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Minneapolis, MN 55401

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October 31, 2025

—Via Electronic Filing—

Sasha Bergman
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: 2025 TRANSPORTATION ELECTRIFICATION PLAN
2025 INTEGRATED DISTRIBUTION PLAN
DOCKET NO. E002/M-25-142

Dear Ms. Bergman:

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission (Commission) the enclosed 2025 Transportation Electrification Plan (TEP). We submit our TEP pursuant to the Commission's December 8, 2022 ORDER in Docket No. E999-17-879 and the Commission's May 9, 2024 ORDER APPROVING XCEL ENERGY'S 2023 TRANSPORTATION ELECTRIFICATION PLAN WITH MODIFICATIONS in Docket No. E002/M-23-452.

Certain portions of Attachment H are marked as "NOT PUBLIC" and meet the definition of trade secret information pursuant to Minn. Stat. § 13.37. This data contains confidential third-party pricing information related to charger, installation, and data services costs. This information derives independent economic value from not being generally known or readily ascertainable by others who could obtain a financial advantage from its use. Thus, Xcel Energy maintains this information as trade secret pursuant to Minn. Rule 7829.0500.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact Brandon Kirschner at 612-215-5361 or Brandon.M.Kirschner@xcelenergy.com or contact me at Holly.R.Hinman@xcelenergy.com if you have any questions regarding this filing.

Sincerely,

/s/

HOLLY HINMAN
DIRECTOR, REGULATORY & STRATEGIC ANALYSIS

Enclosures
cc: Service List

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STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben
Hwikwon Ham
Audrey C. Partridge
Joseph K. Sullivan
John A. Tuma

Chair
Commissioner
Commissioner
Commissioner
Commissioner

IN THE MATTER OF XCEL ENERGY'S
2025 INTEGRATED DISTRIBUTION PLAN

DOCKET No. E002/M-25-142

**2025 TRANSPORTATION
ELECTRIFICATION PLAN**

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy (Company), submits to the Minnesota Public Utilities Commission (Commission) our 2025 Transportation Electrification Plan (TEP). We submit our TEP pursuant to the Commission's December 8, 2022 ORDER in Docket No. E999-17-879 and the Commission's May 9, 2024 ORDER APPROVING XCEL ENERGY'S 2023 TRANSPORTATION ELECTRIFICATION PLAN WITH MODIFICATIONS in Docket No. E002/M-23-452.

The transportation sector is the leading source of emissions in Minnesota, and electrification of the transportation sector will bring substantial environmental benefits.¹ Because of this, the State of Minnesota has set ambitious vehicle electrification targets through the end of this decade which Xcel Energy plans to support through efforts such as this TEP. Xcel Energy is committed to enabling charging infrastructure for 1.5 million electric vehicles (EVs) across its service territories by 2035 while continuing to execute on our clean energy commitments. Given recent load growth trends nationwide and uncertainty of the impact of this growth, EVs present a unique opportunity to increase load in a way that maximizes

¹ For information on greenhouse gas emissions sources in Minnesota, see the 2023 Biennial Greenhouse Gas Emissions Reductions Report, available at [Greenhouse gas emissions in Minnesota 2005-2020 \(state.mn.us\)](https://www.state.mn.us/greenhouse/greenhouse-gas-emissions-reports).

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existing grid assets and has the potential to maintain affordability for all electric customers, not just EV drivers.²

The Company's TEP is designed with offerings to support customers at every stage of their transition to an EV. Whether a customer is just getting started or already owns an EV, we aim to provide the guidance, tools, and infrastructure customers need to charge in a way that works best for them. Learnings from previous program implementation across multiple operating companies have been applied to these proposals to improve the customer experience and maximize charging availability.

In this TEP, the Company discusses three new EV-related offerings that the Company intends to bring to market in the near future. The new programs discussed here are:

- Commercial EV Infrastructure Rebate and Advisory Program
- Residential Advisory Services and Guided Charging Installation Program
- Charging Perks Active Managed Charging Program

The Company's comprehensive TEP is presented in this filing, allowing the Commission and stakeholders to see how the Company is addressing the needs of its customers and the state's goals across all its offerings, including certain elements the Company plans to seek approval of through our Energy Conservation and Optimization Act (ECO) portfolio. For example, the Company will propose the Commercial EV Infrastructure Rebate and Advisory Program and the Residential Advisory Services and Guided Charging Installation Program in ECO. We expect to file a request with the Minnesota Department of Commerce (Department) to modify our 2024-2026 ECO Triennial Plan ECO Portfolio in January 2026.

The TEP also includes proposed tariff modifications related to our EV programs. The tariff modifications proposed in this TEP include modifications to the energy rates and monthly customer charges for our EV programs, modifications related to the closure of several pilots which we plan to replace with programs discussed in this TEP. The Company requests Commission approval of these tariff modifications.

To aid in navigating the TEP, including reporting requirements ordered by the Commission, the Company provides a compliance matrix as Attachment A. The

² *Making Electricity More Affordable with Electric Vehicles* from Alliance for Transportation Electrification ([Making Electricity More Affordable with Electric Vehicles](#)) and *Electric Vehicles Are Driving Rates Down for All Customers* from Synapse Energy Economics, Inc. (Electric Vehicles Are Driving Rates Down for All Customer Update Dec 2023) both point to EV load growth maintaining affordability for electric customers.

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compliance matrix shows all reporting requirements related to transportation electrification and provides references to their location in this year's submissions.

Included with this TEP filing are the following attachments:

Attachment A	Compliance Matrix
Attachment B	Customer Research
Attachment C	Summary of EV Programs in Other Jurisdictions
Attachment D	Cost-benefit Analysis for Optimize Your Charge Pilot
Attachment E	Plug In America 2025 EV Driver Survey
Attachment F	Summary of Stakeholder Meeting
Attachment G	Charging Perks Budget and Incentive Calculation
Attachment H	Proposed Tariff Modifications
Attachment I	EV Accelerate at Home Pricing Update Calculations

The balance of this TEP is organized as follows:

- *Section I* - Transportation Electrification Efforts. Includes discussion of the history of our TEP filings in Minnesota, our transportation electrification efforts in Minnesota, and Xcel Energy's transportation electrification efforts in other jurisdictions.
- *Section II* - Ongoing EV Developments. Includes discussions of proactive grid reinforcement projects, our plans to facilitate greater fleet electrification, public charging infrastructure needs, public charging considerations, improvements we have made to our advisory services, and other streamlined processes.
- *Section III* - New EV Programs. Includes discussion and details about the new EV programs discussed in this TEP.
- *Section IV* - Cost Recovery. Includes a discussion of our proposed methods for recovering costs related to the new EV programs discussed in this TEP.
- *Section V* - Proposed Tariff Changes. Includes a discussion of the proposed tariff changes, including those previously proposed by the Company in our Residential Time-of-Use (TOU) Rate filing.

