



Public Service Company of Colorado (PSCo)
2021-2023 Transportation Electrification Plan (TEP)
Quarterly Stakeholder Meeting
September 29, 2021

AGENDA

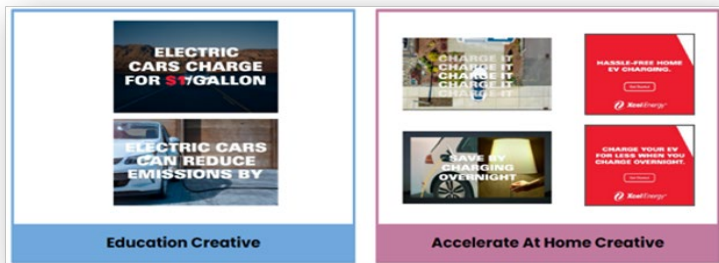
1. TEP Program Development, Updates, & Timelines
2. Discussion Topics
 - Partnerships, Research, & Innovation (PRI) Project Updates
 - New S-EV Rate (October 15th filing)
3. 60/90 Day Notices
4. Wrap Up

1. TEP PROGRAM DEVELOPMENT, UPDATES, & TIMELINES

Equity Programs, Residential Portfolio, MFH Portfolio, Commercial Portfolio, Advisory Services, Partnerships/Research/Innovation

Residential TEP Program Support

- Printed materials for home charging programs and rebates
- Promoting programs with paid advertising and owned channel support (email, social)
- Spanish web pages in development



Ad · <https://ev.xcelenergy.com/electric/vehicles>

Xcel Energy® Electric Vehicles - Browse Cars Or Find Charging

Discover how easy it is to drive electric. Explore cars & rebates or find nearby charging. Find an EV model and compare the cost to a similar gas vehicle to see how you can save.

Incentives & Rebates

See incentives, credits, & special rebates for Xcel Energy customers.

Find Charging Stations

Find an electric vehicle charging station near you now!

READY. SET. CHARGE.

Getting set up to charge your electric vehicle at home is easy with our turnkey programs and rebates to make it affordable.



EV ACCELERATE AT HOME

Charging your EV at home is convenient, and it just got even easier. With EV Accelerate At Home, our turnkey services set you up with a Level 2 charger, and we maintain the equipment so you don't have to. You choose from our charging equipment options, and for a low monthly fee, we do the rest.

Learn more and enroll at ev.xcelenergy.com/ChargeCO.



OPTIMIZE YOUR CHARGE

Choose among three charging schedule options and get rewarded \$50, annually. Flexibility allowed, scheduled charging encouraged, to charge during evening hours when renewable energy is abundant.

Learn more and enroll at ev.xcelenergy.com/OptimizeCharge.



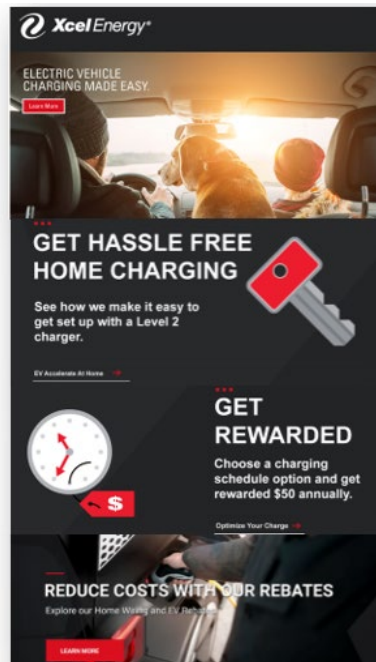
HOME WIRING REBATE

Reduce your costs to add a Level 2 charger when a licensed electrician installs a 240v electrical circuit.

Learn more and enroll at ev.xcelenergy.com/HomeWiring.

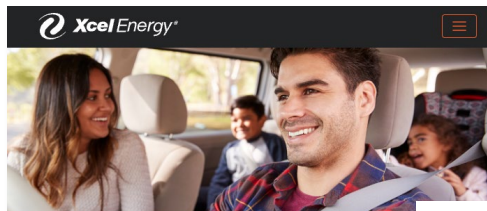
ENHANCED SAVINGS OPPORTUNITIES

Driving electric can be even more affordable with expanded savings for customers that meet certain income guidelines. Our income-qualified home wiring rebate helps you save more when you install a Level 2 charger, and we also offer our income-qualified customers a rebate on a new or used electric vehicle. Visit ev.xcelenergy.com/incentives.



Residential TEP Income Qualified Program Support

- Materials for rebates and home charging programs
 - Printed collateral in English & Spanish
 - EV Rebate explainer for Xcel Energy dealer network to give rebate instantly
- Web pages with helpful FAQs for Income Qualified customers, Spanish versions in development



INCOME-QUALIFIED ELECTRIC VEHICLE REBATE

Save up to \$5,500 on an Electric Vehicle (EV)

Income-qualified customers can receive \$3,000 off a used or \$5,500 off a new EV when you buy or lease from a Colorado-based car dealer.

- 80% of area median income (varies by county; see examples, below):

80% of County AMI	Individual	Family of 4
Denver County	\$58,720	\$83,840
Weld County	\$58,720	\$83,840
Alamosa County	\$41,200	\$58,800

Get help with your questions about income qualification by contacting our partner, GRID Alternatives Colorado, at **866-434-1690** or information@coloradoevs.org.

CON AHORROS PARA LOS CLIENTES DE XCEL ENERGY QUE CUMPLAN CON CIERTAS NORMAS DE INGRESOS, CONDUCIR UN VEHÍCULO ELÉCTRICO PUEDE SER MÁS ASEQUIBLE.

REEMBOLSO EN COMPRA DE VEHÍCULO ELÉCTRICO

Obtenga \$3,000 de descuento en un vehículo eléctrico (electric vehicle, EV) usado o \$5,500 de descuento en uno nuevo cuando compra o arrienda en un concesionario de automóviles de Colorado. Reciba los ahorros por adelantado en un concesionario de nuestra red (ev.xcelenergy.com/dealer) o reciba un cheque después de comprar o arrendar en un concesionario de Colorado fuera de nuestra red. Obtenga más información y presente su solicitud en ev.xcelenergy.com/ev-rebate-co.

REEMBOLSO PARA CABLEADO PARA EL HOGAR

Obtenga \$1,300 para reducir sus costos para agregar un cargador para EV de nivel 2 cuando un electricista autorizado instala un circuito eléctrico de 240V en su hogar. Obtenga más información y presente su solicitud en ev.xcelenergy.com/Home-Wiring-Rebate.



Para obtener más información sobre nuestros programas de reembolso, llame al **866-434-1690** o envíe un correo electrónico a information@coloradoevs.org.

PROGRAMAS DE CARGA EN CASA

Cargar su vehículo eléctrico en casa es fácil con nuestros programas. Obtenga más información en ev.xcelenergy.com/ChargeCO.

- Con EV Accelerate at Home, instalamos un cargador para EV de nivel 2 en su casa y le damos mantenimiento, todo por una tarifa mensual baja.
- Con Optimize Your Charge, usted elige entre tres opciones de horario de carga fuera de horas pico y obtiene un crédito de \$50 en su factura cada año.

XCEL ENERGY ELECTRIC VEHICLE PURCHASE/LEASE REBATE

Xcel Energy offers our Income Qualified customers in Colorado rebate savings opportunities on the purchase or lease of an electric vehicle (EV) under \$50,000 MSRP or purchase price.

- \$5,500 new EV purchase or lease
- \$3,000 pre-owned EV purchase

For your dealership to provide this rebate to the customer up front at the time of purchase or lease, they must provide a 10-digit code from Xcel Energy verifying that they are eligible.

- Dealership must verify this code in the COTEP IQ page on the Xcel Energy Blue Gorilla portal.

Your dealership cannot provide this rebate to the customer up front at the time of purchase or lease if they do not have a 10-digit code.

