can address

- Lack of awareness or understanding
- Upfront costs of charging infrastructure
- Inability to access charging
- Long charging times
- Suboptimal incentives to charge when energy costs are lowest

Keep Bills Low

Lower rates through increased sales

Share of Load by 2030 by EV Adoption Scenario



Source(s): Xcel Energy Analysis – Estimated combined emissions for Xcel Energy Colorado

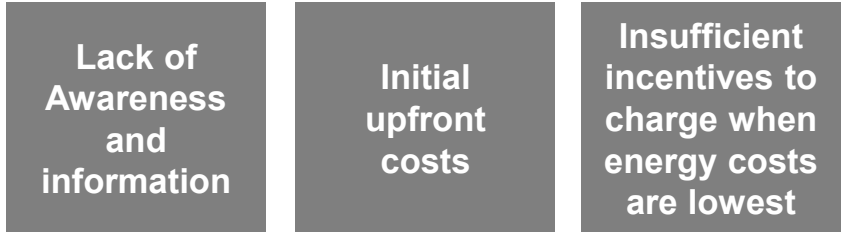
Xcel Energy's EV Plan



Focus on 3 Market Segments:



Key Barriers to Address:



EV Plan: Moving forward residential, fleets, and public charging



Fleet	Light-Duty Infrastructure and Advisory Services
	Medium-and-Heavy Duty Infrastructure
	V2G School Buses
	Fleet Advisory Services
	Fleet Charging Rate
Public Charging	Corridor Pilot
	Community Mobility Hubs Pilot
	Public Charging Rate
Home	EV Service (second-meter rate)
	EV Service Pilot
	Advisory Services & Online Tools
	EV Service Pilot At-Scale
	EV Subscription Rate
	Charging Perks Pilot

In-Market:



Advisory Tools for Fleets and Residential EVs

-chargepoint+



Residential Service Pilot

PUC Approved:



Fleets Infrastructure

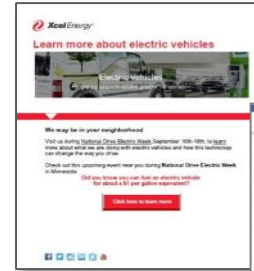
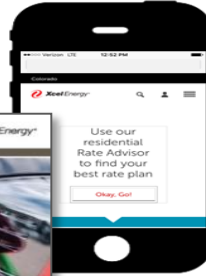
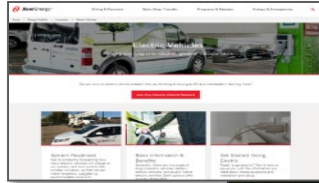
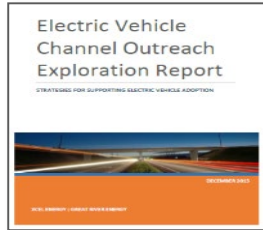


Public Charging Infrastructure

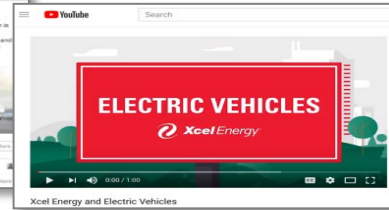


Subscription Service Pilot

EV education & outreach



- EV Email Network
- Social media
- Digital Video



- Market Research
- Program Measurement

- Brochures
- Web content
- Rate & Renewable Advisor

- Out of Home Radio



- Auto Dealers
- Electricians
- Fleet Advising



- Community events
- EV partner events



Fleet analytics and advisory services

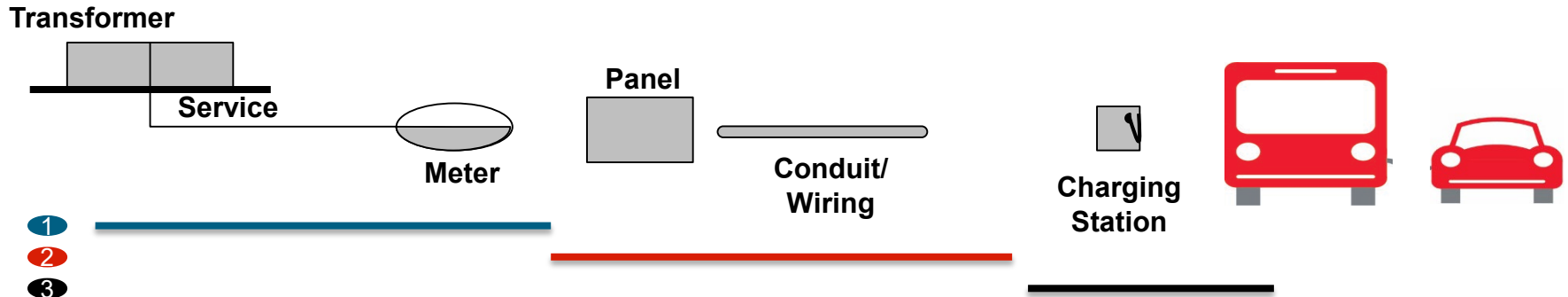
Analytics and Advisory Services



Xcel Energy is partnering with fleet analytics companies to help customers:

- Understand fleet needs and highlight opportunities for electrification
- Collect detailed data of fleet vehicle usage on a day-to-day basis
- Assess which EVs can support existing driving patterns
- Analyze economics for customers and make recommendations based on fleet needs (including rate options)

Make Ready Service



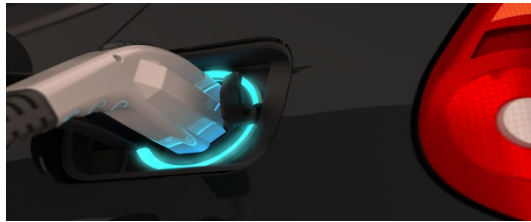
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|--|--|---|
| <ul style="list-style-type: none"> Utility provides new line of service, including: <ul style="list-style-type: none"> distribution feed, necessary transformer upgrades, new meter This new line of service will only serve EV charging | <ul style="list-style-type: none"> Utility provides: <ul style="list-style-type: none"> new service panel conduit and wiring trenching associated site work Utility owns and maintains "Make Ready," including EV service connection up to the "stub" of the charging equipment | <ul style="list-style-type: none"> Customer can choose for pre-qualified equipment; <ul style="list-style-type: none"> Prepay for equipment Pay in monthly charge (provided by utility) Customers enrolled in time-varying rate and encouraged to participate in smart charging programs, as they become available Customer would determine public charging rates (if applicable) |
|--|--|---|

Our continued commitment to pursuing R&D and new solutions

Will continue to explore innovative solutions with partners that can:

- 1 Help drive investment in infrastructure
- 2 Make it easier for customers to access electricity as a transportation fuel
- 3 Minimize system costs for EV charging and support greater renewable energy use and integration



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Fleet EV Strategies and Programs

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