TRANSPORTATION ELECTRIFICATION PLAN

I. TRANSPORTATION ELECTRIFICATION EFFORTS

The Company has undertaken substantial efforts to implement EV programs and create customer offerings that address barriers to EV adoption and support broader transportation electrification in its Minnesota service territory. Past programs have

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leveraged the Company's experience in building and operating critical energy infrastructure to provide charging solutions to our customers. In this section, the Company sets out the TEP process in Minnesota and the current state of its transportation electrification efforts in Minnesota as well as other jurisdictions.

A. History of Transportation Electrification Plans in Minnesota

The requirement to submit TEPs originally arose from a Commission Inquiry into Electric Vehicle Charging and Infrastructure.³ Although the Company began its transportation electrification efforts several years earlier, it submitted its first TEP to the Commission in June 2019. The Order requiring TEPs also highlighted the Commission's general view of transportation electrification, namely that "electrification is in the Public Interest" and that utilities in Minnesota have a role in "[f]acilitating the electrification of Minnesota's transportation sector."

The Company had been submitting EV Annual Reports since 2016.⁴ Those annual reports are intended to be a historical look at the operations of our EV-related programs and activities and feature extensive data about program participation, charging usage, and costs incurred, along with descriptions of our education and outreach activities. The Company submitted its most recent compliance filing on its EV activities in Minnesota as a part of our 2025 Annual EV Report filed in May 2025.⁵

Serving as a companion to the annual reports, the Company's TEPs offer a more comprehensive look into the Company's overall transportation electrification strategy, our plans for future programs, and the coordination of these initiatives with the Company's larger Integrated Distribution Plan (IDP). The Company filed TEPs concurrently with its EV Annual Reports in both 2020 and 2021. However, in the Commission's order accepting the TEP filed in 2020, the Commission approved a biennial filing schedule for TEPs and added the requirement to include greater budget information as well as additional information about system upgrades related to transportation electrification.⁶ Subsequent to the filing of our 2021 TEP, the Commission issued an additional order which combined the TEP filing process with

³ See ORDER MAKING FINDINGS AND REQUIRING FILINGS (February 1, 2019), Docket No. E999/M-17-879.

⁴ Submitted in Docket No. E002/M-15-111, along with various other dockets related to specific EV programs.

⁵ Reference 2025 Annual Report

⁶ See ORDER ACCEPTING 2020 TRANSPORTATION ELECTRIFICATION PLANS, ADOPTING ADDITIONAL INFORMATION REQUIREMENTS, AND ESTABLISHING BIENNIAL FILING REQUIREMENT (April 16, 2021), Docket No. E999/M-17-879.

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the Integrated Distribution Planning process, and suspended the requirement to submit TEPs on June 1 of each biennium. This Order also established a revised set of reporting requirements for both the IDP filing and the TEP.

In the Spring of 2023, the Minnesota Legislature adopted 2023 Minn. Laws Ch. 60, Art. 12, § 12, Subd. 2., which sets forth a framework for TEPs and the Commission review thereof.

B. Transportation Electrification Efforts in Minnesota

Previous TEPs have included programs aimed at expanding access to charging, educating customers on EVs, their charging needs, and increasing charging affordability at both residences and commercial sites. For residential customers, the Company has offered its flagship EV Accelerate At Home (EVAAH) program, a charger rental and TOU rate program since 2019. Since then, we have expanded on this program with various rate and subscription options to meet expanding customer needs. A charger optimization program that incentivizes customers to charge their vehicles off-peak was introduced in 2021. In addition to our EVAAH and rate options, the Company introduced an EV Charger and Wiring Rebate⁷ in 2025 which covers costs associated with Level 2 (L2) home charging installations for customers that agree to opt into a managed charging option.

For our commercial customers, we have offered make-ready pilots for Fleet, Multi-Dwelling Unit (MDU) and Public Charging. Through these pilots, the Company designed, built, and operated EV supply infrastructure (EVSI) which is defined as all secondary electrical equipment between the meter and the charging station which can include conduit, wiring, and electrical panels among other equipment. The Fleet and Public Charging Pilots were initially proposed in 2018 and the MDU Pilot was proposed in 2020, expanded in 2021 and were fully subscribed at the time of the 2023 TEP filing. The 2023 filing extended these pilots to accommodate additional interest.

This section will provide an overview of the implementation of these programs over the past two years along with enrollment and spend data.

⁷ Referred to EV Home Wiring Measure in our ECO portfolio, where it was approved in Docket E,G002/CIP-23-92.

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1. *Summary of Current Programs*⁸

Table 1 below summarizes the Company's EV-related pilots and programs, including those that have already been approved and are in-market and those that are under development.

Table 1
Summary of Xcel Energy's EV-related Pilots and Programs

Program	Status	Docket Number	Implementation Status
Residential EV Service Rate	Commission Authorized, Order Date: June 22, 2015	E002/M-15-111	In Operation.
Residential EV Service Pilot	Commission Approved, Order Date: May 9, 2018	E002/M-17-817	Pilot complete and replaced by the permanent EVAAH program.
Fleet EV Service Pilot	Commission Approved, Order Date July 17, 2019; Extension of Pilot Term Approved by Commission, Order Date December 5, 2022.	E002/M-18-643	In Operation. Closed to new enrollment outside of customers in pipeline. Proposal to close pilot and replace with rebate program included in this TEP.
Public Charging Pilot	Commission Approved, Order Date July 17, 2019; Extension of Pilot Term Approved by Commission, Order Date December 5, 2022.	E002/M-18-643	In Operation. Closed to new enrollment outside of customers in pipeline. Proposal to close pilot and replace with rebate program included in this TEP.
Residential EV Subscription Service Pilot	Commission Approved, Order Date October 7, 2019 Modification Approved by Commission, September 28, 2020	E002/M-19-186	Pilot complete and replaced by permanent subscription option in EVAAH program.
EV Home Service ((Known as EVAAH);	Commission Approved, Order Date	E002/M-19-559	Launched in December 2020. In

⁸ Provided in Compliance with Order Point F.1 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

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Program	Status	Docket Number	Implementation Status
Successor and replacement program for Residential EV Service Pilot)	October 6, 2020		Operation.
General TOU Service Tariff Pilot	Commission Approved, Order Dates July 16, 2021, February 1, 2023, and June 9, 2023	E002/M-20-86	Pilot with two rate options approved by Commission launched in October 2023. Pilot includes special considerations to encourage and allow participation of EV charging providers.
MDU EV Service Pilot	Commission Approved, Order Date July 2, 2021 Modification Approved by Commission, September 21, 2023	E002/M-20-711	In Operation. Closed to new enrollment – budget fully allocated. Proposal to close pilot and replace with rebate program included in this TEP.
Financial Recovery Proposal EV-related offerings (EV Rebates, Public Fast-Charging Network, Xcel Energy Fleet Electrification acceleration)	Public Fast-Charging Network Approved by Commission, Order Date April 27, 2022	E002/M-20-745	Construction of six fast charging locations is complete. Company fleet electrification was addressed in the Company's rate case (Docket No. E002/GR-21-630).
Load Flexibility Pilot Programs EV-related projects (EV Optimize Your Charge Pilot, V2G Demonstration)	Commission Approved, Order Date March 15, 2022	E002/M-21-101	EV Optimization Pilot (referred to as Optimize Your Charge) is currently in operation. V2G demonstrations not yet in development.
EV Home Wiring Measure (EV Charging and Wiring Rebate) in the 2024-2026 ECO Triennial Plan	Department of Commerce Approved, Order Date November 18, 2024	E,G002/CIP-23-92	Launched in March 2025. In Operation.