If the customer does not have the 10-digit code, please direct them to apply for the rebate using one of the following methods:

➔ ev.xcelenergy.com/incentives

☎ **866-434-1690**

✉ information@coloradoevs.org

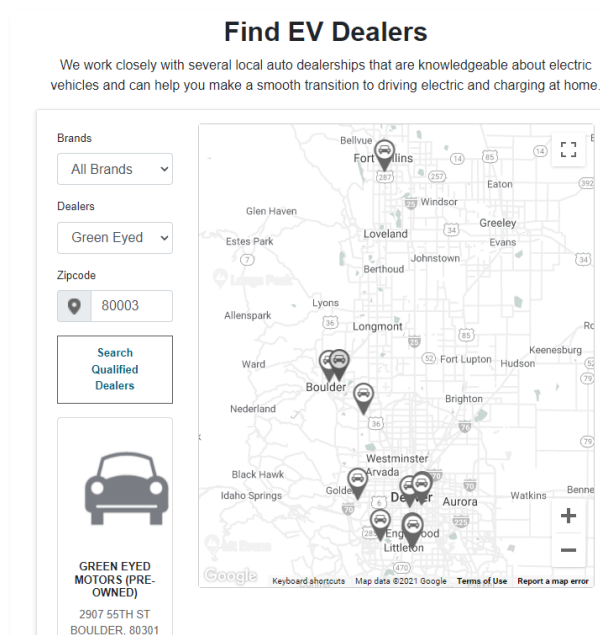
Events: Denver Auto Show



- Our EV Garage was busy throughout the show, with EV experts answering customers' questions about EVs and charging at home
- Over 2,000 total ride & drives provided in 3 days with over 3,400 zero-emission miles driven
- Partnerships increased our success:
 - A range of BEVs for display and ride & drive were provided by the dealers in our EV Network
 - Hyundai relocated the display of their Kona and new Ionic models to just outside our EV Garage
 - Drive Electric Colorado staffed the ride & drive registration booth and provided local professional drivers
 - The president of CADA put his Ford Mustang Mach-E in our ride & drive to allow more people to test drive this popular model (giving us 2 Mustangs)
 - Winn Marion provided Level 2 and Level 3 charging

Advisory Services - Dealer Network

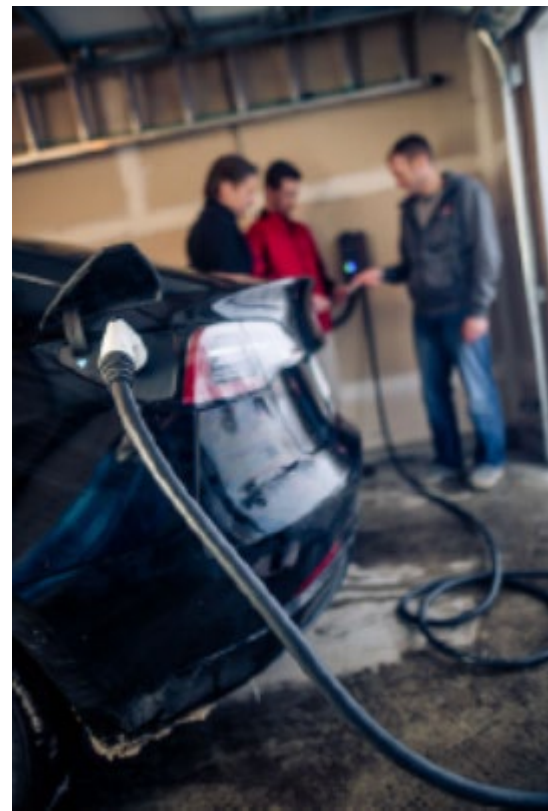
- Expanding our Network of EV Dealers across service area
 - 20+ Dealers in CO, with focus on growth outside metro area
 - All sell new and pre-owned EVs
 - Network dealers can provide EV Rebate instantly during purchase/lease
- Xcel Energy offering services that directly address barriers that dealers face on EVs
 - Training, customer info/tools, EV program sign up in dealership
 - Education and marketing incentives for the dealership
- Spend through Sept 1: \$250k



Residential Home Charging Programs

EV Accelerate at Home (EVAAH)

- Electrician RFP is no longer accepting bids
 - 2 primary electricians contracted to serve the Denver Metro area; 1 secondary electrician contracted for contingency
 - Plans to add 2-4 additional shops across Colorado service territory
- Program Launched in Colorado on August 5th
 - Provides hassle-free installation and maintenance of utility-owned level 2 charger for \$13.29 monthly fee
 - EV static optimization required for 1 year (opt-out for income-qualified customers)
 - As of September 1st:
 - 134 Applications received
 - 9 Residential charger installs completed
- Home Wiring/Charging Station Rebate
 - Up to \$500 market rate or \$1,300 for income-qualified customers
 - Offered to customers installing pre-qualified charging stations
 - As of September 1st:
 - 13 approved applicants outside of EVAAH (1 income-qualified)
 - \$7,300 in rebates of 2021 budget spent



Residential Optimization

Optimize Your Charge (static optimization)

- Program live in CO
 - Customers get \$50 annual bill credit for charging during one of Xcel Energy's three off-peak windows
 - Current participation via two eligible Level 2 chargers (ChargePoint & Enel X) with capability to transmit charging data to Xcel Energy
 - 200 participants as of September 1st (Includes EVAAH)
- Pending winter 2021 partnership with telematics vendor will expand program
 - Capability to communicate with car's technology system to receive charging data
 - Participants will be able to use a small hardware device to transmit their charging patterns to Xcel Energy
- Anticipated in 2022: further expansion of vehicle communication capability



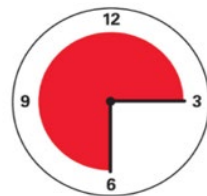
9:00 p.m. – 6:00 a.m.

21:00 - 06:00



12:30 a.m. – 9:30 a.m.

00:30 - 09:30



6:00 a.m. – 3:00 p.m.

06:00 - 15:00

Charging Perks Pilot (dynamic optimization)

- Program launched for Tesla drivers on June 16; will launch for GM, Ford, Honda, BMW soon
- Capped at 100 vehicles per manufacturer

EV Rebate for Income Qualified Customers

- Live in CO
- Income-qualified customers get \$3,000 off a pre-owned EV and \$5,500 off a new EV; maximum MSRP or sale price is \$50,000
- Customers can become pre-qualified and get instant rebate at dealer in our network, or can apply for the rebate after they purchase the car from any dealer, whether in-network or out-of-network
- Working with our partner GRID Alternatives Colorado on targeted outreach
- Additional outreach: Five Points EV event, Levitt Pavilion Denver free concerts



Advisory Services – Residential

Residential Advisory Program	Spend: March - Sept 1, 2021
Digital Tools & Website	\$ 71,700
Event Assets + Sponsorships	\$ 254,588
Advertising	\$ 291,891
Research	\$ 18,750
Agency Strategy	\$ 67,377
Dealership Engagement	\$ 250,000
Total	\$ 954,306

Multi-Family Housing (MFH) TEP Programs

EV Supply Infrastructure (EVSI)

- Application window opened 9/9 and closing soon
 - Shared Parking
 - Assigned Parking
- Optional Level 2 charging stations

Rebates

- Rolling application window opened 9/9
 - New Construction Rebate
 - Income-Qualified and Higher Emissions Community Rebates (working with Energy Outreach Colorado)

Advisory Services

- Intake Form launched 6/25
- 51 MFH leads received as of September 1



Commercial TEP Programs

EV Supply Infrastructure (EVSI)

- Application window opened 9/9 and closing soon
 - Fleet and Workplace EVSI
 - Public EVSI
 - Community Charging Hubs EVSI

Rebates

- Rolling application window opened 9/9
 - Fleet and Workplace IQ and HEC Rebate
 - Community Charging Hubs IQ and HEC Rebate

Advisory Services

- Intake form launched 6/25; Sept 1 results:
 - 18 Fleet Intakes
 - 42 Public Charging Intakes
 - 31 Community Charging Hubs Intakes
 - 52 Workplace Intakes



Xcel Energy Owned DCFC

- August stakeholder meetings held to identify siting metrics
- Upcoming RFP to select vendor to conduct siting analysis to identify ~24 geographic locations for connector and market stations
- RFP to select equipment and software in process
- Accept and evaluate applications for site hosts in the identified geographic locations in early 2022
- Build 10-12 stations in 2022
- Repeat process in 2023

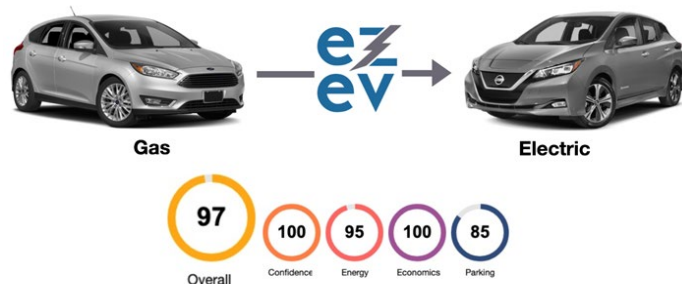


A report summarizing this process will be filed in the TEP proceeding soon.

