Customer-centric approach to EVs

Lead the Clean Energy Transition

<table>
<thead>
<tr>
<th>Significant Emission Reductions</th>
<th>Tons of CO₂ per Year</th>
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<tbody>
<tr>
<td>Typical Conventional Car</td>
<td>5.2</td>
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<tr>
<td>EV Charged on XE System, 2016</td>
<td>2.2</td>
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<tr>
<td>EV Charged on XE System, 2030</td>
<td>1.3</td>
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<tr>
<td>EV Charged on Renewable Tariff</td>
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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

- Low
- Likely 3%
- High

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

Focus on 3 Market Segments:

- Home Charging
- Charging for Fleet Operators
- Public Charging

Key Barriers to Address:

- Lack of Awareness and information
- Initial upfront costs
- Insufficient incentives to charge when energy costs are lowest
## EV Plan: Moving forward residential, fleets, and public charging

<table>
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<tr>
<th>Fleet</th>
<th>Light-Duty Infrastructure and Advisory Services</th>
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<td></td>
<td>Medium-and-Heavy Duty Infrastructure</td>
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<td>V2G School Buses</td>
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<td>Fleet Advisory Services</td>
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<td>Fleet Charging Rate</td>
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<td>Public Charging</td>
<td>Corridor Pilot</td>
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<td>Community Mobility Hubs Pilot</td>
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<td>Public Charging Rate</td>
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<td>Home</td>
<td>EV Service (second-meter rate)</td>
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<td>EV Service Pilot</td>
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<td>Advisory Services &amp; Online Tools</td>
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<td>EV Service Pilot At-Scale</td>
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<td>EV Subscription Rate</td>
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<td>Charging Perks Pilot</td>
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### In-Market:
- EV Service Pilot At-Scale
- Advisory Tools for Fleets and Residential EVs
- Residential Service Pilot

### PUC Approved:
- Fleets Infrastructure
- Public Charging Infrastructure
- Subscription Service Pilot
EV education & outreach

- Market Research
- Program Measurement

- Auto Dealers
- Electricians
- Fleet Advising

- Brochures
- Web content
- Rate & Renewable Advisor

- Out of Home
- Radio

- Community events
- EV partner events

- EV Email Network
- Social media
- Digital Video
Fleet 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

- Utility provides new line of service, including:
  - distribution feed,
  - necessary transformer upgrades,
  - new meter
- This new line of service will only serve EV charging

- Utility provides:
  - 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

- Customer can choose for pre-qualified equipment;
  - 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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