Table 2 below is a summary of the number of participants and total energy consumed for our EV programs that are in operation.

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Table 2⁹
EV-related Pilots and Programs Participation and Energy Usage Summary¹⁰

EV Program	Number of Participants¹¹	Total Energy Consumed (MWh)	Peak Demand (MW)
Residential EV Service Rate	1,650	6,141	N/A
EVA AH – Pay-As-You-Go	4,479	13,531	53.75
EVA AH – Subscription Service	135	514	1.62
EVA AH – Voluntary Charger Service	64	N/A	N/A
Fleet EV Service Pilot	23	402	3.7
Public Charging Pilot	137	1,193	13.8
MDU Pilot	23	43	3.6
Residential EV Optimize Your Charge Pilot	970	N/A	N/A
Commercial EV Optimize Your Charge Pilot	11	N/A	N/A

We provided greater information about all our ongoing EV efforts in our 2025 EV Annual Report.¹²

2. *Spending on Transportation Electrification*

Table 3 provides a summary of the Company's expenditures on its transportation electrification portfolio and efforts for the previous five years. The Company notes that it has included forecasted costs for the remaining months of 2025.

⁹ Provided in Compliance with Order Point A.34 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

¹⁰ Data from our 2025 EV Annual Report submitted May 30, 2025 in Docket No. E002/M-15-111. Data as of March 31, 2025. It reflects the information available to us at the time of our EV Annual Report, with the acknowledgement that some data for our Commercial EV Pilots may be incomplete.

¹¹ Represents actively participating customers. For the Commercial EV Pilots (Fleet, Public, and MDU), that only includes sites that are in-service.

¹² Filed May 30, 2025 in Docket No. E002/M-15-111, available here:

<https://www.edockets.state.mn.us/documents/%7B40162397-0000-C916-BD13-08B80F29DCC3%7D/download?contentSequence=0&rowIndex=1>. Provided in Compliance with Order Point F.9 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

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Table 3¹³
Transportation Electrification Spending: 2021 – 2025
(\$ in Millions)

Budget Category	Capital	O&M	Marketing and Comms.	Other	Total
Comm EVSI	\$17.5	\$4.5	\$0	\$0	\$22.0
Comm. EVSE	\$0.3	\$0	\$0	\$0	\$0.3
Comm. Distribution	\$3.1	\$0	\$0	\$0	\$3.1
O&M & Mrktg Comm.	\$0	\$0	\$5.8	\$0	\$5.8
EVAAH Program Costs	\$3.8	\$0.7	\$0	\$0	\$4.5
Cost of Goods Sold ¹⁴ (Pre-Pay Option)	\$0.02	\$0	\$0	\$0	\$0.02
Total	\$24.7	\$5.2	\$5.8	\$0	\$35.7

3. *Distribution System Upgrades Responsive to Company Program Participation¹⁵*

As a part of our Commercial EV Pilots—Fleet, MDU, and Public Charging—the Company completed necessary distribution system upgrade work to facilitate the installation and commission of charging sites under those pilots. Table 4 below shows the total upgrade costs for active projects by Company program from the inception of each pilot through September 2025.¹⁶ The table also includes the average costs per upgrade. These costs were paid by the Company as participants in the commercial EV pilots are not responsible for system upgrade costs.

¹³ Provided in Compliance with Order Points A.26.i and F.10 of the Commission’s December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

¹⁴ Represents the cost of charging equipment for customers who choose the pre-pay option and paid for the equipment upfront.

¹⁵ Provided in Compliance with Order Point A.35 of the Commission’s December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

¹⁶ We reported Commercial EV Pilot distribution system upgrade costs through September 2023 in our last 2023 TEP.

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Table 4
Distribution System Upgrade Costs
To Date Through September 2025

Program	Total Upgrade Cost	Number of Projects Requiring Upgrades	Average Upgrade Cost Per Project
Fleet	\$372,798	20	\$18,640
MDU	\$298,364	19	\$15,703
Public Charging	\$2,517,355	132	\$19,071

4. *Residential and Managed Charging Options*¹⁷

The Company's current residential offerings help expand access to home charging while making it more affordable for customers and supportive of grid reliability. This portfolio contains programs that support customers at each stage of the electrification journey: preliminary education, installation, and operation. Advisory services are aimed at customers that are considering an EV purchase or home charger installation and are looking for materials and tools to help them understand their options. These are described in greater detail in subsequent sections. The Company's EVAAH and EV Charger and Wiring Rebate programs provide financial and installation assistance for customers installing charging at their residence. Additionally, rate options, such as EVAAH Pay-As-You-Go, Subscription, and Optimize Your Charge (OYC) reduce ongoing charging expenses while optimizing charging behavior in ways that reduce system costs.

Our EVAAH and EV Charger and Wiring Rebate programs are designed to lower financial barriers to L2 charging equipment installations in for residential customers. EVAAH provides installation services to customers at no upfront cost. Customers can bring their own eligible charger or pay a monthly fee to rent a charger through us. Included in the rental fee and agreement is that the Company is responsible for operation and maintenance of the charging stations. Customers enrolled in EVAAH have their EV charging separately metered at the charging station and are billed at the rates defined in the program tariff sheet according to their enrollment selection. These rates promote off-peak charging through lower rates, thus saving customers money who charge their vehicles at times beneficial to the grid. The EV Charger and Wiring Rebate program reduces the upfront cost of charging station installations by providing rebates to customers installing L2 charging in their homes. Increased rebate amounts are offered to income qualified customers as defined in the program requirements. To

¹⁷ Provided in Compliance with Order Points F.2.b, F.3 and F.4 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879 and Order Point 4A of the Commission's August 23, 2023 Order in Docket No. E002/M-22-432.

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qualify for this rebate, customers must opt into an EV rate or our managed charging program, OYC, which provides bill credits to customers who charge during off-peak times. Both programs are currently in operation and report high rates of customer satisfaction.