Advisory Services – Fleet Electrification

Fleet Electrification Advisory Program

- Launched in April
 - Held 4 webinars across the territory
 - Continuous account management outreach
- Intakes are occurring now
 - 21 fleets have submitted intake forms
 - Expect 19 to complete assessments in 2021
 - Goal for 2021 was 10
 - Covers all fleet market segments
- Assessments results are being shared and used
 - Assessments take 3-6 months to complete
 - 5 fleets have completed their assessments (102 vehicles)
 - Expecting that 4-6 projects will apply to EVSI this round. Others will apply in 2022



Advisory Services – Communities

Standard Community EV Planning

- Community level EV Planning through Xcel Energy's Partners in Energy program
 - EV plan development at no cost to the community
- Regional Cohort planning workshops launched with Boulder County (Aug 2021)
- Two plans-initiated YTD
 - Three more projected to start by EOY

Higher Emission Community (HEC) EV Planning

- HEC community-level EV planning through Partners in Energy
 - Criteria will align with other Xcel Energy programs
- Initial community engagement 4th Qtr 2021
- Emphasis on integrating community representation
- Target communities where existing transportation electrification initiatives can be leveraged



2. DISCUSSION TOPICS

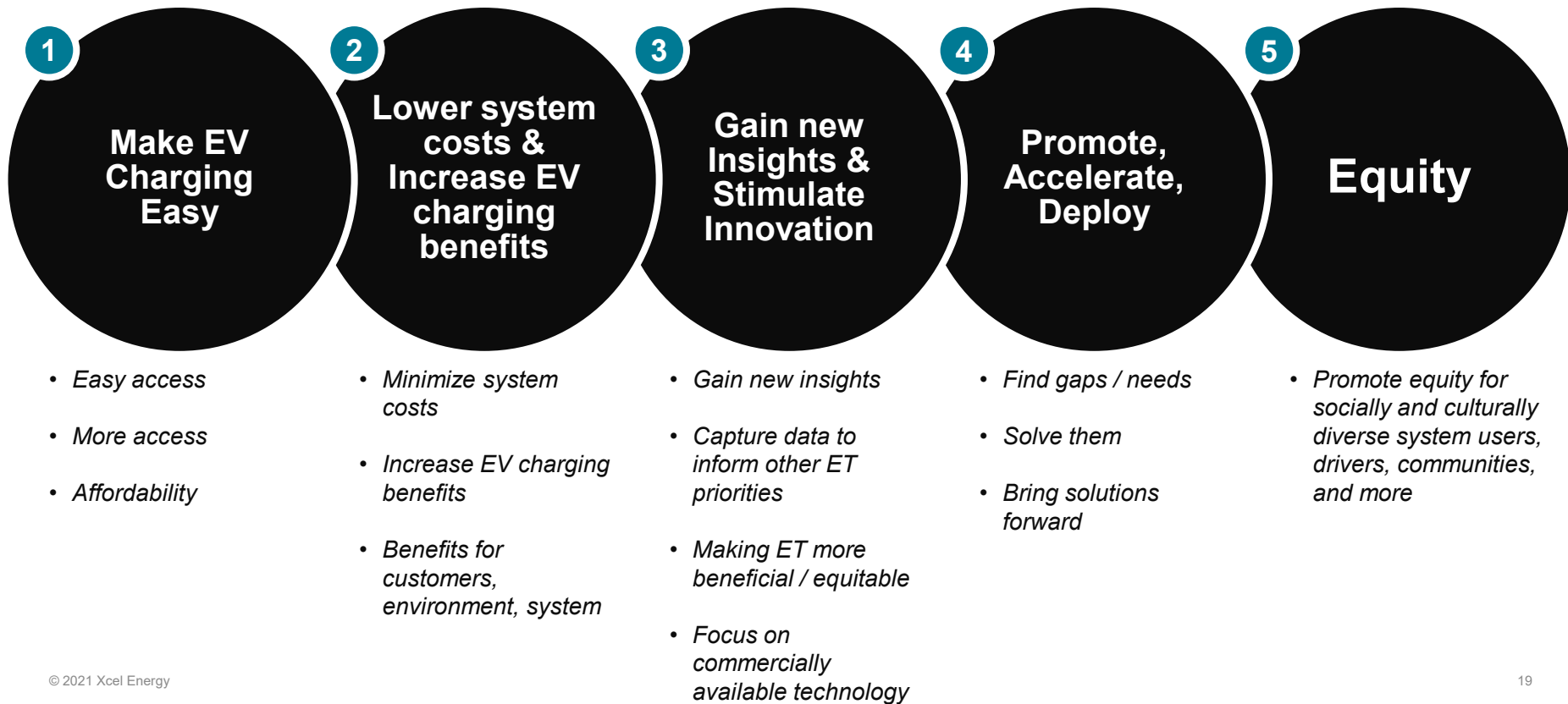
Deep dive conversations with Stakeholder Q&A

PARTNERSHIPS, RESEARCH, & INNOVATION (PRI)

Project Updates

PRI Background

Partnerships, Research, Innovation



PRI Stakeholder Engagement

Ongoing Discussions with

(current in process examples, but not limited to)

Non-Profits

- Western Resource Advocates (WRA)
- Southwest Energy Efficiency Project (SWEET)
- Grid Alternatives
- National Resources Defense Council (NRDC)
- Vote Solar
- Energy Outreach Colorado
- Colorado Car Share

Technology Companies

- Multiple Charging Network Operators
- Automotive OEMs
- Software and Big Data Providers

Labs / Universities

- National Renewable Energy Laboratory (NREL)
- Colorado State University (CSU)

Communities / Local Groups

- City, Rural, Mountain, Communities
- Denver, Boulder, Aurora, Commerce City, Grand Junction, Breckenridge

What we're doing / discussing

Capture ideas, insights,
and feedback

Consider what / how to
evaluate

Where to site pilots /
deployments

How to partner / how to
co-fund

***Please send any feedback
to us in writing following
the meeting.***

Send to:

Patrick.J.Murphy@xcelenergy.com

PRI Project Portfolio

9 Potential Projects – (9/29 Current Snapshot)

Spend Range \$M	Project Name
\$525k - \$3.7M	Municipal Refuse / Waste Fleet Electrification
\$400k - \$1.2M	DC Fast Charging (DCFC) + Storage
\$ 1M - \$1.8M	Residential Equipment Study & Managed Charging Pilot
\$200K - \$700k	Vehicle to Building (V2B) Feasibility Study & Demonstration
\$1.5M - \$2M	Level 2 (L2) Public Charging Leveraging Common Area lighting
\$1.5M - \$2M	Electrify & Expand Access to Affordable Car Sharing for Income Qualified / Rural Communities
\$1.5M - \$2M	Electrify Paratransit Mobility Services and Expand Electric Transportation (ET) Benefits
\$500K - \$750K	Middle, High School, and/or Vocational School Education / Training focused on ET
\$500K - \$1M	“*X-Prize-like” concept for EVs/ET, focused on Equity
Total Portfolio Spend to = \$10M	

Project OVERVIEW

Municipal Refuse / Waste Fleet Electrification

Outcomes / Partners / Scope / Equity

Procure 1-5 electric refuse vehicles for short-term demonstrations with various municipal and private refuse fleets throughout Xcel Energy's service territory.

- 1. Outcomes:** Accelerating early interest and understanding of EV benefits for waste handling fleets, which have over 2,600 total vehicles in Xcel Energy territory throughout Colorado. Exposure of technology within the community. Communication of technology to fleets and the community at large.
- 2. Partners / Communities:** Municipal and private refuse fleets, disadvantaged communities along refuse routes, vehicle OEMs, and EV charging manufacturers.
- 3. Scope:** Demonstrate vehicle electrification with refuse fleets across the Xcel Energy electric footprint. Selection process to begin in early 2022, with demonstrations taking place through the end of 2023.
- 4. Equity:** Socialized benefits of vehicle electrification in communities that may not receive other direct EV benefits, and bringing electrification opportunities to communities affected by high mobile emissions.