For customers living in an MDU¹⁸, our MDU Pilot offers EVSI installation services for MDU property owners at no cost along with various options to meet the wide-ranging billing and parking arrangements found at MDU properties. The pilot builds, owns and operates EVSI equipment for customers at no cost while also providing the option for customers to rent charging stations for a flat fee on their bill. This program was fully subscribed between 2021 and 2023 with additional funding proposed to cover customer interest in 2024. Due to implementation complexity and costs, the program has remained closed to new enrollments with the incremental funding approved in 2024 used to complete projects for customers that had expressed interest previously. One of the findings from this pilot is that participation requirements and rate design proposals have not always aligned with customer needs.¹⁹ These challenges and subsequent customer and developer feedback have led to the program remaining closed as the Company has analyzed implementation outcomes and determined a path forward better aligned with customer needs. Pilot findings have been applied to the permanent program proposals outlined in Section III that aim to simplify program operations and expand access to MDU charging installations.

Support for ongoing operations of charging stations is provided through both maintenance and technical support of Company-owned charging stations rented by customers in EVAAH and our MDU pilot. These programs make it cheaper for customers to charge their vehicles off-peak which reduces EV related strain on the distribution and transmission systems. This in turn reduces system upgrade costs from EV's, thus reducing bill impacts for all, not just program participants. Expanding managed charging participation and further shifting EV load away from system peaks, at the generation, transmission and distribution levels, is a primary focus of this TEP. Existing products such as EVAAH and OYC have proven effective at influencing customer behavior, however they are limited in their use cases and potential benefits. With whole-home TOU rates becoming available to Minnesota customers in 2026, a reassessment of program offerings, their relationship to broader rate options and the role these programs play in influencing customer behavior is necessary.

¹⁸ MDU is discussed as a Residential charging option here because the program serves as a residential option for customers living in multi-family housing locations. However, due to the design of the program, it is more like a Commercial program and is discussed as one of our Commercial EV Pilots in other portions of our reporting.

¹⁹ See the Commercial EV Pilot Evaluation Report, included as Attachment F to our 2025 EV Annual Report filed May 30, 2025 in Docket No. E002/M-15-111, et. al.

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OYC is considered a passive managed charging program. Incentives are provided to customers solely based on their behavior; the Company does not administer any active control of customer charging. Customers are given options of off-peak windows when they can charge during and receive an incentive. The windows are typically between midnight and 9AM; program staff collecting charging data from customer chargers to validate that charging occurred in those windows. Customers that meet the minimum charging requirements receive an annual bill credit. Costs associated with collecting and analyzing this data are high, resulting in implementation costs that exceed system costs avoided by the program. As TOU rates become more prevalent, both at the whole-home level and through EVAAH, OYC's value diminishes as more low-touch and cost-effective options for achieving the same customer behavior (charging away from bulk system peaks) become available. Because of the shifting rate options and high data costs associated with the program, the Company is proposing to sunset OYC as a passive managed charging program.

The Company is proposing instead an active managed charging program, Charging Perks, which will be described in detail in Section III. Active managed charging solutions face similar cost and data challenges to OYC; however, they provide additional benefits above and beyond influencing customers to charge away from bulk-system peaks. Active managed charging allows for direct dispatching of managed charging events and more sophisticated dispatching strategies to shift customer charging loads and provide additional benefits to the system. The Company is currently operating Charging Perks in its Colorado service territory and is piloting various use cases with plans to apply those learnings in Minnesota.

With TOU options available to shift load away from bulk system peaks²⁰ and active managed charging able to utilize existing data infrastructure of passive programs while providing additional benefits, our recommendation is to no longer offer OYC and transition existing customers over to the Charging Perks program proposed in this plan. In addition to this transition, we are proposing to expand the EV Charger and Wiring Rebate eligibility to customers that opt into a whole home TOU rate or time of day rate in addition to customers that opt into a managed charging program. We will provide more information about this transition plan in Section III of the TEP.

²⁰ See Attachment D.

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5. *Fleet Electrification*²¹

The Company has supported fleet electrification through its Fleet EV Service Pilot which has been in market since 2019. Similar to the MDU Pilot described above, the Company provides EVSI design, procurement and installation services for fleet customers at no cost. Level 2 charging station rentals are also made available to interested customers. This program was fully subscribed at the time of our last TEP. Additional funds have been approved that are being used to complete projects for customers that expressed interest but did not execute a customer agreement.²² Due to the same cost and implementation complexities cited in the MDU program description above, the Fleet Pilot has not been reopened to new participants.

Through implementation of our Fleet Services Pilot as well as similar programs offered in other Xcel Energy jurisdictions, the Company has determined that any future fleet offerings will require an increase in upfront advisory services as well as more flexible installation and financial support. The consolidated permanent program described later in this plan is designed to expand program access and advisory options in ways that align with pilot findings and best practices elsewhere. These details can be found in subsequent sections of this plan.

6. *Public Charging*²³

The Company supports public charging buildouts through two different customer programs. Our Public Charging Pilot operates in the same manner as the Fleet and MDU Pilots describe above with no-cost EVSI services and charger rental options. This program provides support to both L2 and direct current fast-charging (DCFC) installations for public use.

The Public Charging Pilot proved valuable for customers with limited resources and knowledge regarding the charging installation process, however we found that the ownership structure and contracting processes made participation difficult for larger public charging developers. As we discuss in more detail later in this plan, our Commercial EV Infrastructure Rebate and Advisory Program is aimed at expanding support to a broader range of installations, attracting investment from national public

²¹ Provided in Compliance with Order Point F.2.d of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

²² Order Approving Xcel Energy's 2023 Transportation Electrification Plan with Modifications, Docket No. E-002/M-23-452 (May 9, 2024)

²³ Provided in Compliance with Order Point F.2.a of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

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charging developers in our service territory, and ultimately expanding charging access to our customers.

a. Company-owned DCFC Charging Stations

In addition to our Public Charging Pilot, the Company has built various Company-Owned public fast charging sites in rural locations across our service territory aimed at serving locations unlikely to receive private sector investment in the near term while providing valuable operational data and learnings. Currently we have six locations undergoing testing. These sites are currently in rigorous live testing to ensure suitable uptime. The sites are valuable resources for data regarding utilization in these areas and the operational costs and challenges associated with public DCFC operations. Table 5 below provides a list of Company-owned DCFC sites currently in operation.

Table 5
Company-owned DCFC Site Locations

Site Address	DCFC Ports	Power Output per Port (kW)
122 8th St., Albany	2	90/180kW
3010 Adams St, Mankato	2	90/180kW
605 Highway 212, Montevideo	2	90/180kW
110 E Main St., Belle Plaine	2	90/180kW
1511 Main St., Red Wing	2	90/180kW
970 Diekmann Dr., Paynesville	2	90/180kW

The Company has prioritized reliability in testing procedures as work commences to establish these sites on a network. Testing started with our own EV fleet during the charger activation process. Any issues that were found with these initial testing sessions were reported back to the equipment manufacturer Asea Brown Boveri and resulted in warranty repairs. Several power modules were found to be faulty during these testing sessions, among other issues like door latches, signage issues, and dull screens.

Once reliability goals are attained and a network is installed, the Company intends to launch these sites to customers.

The chargers were originally purchased from Shell Recharge and were intended to be activated on their network. That network has since dissolved. Through a testing process, the Company has determined that the best customer experience and

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monitoring capabilities are currently provided by EVConnect and plan to commission the remainder of Minnesota chargers on their network through the end of 2025.

The Company-Owned DCFC Charging stations will provide public fast charging services to communities without traditional access to public DCFC stations. These stations will be valuable sources of data regarding the operations, costs and uptime challenges facing DCFC operators today. The Company plans to continue operations of these charging stations throughout the course of this TEP and beyond to continue these data collection activities. This data can help inform future program requirements aimed at expanding public charging access in Minnesota. Given the educational benefits these stations provide, the Company does not currently plan to divest from these stations in the near term but will continue to assess the value, costs and viability of operating these stations in subsequent TEPs.²⁴

7. *Education and Awareness (Advisory Services)*²⁵

The Company operates EV education and awareness initiatives to inform customers and the public about the benefits of owning an EV and how our rates and programs can facilitate their transition to an EV. These initiatives, known as the Company's advisory services, are available via multiple channels, including sponsored public events, digital media, online tools, and offerings that help dealers and other trade allies, address barriers to selling EVs and installing charging infrastructure.

Going forward, as part of the Company's ongoing efforts to enhance the effectiveness of its advisory services, comprehensive customer research has been conducted. The Company worked with Burke, Inc. (Burke) to gather customer research. The studies completed by Burke identified distinct customer segments based on attitudes, behaviors, and demographics with specific needs related to education and implementation of EV charging solutions. While the existing customer awareness and outreach mechanisms (media, search, digital, events, and trade channels) for advisory services will remain in place, the strategic emphasis of residential advisory offerings will have a greater focus on supporting customers in planning and implementing EV charging and will move away from the communication and tools intended to educate on the vehicles themselves. The information provided to the Company by Burke is provided as Attachment B.

²⁴ Provided in Compliance with Order Point F.5 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

²⁵ Provided in Compliance with Order Point F.7 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

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b. Education and Awareness Activities

Activities that include digital outreach, search engine optimization and online media campaigns serve as primary engagement drivers, directing customers to the Company's EV website. This site hosts educational content, rebate and EV program information, and interactive online tools designed to assist customers.

In addition to digital tools, the Company has sponsored community-based events to further promote EV charging awareness. Notable examples include participation in the Minnesota State Fair and the Twin Cities Auto Show, which provide high-visibility platforms for customer interaction and education.

The Company has also collaborated with trade allies, with a particular focus on the automotive dealer network, to extend the reach of its EV initiatives and support broader market transformation. These partnerships have served to help address barriers to EV adoption and ensure consistent messaging across customer touchpoints.

With the automotive sector, including manufacturers, dealerships, and affiliated providers, having addressed prior consumer education gaps, and based on the proprietary customer research, previously mentioned, indicating that core groups of emerging EV adopters now look to the Company solely for charging-related guidance, the Company will transition away from broader vehicle education and webtools. Going forward, the Company will shift our educational focus to charging, specifically, helping our customers plan and install EV charging that is best for them. More details of these changes will be provided in Section III.

c. EV Advisor Online Tool

The original purpose of the EV Advisor Online Tool was to broadly educate customers about electric vehicles. However, recent customer research shows that our customers typically turn to auto industry sources – not their electric utility – for this type of information. Based on these insights, we propose to replace the EV Advisor Online Tool with a new digital experience on our website focused exclusively on EV charging, including updated online tools to support a customer's EV charging education and installation journey.

The current EV Advisor Online Tool includes the following:

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- Various new and pre-owned EVs available in the market and options to compare models;
- Environmental impacts of EVs;
- Costs and benefits of EVs, including fuel and maintenance costs;
- Auto Dealers who are knowledgeable about EVs and current inventory at select dealer locations;
- Rate and managed charging program recommendations, including information encouraging customers to charge during off-peak periods.

As noted, the EV automotive industry has rapidly filled the vehicle education gap that existed and through our customer research we have learned that the Company no longer needs to provide the above tools. Through new digital methods, the Company will continue to educate our customers focusing on customer charging rather than vehicle details. Our plan to reshape our online EV tools to better focus on EV charging are detailed in the Residential Advisory proposal section of this TEP.

C. Transportation Electrification Efforts in Other Jurisdictions²⁶

In addition to its transportation electrification efforts in Minnesota, Xcel Energy has implemented Transportation Electrification Plans in its other jurisdictions through its other Operating Companies. We have received approval of EV programs in Colorado for Public Service Company of Colorado (Public Service), in Wisconsin for Northern States Power Company – Wisconsin (NSPW), and in New Mexico for Southwestern Public Service Company (SPS).

Most notably, Public Service has seen rapid expansion of its programs in Colorado resulting in positive outcomes for our customers. Colorado's EV market is more mature than Minnesota's with current EV penetration in Public Service's Colorado service territory roughly three times that of our service in Minnesota according to vehicle registration data. As a result, Public Service's TEP efforts in Colorado are larger than the TEP efforts in Minnesota, Wisconsin, and New Mexico to address a more developed market. Implementation successes and challenges and stakeholder feedback in Public Service have informed our clean transportation strategy for Minnesota described in this plan. Best practices from PSCo's offerings have been applied to the solutions proposed here with decisions around what to offer and how to support the EV market based on the Company's actual program data and customer outcomes.

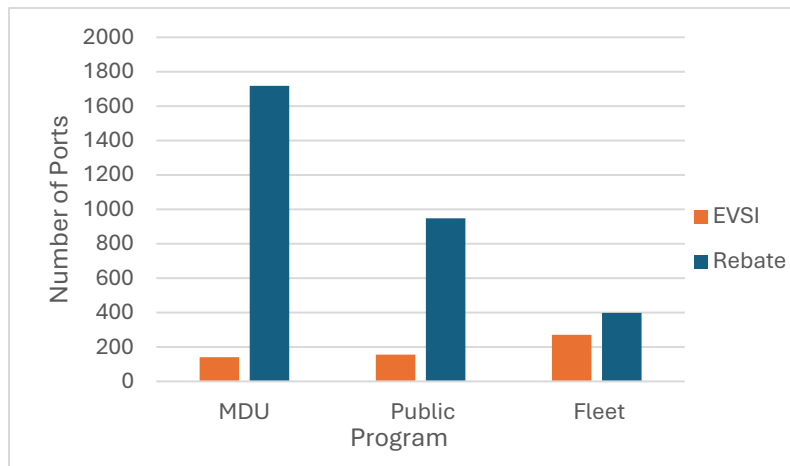
²⁶ Provided in Compliance with Order Point F.8 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

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For example, our Public Service portfolio has recently transitioned from a Company-owned and operated EVSI model to a rebate program, and they have also implemented an active managed charging program; both types of programs are proposed in this TEP for Minnesota.