Milestones

Letters of Intent from interested fleet, vehicle OEM, and charging infrastructure partners

Selection of EV charging infrastructure

Electric refuse vehicle demonstration(s)

Community showcase events

Fleet feedback and data analysis

Timeline

December 2021

2022

2023

2022-2023

Late 2023



Costs

\$525,000 - \$3,750,000

- Depending on the number of vehicles (1-5), the number of demonstrations (4-20), and mobile vs. permanent charging infrastructure
- 80% Cap / 20% OM split

PRI Objectives Met

Ease of EV Charging

Lower system costs / Increase EV charging benefits

Gain new Insights / Stimulate Innovation

Promote, Accelerate & Deploy

Promote Equity

Project OVERVIEW

DCFC + Storage

Outcomes / Partners / Scope / Equity

Lower barriers to both public and fleet fast charging by providing technology solutions, paired with rate design, to lower customer demand charges and alleviate grid constraints

1. **Outcomes:** Advancing grid-friendly EV adoption. Adding a Battery System to DC Fast Charging would ultimately deliver cost savings to the customer, provide peak load reduction for the grid, and potentially deliver additional sources of grid value.
2. **Partners:** Site hosts, fleet operators, charging station vendors, battery storage vendors
3. **Scope:** Battery storage systems at Xcel Energy owned public charging stations and fleet charging operations
4. **Equity:** High demand charges can be a barrier to the adoption of fast charging - battery storage can reduce costs to site hosts and increase availability of charging

Milestones

Timeline

Identify Site Locations and Battery Use Cases

Q1 2022

Source Battery Vendor

Q1 2022

Install Charging Stations and Batteries

Q3 2022

Implementation and Data Gathering

Q3 2022 – 2023

Project Evaluation and Scaling Opportunities

Q4 2023



Costs

\$400k - \$1.2M

- 80% Capital / 20% O&M

PRI Objectives Met

Ease of EV Charging

Lower system costs / Increase EV charging benefits

Gain new Insights / Stimulate Innovation

Promote, Accelerate & Deploy

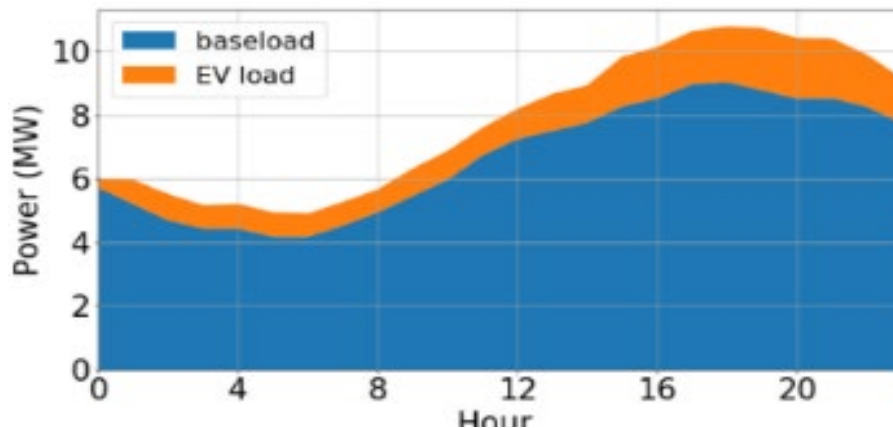
Promote Equity

Project OVERVIEW

Residential Equipment Study & Managed Charging Pilot

Outcomes / Partners / Scope / Equity

1. **Outcomes:** Understand impacts of EV home charging; validate and model impacts on service transformers; analyze diverse grid locations and configurations to determine 'risk factors'; finalize/deliver new design tool and typical EV load curves; improve/issue new construction standards for transformers, secondaries, and services
2. **Partners:** National Renewable Energy Laboratory – Golden Colorado
 - Site Host for study
 - Academic Researchers
3. **Scope:** Understand EV home charging impacts, develop analysis tools and methodologies
4. **Equity:** Ensure affordable demand charges through managed charging



This image shows a heavily residential feeder's peak load could increase by almost 2 MW with uncontrolled EV charging. Source: National Renewable Energy Labs RECHARGE Study, 2021

Milestones

Timeline

Develop SOW & deliverables/award contract to NREL

Q4 - 2021

Quarterly Updates

Q1 - 2022

Draft final report

Q3 - 2023

Final report and new OpenDSS Design Tool

Q4 - 2023

Costs

\$1 – \$1.8M

- 9 study areas/deliverables

PRI Objectives Met

Ease of EV Charging

Lower system costs / Increase EV charging benefits

Gain new Insights / Stimulate Innovation

Promote, Accelerate & Deploy

Promote Equity

Project OVERVIEW

Vehicle to Building (V2B) Feasibility Study & Demonstration

Outcomes / Partners / Scope / Equity

Bi-directional charging or vehicle-to-building (V2B) technologies present an opportunity for EVs to be used as back-up power sources in emergency situations. Target markets includes at-risk customers (ex. those with medical needs) and customers with critical loads (ex. clinics, pharmacies, security infrastructure).

Scope Phase 1:

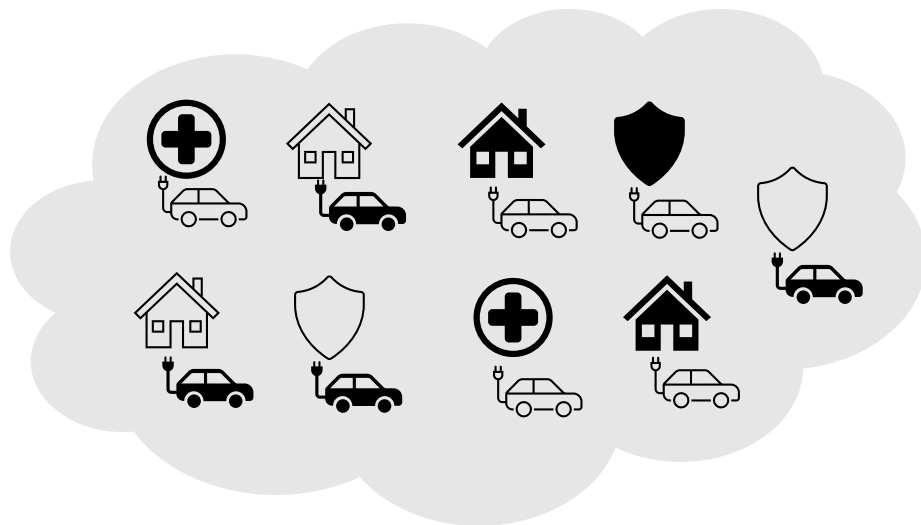
- Conduct market research into available V2B technologies; bi-directional charging equipment and BEVs, and alternative interconnection options
- Identify market potential including qualified customers and loads, interconnection and infrastructure requirements, and associated costs
- Create conceptual emergency response plans

Scope Phase 2:

- Limited deployment of bi-directional charging and BEV to demonstrate concept and provide educational and research opportunities

Partners: City of Denver, Co Smart City Alliance, ecosystem vendors

Equity: Creates greater resilience for at-risk customers



Costs

Phase 1 - ~\$200k

- O&M for research and consultative services

Phase 2 - ~\$500k

- Mix of Capital and O&M including, EVSI, bi-directional charging infrastructure, use of BEV, analysis, and reporting

PRI Objectives Met

Ease of EV Charging

Lower system costs / Increase EV charging benefits

Gain new Insights / Stimulate Innovation

Promote, Accelerate & Deploy

Promote Equity

Milestones

Timeline

Phase 1: Identify research consultant(s)

Q1 2022

Phase 1: Conduct market research: eligible market, critical loads, equipment

Q1 - Q3 2022

Phase 1: Create theoretical response plan

Q3 2022

Phase 2: Deploy demonstration V2B for resilience site(s)

Q4 2022

Project OVERVIEW

L2 Public Charging Leveraging Common Area lighting

Outcomes / Partners / Scope / Equity

Provide greater accessibility to charging options by partnering with local retailers and leveraging existing area lighting. Increase affordability by billing at user's residential rate on their home energy bill.