Public Service has offered EVSI services to customers in its Colorado service territory since 2021. In their most recent TEP approved by the Colorado Public Utilities Commission (CPUC) in 2024, Public Service was ordered to transition from the utility-built and owned EVSI model to a program that provides rebates for EVSI and electric vehicle supply equipment (EVSE).²⁷ Their rebate program in Colorado was launched in early 2025 and has significantly expanded Public Service’s ability to support charging installations in Colorado. Annual installed charging ports through the program has increased by more than five times with the biggest increases seen in the MDU and public fast charging sectors as shown below in Figures 1 and 2. In conjunction with these participation increases, program cost per port have dropped substantially.

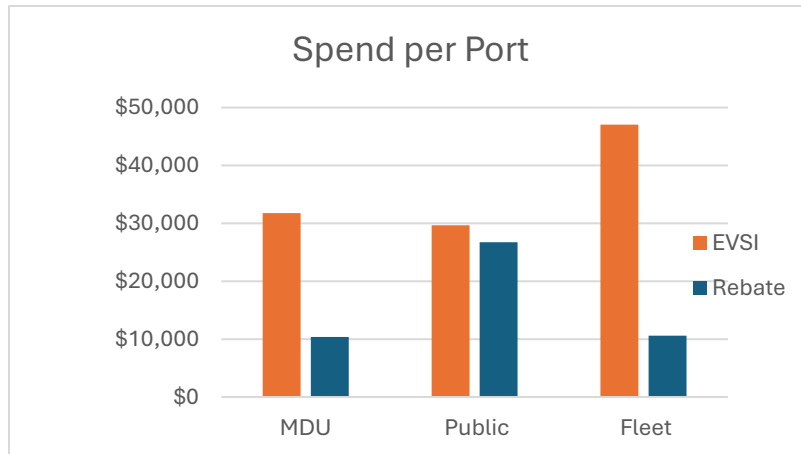
Figure 1
Public Service Annual Ports Installed in Colorado



²⁷ Commission Decision 2024-2026 Transportation Electrification Plan, PROCEEDING NO. 23A-0242E (April 10, 2024)

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**Figure 2
Public Service Cost per Installed Port in Colorado**



The participation increases and cost reductions Public Service saw in Colorado can largely be attributed to the transition away from utility-owned and installed equipment to providing equipment rebates. Utility ownership is a good fit for many first-time EV installers that are not familiar with the procurement and installation process. However, utility ownership and design requirements associated with that ownership make it difficult to serve larger developers that need to be able to meet a broader range of customer needs.

An example of the limitations of utility ownership within this context is the intersection with Charging as a Service (CaaS) providers who provide a packaged charging solution customized to a customer's needs which are popular in multifamily settings. Utility ownership and design requirements preclude CaaS providers from receiving financial support from our current EVSI programs due to contracting and maintenance requirements. Division of equipment ownership does not align with their business model making participation in any program leveraging utility-owned equipment infeasible. These programs also tend to be somewhat rigid as they attempt to serve the broad range of solutions that MDU properties require which are well suited for CaaS solutions.

Another example of such limitations within this context is the tension with public fast charging developers and owners. These entities often require full ownership and control of the equipment on site to coordinate maintenance and meet market uptime requirements. Public Service's rebate program in Colorado has proven to support flexible solutions for charging developers who are generally able to bring charging to market faster than a utility due to more entrenched supply chains and design and installation operations. Rebates eliminate procurement and warehousing costs borne

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by Public Service for owned and operated projects and ultimately reduce project costs overall. Based on the positive transition experienced by Public Service, we developed the Commercial EV Infrastructure Rebate and Advisory Program, which we discuss in this TEP.

Another program Public Service currently offers in Colorado that we have developed for Minnesota and discuss in this TEP is Charging Perks, an active managed charging program. Public Service proposed Charging Perks as a pilot in 2021 and has steadily increased in participation and sophistication over the last four years.

In Public Service's most recent TEP, approved in 2024, the CPUC approved both Charging Perks as a permanent program along with OYC which has been in market for a similar amount of time and has a much higher participation rate. Efforts are currently underway to transition Colorado OYC customers to Charging Perks. Public Service intends to sunset OYC at the end of the current plan, as TOU rates become more prevalent in Public Service's Colorado service territory. Public Service has also recently begun diversifying its charging control strategies used for Charging Perks by implementing distribution optimization with successful initial results. Under the program, charging has historically been shifted to align with renewable generation with the goal of reducing curtailments. By expanding control strategies to include peak management on the distribution system, Public Service hopes to increase the cost effectiveness of managed charging as a whole and align program costs with real grid benefits. Learnings from Public Service's efforts in Colorado have been applied to our EV efforts in Minnesota discussed in this TEP and findings and best practices will continue to be shared across jurisdictions.

Xcel Energy continues to pursue EV programs in other jurisdictions as well, with commercial offerings for public charging in Wisconsin and residential, commercial, and advisory services in New Mexico. The EV market and resulting TEP portfolios are at various stages of maturity, but all are aligned with the strategies and best practices learned in our PSCo programs and proposed in this plan.

Table 6 below summarizes the approved EV charging infrastructure investments in other jurisdictions, along with the amount of investment we have requested but is not yet approved.

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Table 6
Cumulative EV Charging Infrastructure Investment by State
(\$ in Millions)

State	Approved Investment	Pending Approval
Colorado	\$372	\$0
Wisconsin	\$9	\$0
New Mexico	\$31	\$0

Attachment C provides a detailed list of relevant filings in other jurisdictions with a list of the included pilots and programs. The attachment also includes links to the filings or instructions of how to find the filings on the relevant utility commission website.

II. ONGOING EV DEVELOPMENTS

The Company continues to seek out opportunities to improve its clean transportation programming and respond to shifting customer needs and market conditions. This requires continuous assessment of the broader EV and EV charging market alongside evaluation of the electric utility's role within this market. This section outlines the Company's ongoing development of EV charging programs, articulates the objectives of its clean transportation portfolio, and provides information on how current and future initiatives are designed to meet customer EV charging needs while advancing portfolio goals. It also includes a summary of proposed new programs and how these initiatives are expected to enhance the Company's ability to align with evolving customer expectations.

The purpose of the Company's Clean Transportation portfolio and the EV programs discussed within this TEP is to expand charging access in our service territory and assist customers in overcoming charging barriers to EV adoption at various points in the electrification journey. This requires a firm understanding of what these barriers are and how utility clean transportation programs are positioned to help customers overcome these barriers.

The experience of driving an EV is broadly similar to driving an internal combustion engine (ICE) vehicle, with the primary difference being the fueling experience. As the fuel provider for all EVs in our service territory, it is our responsibility to provide reliable and affordable electricity to all EV drivers and to help them overcome the education, knowledge, and implementation challenges this change can cause. The EV programs discussed in this plan are intended to help customers access this fuel by helping customers across the EV spectrum develop a charging plan. Understanding

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how, where, and when they will charge their vehicle is the primary barrier customers face when transitioning to an EV.²⁸ The Company defines the goals of this plan and the clean transportation portfolio more broadly as the following:

1. Improve customers' understanding of and access to EV charging
2. Leverage customer programs to improve system planning efforts around EV's to allow for more efficient grid planning and utilization
3. Positively impact customer affordability through clean transportation programming

Throughout this section, we will discuss how the EV programs discussed in this TEP will help accomplish these goals based on market conditions, customer needs, and alignment with broader Company operations.