- 1. Outcomes:** (a) Expand affordability and accessibility of charging options in communities with high density of multi-family housing or rental housing. (b) Minimize the impact to the electric grid by leveraging existing infrastructure.
- 2. Partners:** (a) Desirable host sites such as supermarkets and other retailers with adequate "dwell times. (b) Cities, municipalities, neighborhood organizations who provide buy-in and support.
- 3. Scope:** Approx. 10 sites, each with 2-4 charging stations; access procedures and billing modifications, community outreach and promotion.
- 4. Equity:** Making charging as affordable to customers using public stations as it is for customers with at home charging equipment.



Examples of EV charging co-located with parking lot area lighting.

Milestones

Timeline

Identify potential host sites and community partners Create scope of work for App development and billing modifications	Q1 2022
Develop App and implement billing modifications	Q2 - Q3 2022
Install EVSEs and any EVSI required	Q3 2022
Begin pilot operations, promotional activities and community education	Q3 2022 +
Provide assessment and report of findings	Q4 2023

Costs

Proposing approx. \$1.5 – 2M

Mix of Capital and O&M including EVSI and Charging infrastructure for 10 sites, App/software development, billing integration, community outreach and promotion, and analysis.

PRI Objectives Met

Ease of EV
Charging

Lower system
costs / Increase EV
charging benefits

Gain new Insights /
Stimulate Innovation

Promote,
Accelerate &
Deploy

Promote
Equity

Project OVERVIEW

Electrify & Expand Access to Affordable Car Sharing for IQ / Rural Communities

Outcomes / Partners / Scope / Equity

Electrify & Expand access to affordable ride/car sharing services in Income Qualified (IQ) and/or Rural Communities to promote equitable benefits of electric transportation (ET)

- 1. Outcomes:** (a) Expand affordable, accessible mobility options, saving individuals approx. \$6,500 in car expenses over SOV ownership/use. (b) Establish an easily replicable model to expand to other communities.
- 2. Partners:** (a) Car/ride share services; (b) Dept.'s of transport; (c) Rural and/or IQ Communities; (d) other ecosystem participants who can help bend the cost curve
- 3. Scope:** approx. 20-30 vehicles; 5-10 community charging hubs; IQ and/or rural areas; Education, Outreach and Community Support;
- 4. Equity:** Bring ET benefits to more diverse communities / geographies more affordably and in a more scalable way.

Milestones

Timeline

Assess community mobility access needs for IQ / Rural geographies

Q1 2022

Decide on pilot location, and finalize scope

Q2/Q3 2022

Begin vehicle requisition, charging infrastructure development

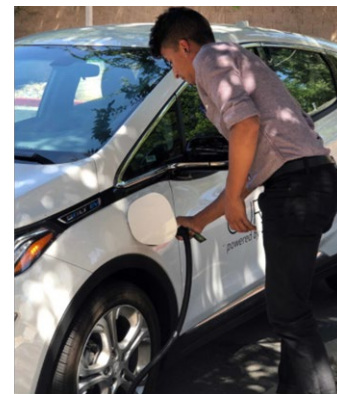
Q4 2022

Community education

Q2 2022 +

Initial model / template developed and shared to promote further expansion

2023



Example that we can model from: Our Community CarShare (OCCS) Pilot program initiated by the Sacramento Metropolitan Air Quality Management District. | [Breathe California \(sacbreathe.org\)](https://www.breathecalifornia.org/)

Costs

Proposing approx. \$1.5 – 2M

Mix of Capital and O&M; additional support from other programs for EVSI, Charging infrastructure, etc.; includes additional dollars for promoting the program, and developing learnings into a scalable, shareable template

PRI Objectives Met

Ease of EV Charging

Lower system costs / Increase EV charging benefits

Gain new Insights / Stimulate Innovation

Promote, Accelerate & Deploy

Promote Equity

Project OVERVIEW

Electrify Paratransit Mobility Services and Expand ET Benefits

Outcomes / Partners / Scope / Equity

Electrify Paratransit Mobility Services to expand electric transportation (ET) benefits for those with Disabilities / IQ

- 1. Outcomes:** (a) Electrify / expand electrification of paratransit mobility services; (b) Establish an easily replicable model for scalable expansion; (c) learn about MD fleet segment / duty cycle infrastructure needs; promote awareness and benefits of EVs to the community at large
- 2. Partners:** (a) Municipal transit operators; (b) Rural and/or IQ Communities; (c) other ecosystem participants who can expand access, promote awareness, bend the cost curve, replicate and scale the model
- 3. Scope:** approx. 10-20 vehicles; associated depot & in field dedicated charging; IQ and/or rural areas; Education, Outreach, Community Support
- 4. Equity:** Bring ET benefits to community members who use paratransit. Focus on serving those with disabilities. Early vehicle placement and infrastructure in high emissions and high noise, limited access communities

Milestones

Timeline

Assess applicable potential partners, ET plans and community needs	Q1 2022
Consider optimal routes, charger placements, and scalability impacts	Q2/Q3 2022
Finalize program scope, vehicle and charger counts, and move to deploy	Q3 22 – Q1 23
Community education	Q3 2022 +
Initial model / template developed and shared to promote further expansion	2023 +



Example of an electrified Paratransit bus, built on a Ford E-450 chassis. a 127kWh battery; 105 mile range
<https://www.motivps.com/application/electric-shuttle-bus/>

Costs

Proposing approx. \$1.5 – 2.5M

Mix of Capital and O&M; additional support from other programs for EVSI, Charging infrastructure, etc.; includes dollars for promoting the program, and developing learnings into a scalable, shareable template

PRI Objectives Met

Ease of EV
Charging

Lower system
costs / Increase EV
charging benefits

Gain new Insights /
Stimulate Innovation

Promote,
Accelerate &
Deploy

Promote
Equity

Project OVERVIEW

Middle, High School, and/or Vocational School Education / Training focused on ET

Outcomes / Partners / Scope / Equity

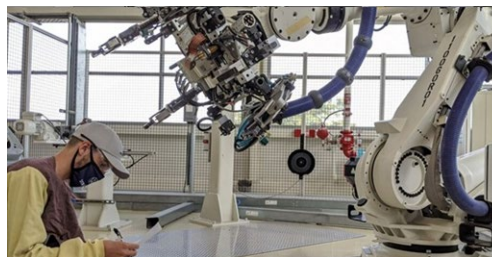
Develop curriculums for Middle / High School Students to learn about the benefits of EVs/ET / Carbon Reduction; and/or Vocational Training Programs that lead to energy transition jobs creation

- 1. Outcomes:** Develop a scalable curriculum that educates middle, high school and/or vocational school students about the innovation and hands on opportunities for them to participate in the clean energy transition
- 2. Partners:** (a) educational institutions; (b) sustainability / equity ecosystem participants; (c) high and/or heavy tech; (d) key SMEs
- 3. Scope:** 1-3 interconnected curriculums, supporting learners towards jobs participation in the clean energy transition
- 4. Equity:** Benefit community members, *not just* from driving an EV, but also from being a well informed and promoting ways to be an early pioneer / participant in the clean energy transition. Focus on youth / learners.

Milestones

Timeline

Identify optimal partner mix, pilot site(s) and approach	Q1/Q2 2022
Landscape analysis of learners' educational interests, wants, and needs	Q1/Q2 2022
Curriculum development, refinement and materials production	Q3/Q4 22
Pilot launch and Trials to gain insights / feedback	Q1 2023
Refinements and prep for Fall full launch and scaling	Q2 2023



Top: Educating students about the impacts of EVs on reducing GHGs and pollution.

Bottom: Examples of some of the needs for vocational education and support about installing and maintaining parts of the evolving EV ecosystem of infrastructure

Costs

Proposing approx. \$500 - 750k

Mix of Capital and OM including support for the development of demonstration hardware / software ecosystems for hands on “go see / touch/feel” use cases, curriculum developments and program promotion

PRI Objectives Met

Ease of EV Charging

Lower system costs / Increase EV charging benefits

Gain new Insights / Stimulate Innovation

Promote, Accelerate & Deploy

Promote Equity

Project OVERVIEW

“*X-Prize-like” concept for EVs/ET, focused on Equity

Outcomes / Partners / Scope / Equity

Award an “X-Prize-like” grant, and provide resource support for the advancement of a project that focuses on ET Equity | Promote innovative 3rd party pilot projects

- 1. Outcomes:** Teams from CO frame solutions to the challenge of promoting and expanding the equity benefits of EVs/ET. The selected idea is moved from concept to deployment. Criteria to be determined.
- 2. Partners:** (a) EV Ecosystem, environmental, and/or social justice participants; (b) high/heavy tech organizations; (c) communities; (d) more
- 3. Scope:** (a) clear process and criteria established; (b) project teams submit ideas; (c) evaluation / award made; (d) execution support provided
- 4. Equity:** Provide the community with an opportunity to participate directly in identifying, and solving for equity issues that include access, affordability, pollution reduction, and/or other aspects.