A. Residential EV Charging Programs

The current residential portfolio aims to achieve the three portfolio goals laid out above by supporting EV drivers at each point in the transition to an EV and helping drivers identify and execute a charging plan. The Company's Clean Transportation programming tends to fall within three general buckets aimed at different points of a customer's EV transition.

- Advisory support and educational materials for customers considering a transition to an EV
- Programs that offer financial and installation support for customers that have purchased an EV and
- Managed charging and rate options to reduce charging costs and maintain grid reliability for EV drivers

Advisory Services complement existing installation support programs such as EVAAH and the EV Charger and Wiring Rebate which in turn promote managed charging or rate solutions to customers. While the portfolio today has proven to accomplish these goals cost effectively, the Company has identified ways to adjust our offerings and optimize around our strategy of helping customers create and execute charging plans.

The primary change to our residential portfolio being proposed here is to the advisory services portion of our Clean Transportation programming. Previous advisory tools and services were focused on program education and awareness. Existing customer

²⁸ Xcel Energy Home Charging Analysis - Social IQ Results 2024-12-06.pdf (December 2024), Burke, Inc.

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programs are a great tool for reducing barriers to EV adoption and charging equipment installations; however, we recognize that these programs, and utility programs in general, are not a fit for all customers. In alignment with the portfolio's emphasis on leveraging EVs to enhance affordability for all customers, particularly those charging at home during off-peak hours, the Company proposes a targeted advisory experience. This initiative is designed to engage customers by presenting a comprehensive suite of charging solutions. These solutions will include options both within and beyond existing Company programs and will be delivered through a research-informed educational framework. This framework will walk customers through an educational progression to help them identify the charging method that will work best for them, based on their individual situation and priorities. In other words, it will help them build a customized charging plan. Once their plan is built, solutions to barriers will be offered.

In addition to realigning our Advisory Services to better connect customers with charging solutions, we are proposing to replace our existing passive managed charging program with our active managed charging program, Charging Perks, which is discussed in more detail in Section III.C below. This will increase the cost-effectiveness of our portfolio by better aligning charging behaviors with system needs.

While Charging Perks can provide multiple system benefits, both bulk system and distribution system benefits depending on customer and vehicle characteristics, there is still a need to promote passive managed charging if EV charging load is to be cost-effectively managed. A benefit of passive managed charging is that it can occur through low-touch, and therefore low-cost, methods that do not require program enrollments or expensive and cumbersome data transfers between customers and the Company. Residential TOU rates are an effective tool to incentivize customers to avoid bulk-system peaks.

The Company's managed charging strategy consists of leveraging TOU rates and other rate-based products in conjunction with Charging Perks to alleviate potential grid constraints caused by EVs and use them as a tool to maintain affordability for all customers. With a Residential TOU option becoming available in Minnesota for customers starting in 2026, we see an opportunity to leverage existing EV programming to increase the number of customers, and specifically EV owners, that take advantage of these rate products to minimize their charging costs and align charging behaviors with system needs.

Our EV Charger and Wiring Rebate currently requires customers to opt into our OYC or EVAAH programs to be eligible for the rebate. In addition to the proposal in this plan to replace OYC with Charging Perks, we would also like to expand EV

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Charger and Wiring Rebate eligibility to include TOU rate options. This proposal would broaden the requirements to allow customers to either opt into a TOU rate or enroll in Charging Perks. By adjusting this requirement, the program better aligns with portfolio goals by expanding the reach of financial support available through the EV Charger and Wiring Rebate to all customers purchasing an EV and installing a Level 2 charger (as not all vehicle makes and models are compatible with OYC or Charging Perks) while continuing to promote charging behavior that is beneficial to the grid.

For MDU residents, we plan to leverage findings from our MDU Pilot to expand access to financial support and advisory services by consolidating our EVSI pilots into single Commercial EV Infrastructure Rebate and Advisory Program.²⁹ We are proposing to simplify the process via a rebate, allowing developers with solutions tailored to the unique needs of MDU facilities to manage design, procurement and installation activities.

The MDU Pilot proved effective for specific MDU use cases, however the nature of utility-owned infrastructure necessitated specific design requirements, complex customer agreements around maintenance responsibilities and intricate billing structures that made it difficult for many MDU properties to participate. MDU sites vary dramatically in size, parking layouts and metering configurations and therefore require flexible, agile solutions.

Developers that specialize in MDU EV charging installations can provide these flexible solutions, often through CaaS business models that provide a fully packaged, turnkey solution to customers where the developer owns, operates and bills the customer for the service. This CaaS model is incompatible with the MDU Pilot, since the pilot is premised on Company-ownership of equipment and billing relationships.

The rebate model being proposed will allow CaaS providers to accept a rebate on a customer's behalf and pass the monetary benefits through to the customer. By consolidating our pilots into a single rebate program, we are proposing to offer similar levels of financial and advisory support available through our existing MDU pilot but doing so in a way that partners with market actors that specialize in meeting the needs of a unique and diverse customer base. A transition to a rebate program allows us to do this at significantly lower costs. Procurement, design, installation and maintenance

²⁹ Compliance-Annual Report ELECTRIC VEHICLE (EV) CHARGING TARIFFS, PROGRAMS, AND PILOTS DOCKET NOS. E002/M-15-111, E002/M-17-817, E002/M-18-643, E002/M19-186, E002/M-19-559, E002/M-20-711, E002/M-20-745, E002/M-21-101, Attachment F: Commercial Pilot Evaluation Report (May 30, 2025)

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costs sit with the developers who execute these services, further aligning our programs with portfolio goals.

Additionally, given the importance of MDU charging availability we are proposing to offer a rebate for EVSE installed at MDU facilities, providing further financial support for MDU sites specifically. As noted earlier in this plan, this shift from a company-owned and operated program to a consolidated rebate model has led to a 6x increase in planned MDU installations in our Colorado service territory at one-third of the cost. More details on the design and implementation plans for this program can be found in Section III.A.

1. *Cost-effectiveness of Existing Residential Programs*³⁰

Revenues and costs for EVAAH can be found in our most recent annual report. Costs currently exceed revenues, but we anticipate this gap will close over time as charging and rental revenues continue to accumulate for existing participants. Tariff adjustments are proposed later in this plan to better align program charges with operating costs.

The Company has also included cost benefit analysis (CBA) for our OYC program, Attachment D. The CBA uses the same framework for which the Company reviews other customer programs to demonstrate the relationship between system, participant and ratepayer benefits and program costs in an established and broadly understood framework.³¹ The CBA shows that program costs outweigh benefits by a significant margin. This analysis paired with the availability of more cost-effective methods of influencing customer behavior have informed the decision to sunset OYC and replace it with Charging Perks.