Milestones	Timeline
Process, criteria and problem statement parameters identified – notice given	Q1/Q2 2022
Community project teams submit ideas / responses	Q2/Q3 2022
Idea evaluation and awarding	Q3 2022
Projects refine scope and launch	Q3/Q4 2022
Move to execution	Q1 2023+



Getty Images | equitytool.org |

Costs

Proposing approx. \$500k - 1M

Mix of Capital and O&M is dependent upon what project / idea is selected and advanced. Evaluation criteria to be developed

PRI Objectives Met

Ease of EV Charging

Lower system costs / Increase EV charging benefits

Gain new Insights / Stimulate Innovation

Promote, Accelerate & Deploy

Promote Equity

PRI Portfolio Next Steps

- Continued stakeholder engagement and feedback (October 2021)
- 60 Day Notices issued for selected projects (Late October 2021)
- Discuss any additional PRI project ideas (Q4 2021 & next quarterly stakeholder meeting in December 2021)

S-EV 2.0 RATE

Updates

S-EV 2.0

Timeline

October 15th, 2021

2019 Settlement Agreement

- Company will make a Future Advice Letter filing with the Commission with two optional rate schedules. The objective of filing two rate schedules is to support both public and fleet charging and support the intent of Senate Bill 19-077

S-EV 2.0

Commercial EV Charging Options

Rename current S-EV schedule to "S-EV-CPP"

- Retain basic structure of current rate
- Slightly modify On-Peak period – Shorten 1 hour to 1:00 PM to 9:00 PM
- Align critical peak pricing definition with definition used in other CPP rates approved by the Commission earlier this year

New schedule S-EV

- Elimination of CPP
- Same time-of-use energy charges
- Same distribution demand charge

Both schedules for EV charging only with provision for "ancillary load"

- Also available to hydrogen charging stations

S-EV 2.0

Cost Allocation

- Cost allocation based on 2020 Phase II, Proceeding 20AL-0432E & 2020-2021 load shapes from S-EV

Step 1 – Develop Average Costs Rates

	SG Allocated Costs	Allocation Basis	Average Allocation Rate
Generation	\$244,180,834	2,268,867 kW	\$107.62/kW
Transmission	\$84,525,740	2,268,867 kW	\$37.25/kW
Substations	\$37,666,010	2,271,662 kW	\$16.58/kW
Primary Distribution	\$130,655,369	2,723,015 kW	\$47.98/kW
Secondary Distribution	\$33,718,414	6,865,647 kW	\$4.91/kW
Variable Energy	\$93,070,114	12,658,300,130 kWh	\$0.0074/kWh
Demand Side Management	\$32,994,505	\$640,641,395	\$0.05/dollar
Total	\$656,810,986		

Step 2 – Apply Those Costs to EV Loads

	Average Allocation Rate	S-EV Volumes	Allocated S-EV Costs
Generation	\$107.62/kW	1,235 kW	\$132,908
Transmission	\$37.25/kW	1,235 kW	\$46,007
Substations	\$16.58/kW	1,237 kW	\$20,509
Primary Distribution	\$47.98/kW	2,625 kW	\$125,972
Secondary Distribution	\$4.91/kW	9,197 kW	\$45,166
Variable Energy	\$0.0074/kWh	5,704,906 kWh	\$41,945
Demand Side Management	\$0.05/dollar	\$412,508	\$21,245
Total			\$433,753

S-EV 2.0

Cost Allocation Results

- 36 percent lower overall rates
- 56 percent lower demand charge
- Forecasted bill savings range from 34 to 44 percent
- Why? - Contribution to summer coincident peak (4CP) is substantially lower than other C&I customers

	SG Total	SG Unitized Load
Individual Max Demand	4,142,632 kW	1.00 kW
Annual Energy	12,658,300,130 kWh	3,056 kWh
Load Factor	34.9%	34.9%
4CP - AED	2,268,867 kW	0.55 kW
NCP	2,723,015 kW	0.66 kW

	EV Charging Total	S-EV Unitized Data
Individual Max Demand	6,571 kW	1.00 kW
Annual Energy	5,704,906 kWh	868 kWh
Load Factor	9.9%	9.9%
4CP - AED	1,235 kW	0.19 kW
NCP	2,625 kW	0.40 kW

S-EV 2.0

Average Monthly Bill Comparison

	Current S-EV		S-EV-CPP	Change		New S-EV (no CPP)	Change		
S&F	\$37.90		\$37.90	\$0.00	0%	\$37.90	\$0.00	0%	
Distribution Demand	\$1,530		\$679	(\$851)	-56%	\$679	(\$851)	-56%	
TOU Energy Charges	\$1,131		\$592	(\$538)	-48%	\$1,042	(\$88)	-8%	
CPP	\$449		\$449	\$0	0%	\$0	(\$449)	-100%	
Riders	\$1,371		\$1,120	(\$250)	-18%	\$1,120	(\$250)	-18%	
Total	\$4,519		\$2,879	(\$1,640)	-36%	\$2,879	(\$1,640)	-36%	

3. 60/90 DAY NOTICES

Process, Schedule, Upcoming Notices

60/90 Day Notices

Process

- Proposal: Notices will be filed in the month following each quarterly stakeholder meeting
 - i.e., January, April, July, October

Pending/Upcoming notices

- Partnership, Research, Innovation projects (as discussed previously)
- Any new requests to receive a Higher Emissions Community designation (if applicable)

Summaries filed

- The Company will provide a written summary of input submitted through the 60/90 Day Notice process and what feedback was incorporated, or not, and why (filed into Proceeding No. 20A-0204E)
- Summaries submitted for Higher Emissions Communities, Electric School Bus Program, Small Commercial Program

Higher Emissions Communities

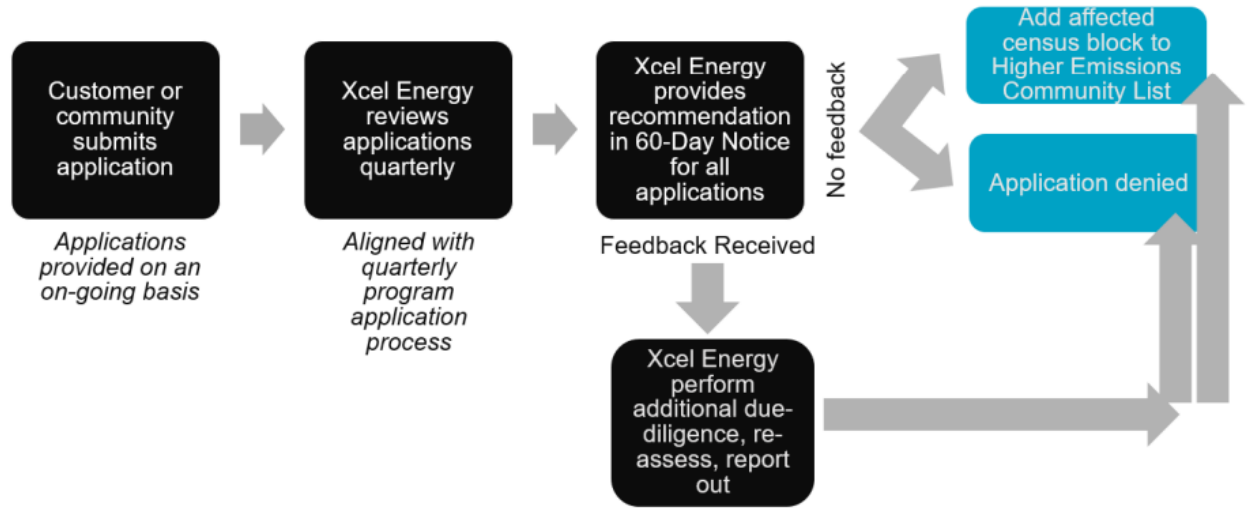
Higher Emissions Communities (HEC) have been identified consistent with the process described in 60-day notice

Opportunity remains to apply for additional locations/projects to receive HEC designations:

1. PSCo to review any new HEC designation applications after Commercial and MFH program application round closes (first round closing soon)
2. PSCo to file a 60-Day Notice including a recommended decision on any newly proposed HECs (*only applicable if applications are received*)
3. 60 Day Notice: external comment opportunity
4. PSCo to file final 60 Day Notice (*addressing comments if any received*)

Higher Emissions Communities

Process for Reviewing Applications for New HEC Designations



Higher Emissions Communities

*For more information, visit
Program Portfolio pages*


*(Customers can select their
portfolio [here](#))*



Higher Emissions Communities

[List of Higher Emissions Communities \(XLS\)](#)

[Higher Emissions Census Block Maps](#) 

[Application for Consideration of Additional Higher
Emissions Communities \(ENG\)](#) 

[Consideración de comunidades con otras
emisiones más altas \(ESP\)](#) 

60/90 Day Notices: School Buses

- Provide funds directly to school districts to be used for fleet electrification
 - No requirement to destroy a diesel bus
- Funds to cover bus, charging equipment and infrastructure costs
 - 75% of Total Project Cost
 - Capped at \$275k
- Comments received and responded to through 60-Day Notice Process
- Application round to open in October

Funds Available	\$2,200,000
Rebate per Bus	\$275,000
Buses Funded	8



60/90 Day Notices: Small Commercial Program

- No stakeholder comments received on the proposed design
- Moving forward with program planning and implementation
- Preparing to launch the program in October

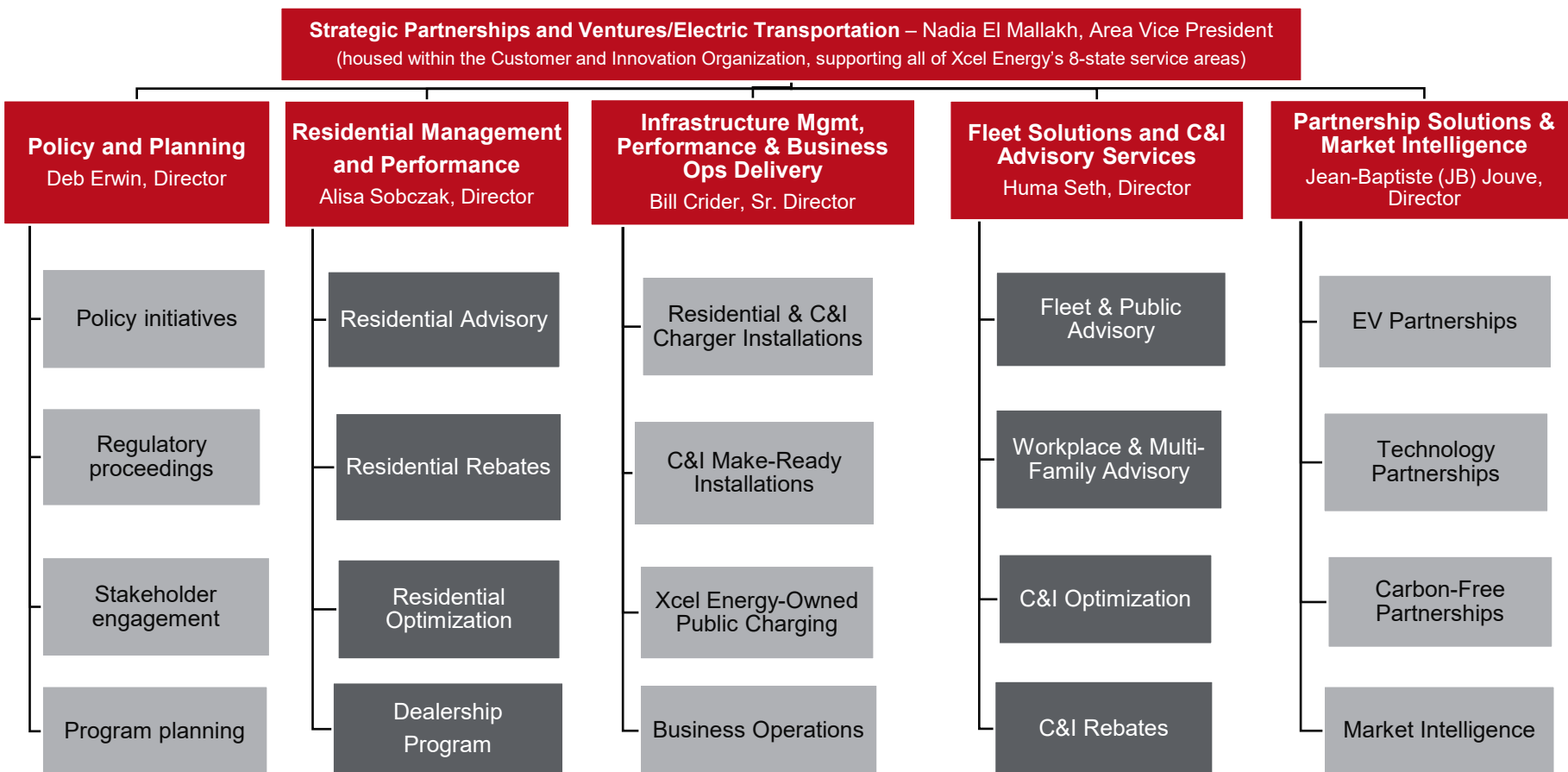
Summary of Small Commercial Program Design

Number of Ports	Market-Rate Rebate	Income-Qualified Rebate
1	Up to \$2,500 of EVSI costs (no charger support)	50% EVSI average + L2 station (\$2,500 for EVSI and \$2,000 per port)
2	Up to \$5,000 of EVSI costs (no charger support)	50% EVSI average + L2 stations (\$5,000 for EVSI and \$2,000 per port)
3	Up to \$7,500 of EVSI costs (no charger support)	50% EVSI average + L2 stations (\$7,500 for EVSI and \$2,000 per port)
4 +	[eligible for EVSI program]	[eligible for EVSI program]

4. WRAP UP

Next meeting in December

Xcel Energy Electric Transportation Organization



How to Reach Out with EV Questions

- Residential Program Questions:
 - Rebates: email us at EVrebates@xcelenergy.com
 - EV Accelerate At Home: email us at ElectricVehicles@xcelenergy.com
 - Speak to a member of the EV Concierge Team by calling 1-800-895-4999
- Commercial and MFH Infrastructure Program Questions:
 - <https://co.my.xcelenergy.com/s/business/ev>
 - Click “Let’s Connect” to start working with an EV Advisor
 - Click “Contact Us” for general questions
- Advisory Services Questions:
 - Fleet Electrification Advisory Program: <https://co.my.xcelenergy.com/s/business/ev/fleet>
 - Community Assessments (Partners in Energy): email PartnersinEnergy@xcelenergy.com

How to Reach Out with EV Questions (cont.)

- General Inquiries:
 - Email us at ElectricVehicles@xcelenergy.com
 - Speak to a member of the EV Concierge Team by calling 1-800-895-4999
- Stakeholder Group:
 - To join stakeholder list, email Patrick Murphy at Patrick.J.Murphy@xcelenergy.com

Upcoming EV-Related PUC Filings

- October 1: First semiannual report on TEP programs
- October 1: 2022 TEPA Rider
- October 15: New S-EV rate, DCFC rate at PSCo stations, Performance Incentive Mechanism (PIM)

Additional Contact Information

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Appendix

Goals of TEP Stakeholder Group and Quarterly Meetings

Quarterly schedule – Q1(Mar.), Q2 (June), Q3 (Sept.), Q4 (Dec.)

Process

Xcel Energy will provide a brief PowerPoint overview of TEP implementation covering:

- Updates
- Expenditures
- Milestones achieved each quarter
- Present on TEP topical areas

Goals

Quarterly meetings are intended to:

- Foster discussion about programs in-market.
- Gather ideas for continuing to improve the programs and portfolios.
- Discuss whether additional projects and programs are necessary to support transportation electrification in Colorado.

Reporting schedule – October and April each year (semi-annual)

Does your colleague want to join the TEP Stakeholder Group?

Email patrick.j.murphy@xcelenergy.com

Budgets, including capital, rebates, and O&M expense, for TEP portfolios

Portfolio	Spending Type	2021	Total
Residential	Capital	\$1,808,000	\$8,256,000
	Rebates	\$1,865,000	\$7,940,000
	O&M Expenses	\$461,000	\$2,003,000
	Total	\$4,134,000	\$18,198,000
Multifamily Housing	Capital	\$1,348,000	\$6,450,000
	Rebates	\$174,000	\$1,094,000
	O&M Expenses	\$189,000	\$725,000
	Total	\$1,711,000	\$8,269,000
Commercial	Capital	\$8,673,000	\$43,692,000
	Rebates	\$915,000	\$4,096,000
	O&M Expenses	\$487,000	\$2,322,000
	Total	\$10,076,000	\$50,110,000
Partnerships, Research, and Innovation	Rebates	\$1,000,000	\$5,000,000
	O&M Expenses	\$1,000,000	\$5,000,000
	Total	\$2,000,000	\$10,000,000
Advisory Services	Rebates	\$350,000	\$2,500,000
	O&M Expenses	\$3,416,000	\$10,603,000
	Total	\$3,766,000	\$13,103,000
EV Purchase & Lease Rebates	Capital	\$50,000	\$50,000
	Rebates	\$863,000	\$4,163,000
	O&M Expenses	\$256,000	\$773,000
	Total	\$1,168,000	\$4,985,000
Program Evaluation	Total	\$500,000	\$1,500,000
School Bus Electrification	Total	\$0	\$2,200,000
Total		\$23,354,000	\$108,366,000

EV Education/Awareness Ads

[Xcel Energy – EV Multiply :15 Digital Ad](#)



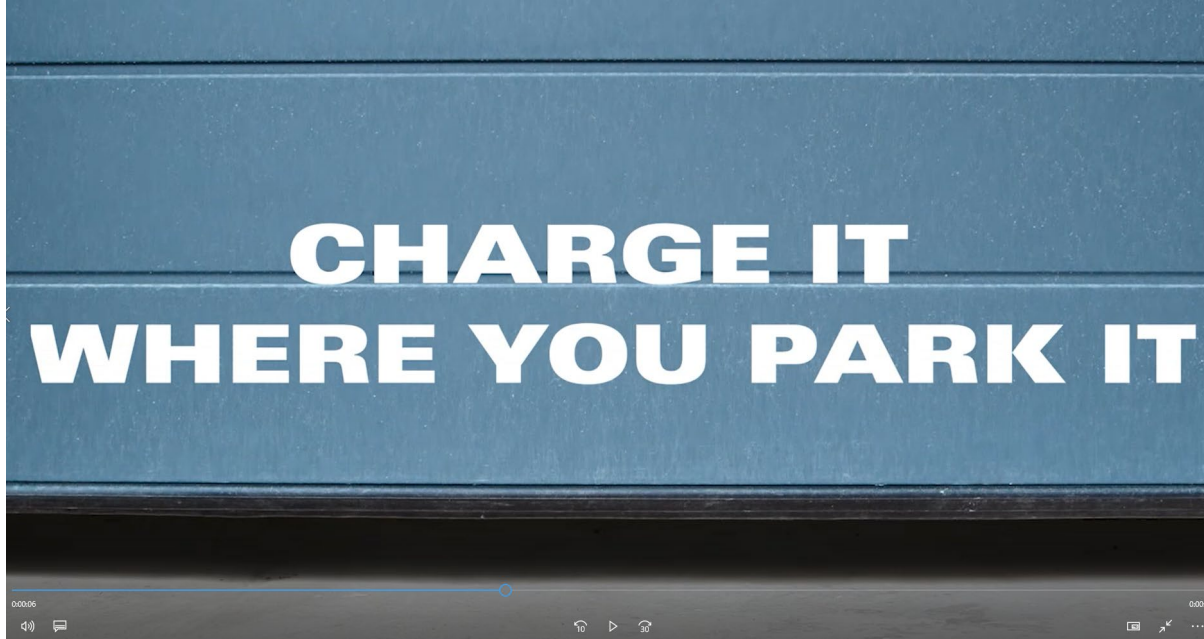
EV Education/Awareness Ads

[Xcel Energy – EV Question :15 Digital Ad](#)



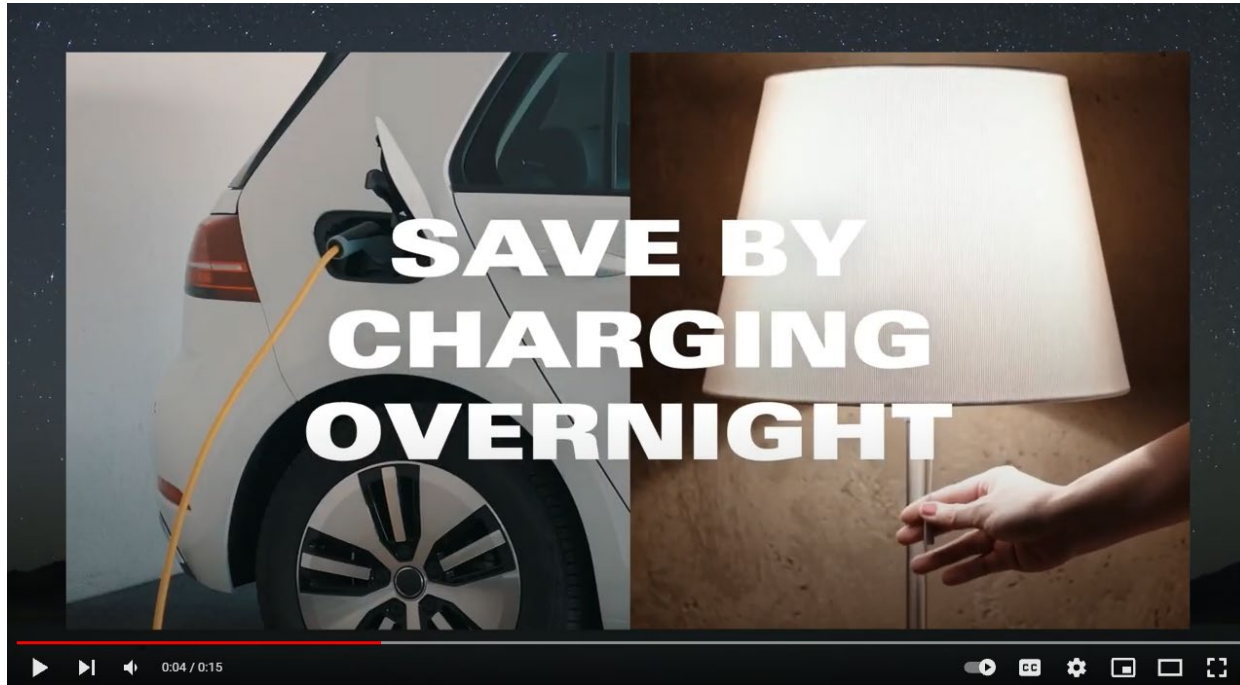
Program Promotion Ads

[Xcel Energy - EV Ideal :15 Digital Ad](#)



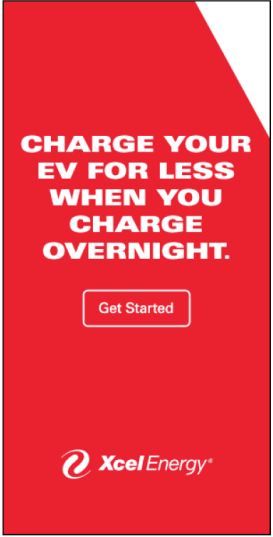
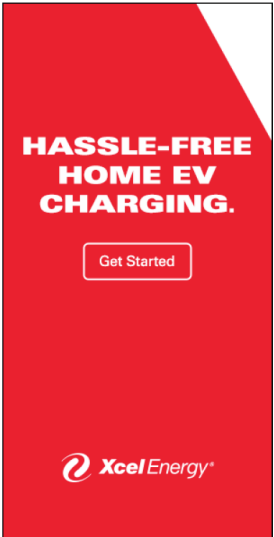
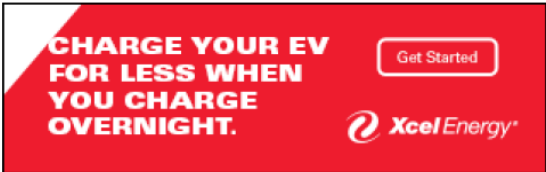
Program Promotion Ads

[Xcel Energy - EV Save More :15 Digital Ad](#)



Program Promotion Ads

Banner Ads



Dealership Network Marketing

Signage and Tools to Demystify Charging, right in dealer showrooms



Quick Break

Returning at 11:24am MT