2. *Potential Optional Subscription Service Tier*³²

The Company's Residential Subscription service was launched as a permanent option under the EV Accelerate At Home program in November 2024. Customers receive all the services of EVAAH, but instead of a three-part TOU rate, they are charged a straightforward monthly subscription fee that makes the cost of charging an EV easy to understand and consistent from month to month. As transportation electrification

³⁰ Provided in Compliance with Order Point F.6 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

³¹ Decision, *In the Matter of 2024-2026 CIP Cost-Effectiveness Methodologies for Electric and Gas Investor-Owned Utilities*, Department of Commerce, March 31, 2023

³² Provided in Compliance with Order Point 21.i of the Commission's May 9, 2024 Order in Docket No. E002/M-23-452.

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continues to expand, particularly in high-demand sectors such as ridesharing, the Company recognizes that additional tiers of service in a subscription model may be desired to accommodate different use cases. Customers may also desire to charge their vehicles more per month.

However, the Company maintains that a single-tier subscription model currently offers the most practical and customer-friendly approach for this program. This structure provides multiple benefits, including design simplicity and reduced customer confusion. The primary benefit of the subscription option is that it allows customers to charge off-peak for a preset monthly fee, encouraging off-peak charging behavior while offering predictability in monthly charging costs. A unified offering ensures that all customers understand the value proposition and can easily engage with the program. The customer enrollment process for our residential EV programs can be complex, and the single-tier subscription model also helps provide product simplicity, leading to a clear customer decision process. The Company has not received any feedback from our customers indicating that they would like an additional higher tier. If customers desire more control of their charging options, they can switch to the EVAAH Pay-As-You-Go option.

3. *Existing Residential EV Charging Rates and Level 1 Charging*

As a part of approving our upcoming Residential Time of Use (TOU) Rate, the Commission Ordered:

*The Company must provide an analysis of, and any recommended changes to, its existing residential electric vehicle charging rates to accommodate longer off-peak time periods that allow for Level 1 charging and the ability to stagger the start time of electric vehicle charging in its Transportation Electrification Plan due November 1, 2025.*³³

Our EV programs, which encourage and incentivize off-peak charging, are designed with customers using L2 charging in mind. They are optimized to allow customers with that level of charging to meet their daily charging needs during lower-cost overnight hours. Our EVAAH program offerings, which use the three-period TOU rates as the basis for their pricing, have shown to be extremely popular with rapid growth in participation. We do not believe there is a current need to change our EV program tariffs to extend the off-peak periods of our EV programs, and in fact extending the off-peak periods may come with unintended costs, discussed in more detail below. Customers also have the option to participate in our whole home two-

³³ See ORDER APPROVING REVISED OPT-IN PROPOSAL AND SETTING REPORTING REQUIREMENTS (May 15, 2025), Order Point 9, Docket No. E002/M-23-524.

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period residential service rate.³⁴ This gives customers with only Level 1 (L1) charging capability a larger off-peak window of 12 hours compared to the six-hour off-peak window associated with the three-period TOU service. An additional benefit of this service is that it gives residential customers more options to manage their bill by providing the incentive to move their household load to the off-peak period as well.

In terms of unintended costs of changing off-peak periods, it is important to note that such changes, especially lengthening the lowest priced off-peak period, cannot be done without changing the overall pricing of the three-period structure. The energy charge pricing for our EVAAH programs, which use the same pricing as our Residential TOU rate, are cost-based and designed to be revenue neutral when compared to a standard residential rate. Extending the off-peak period into what is now the mid-peak or even on-peak periods would result in lower revenues without changes to the pricing. To compensate for the reduction in revenues it is likely that the pricing for the on-peak and mid-peak periods would need to be increased. Or, if we are truly trying to reflect the cost of providing energy service through our TOU rates, the price during the off-peak period itself would likely have to increase to reflect higher costs in the additional hours added. Pricing changes may limit the overall economic benefit of the program to customers and would potentially create additional costs for those customers interested in the on-peak period as it is currently designed. Having multiple three-period or two-period rate designs could also lead to real customer confusion and administrative and billing inefficiency. In rate design, there is a tradeoff between practicality and precision, and creating an entirely redundant rate structure for what is now less than 10,000 EV customers does not appear to be a practical solution when other options are currently available.

Our EVAAH program offerings as currently designed serve customers in the intended manner that is clearly attractive to EV drivers, but we acknowledge that they may not be a perfect fit for every customer who drives an EV. For those customers who are interested in a longer off-peak period to allow for more L1 charging for just their EV, the Company offers our Residential EV Service tariff.³⁵ This tariff features a two-period time-varying rate, with a twelve-hour off-peak period. While this program does require the installation of a second meter, we believe it is a good alternative for L1 charging users who are interested in longer opportunities for off-peak charging.

Taken together, the Company does not propose any recommended changes to its existing residential electric vehicle charging rates.

³⁴ Rate Codes A02 and A04

³⁵ Rate Code A08

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B. Plans to Facilitate Greater Fleet Electrification³⁶

Over the past six years, the Company's Fleet Services Pilot has provided turnkey installation services through which the Company designs, builds and maintains EVSI equipment on behalf of fleet customers. The pilot has proven successful in reducing the upfront cost of electrification for fleet customers while simplifying design and procurement processes for those who lack experience with EV charging installation. However, findings indicate that the pilot as designed has proven somewhat rigid and complex to implement, leading to restricted participation.³⁷ Based on these findings, the Company is proposing to consolidate the three EVSI pilots implemented through previous TEP's into a single commercial rebate program that provides rebates for EVSI equipment. This consolidated program will be available to any customer that installs a charging station at a commercial premise.

Fleet customers are an extremely diverse set of customers with unique vehicle duty cycles and charging needs. To support this market, programs need to be flexible and agile enough to support everything from small light duty fleets installing L2 charging, to large medium duty fleets managing last mile delivery, to long range trucking operations that can require a megawatt or more of EV charging. Fleet operators need financial support as well as education and Advisory Services to have the investment certainty and understanding of operational costs necessary to make the switch to electric.

The Commercial EV Infrastructure Rebate and Advisory Program discussed in this TEP will provide a simple to understand funding mechanism that can help reduce the significant upfront cost necessary to establish a charging depot for a vehicle fleet and provide cost certainty for fleet operators new to the EV space. The program's rebate structure allows for a wide range of charging solutions and types, allowing it to serve unique customer needs in simplified manner. As was seen in a similar rebate program implemented by Public Service in Colorado program participation by fleet customers increased dramatically under a rebate program model while overall program costs per port installed decreased.

In addition to this financial support, the Company is also proposing to continue its Fleet Electrification Advisory Program (FEAP) as a part of this plan. This program

³⁶ Provided in Compliance with Order Point F.2.d of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

³⁷ Compliance-Annual Report ELECTRIC VEHICLE (EV) CHARGING TARIFFS, PROGRAMS, AND PILOTS DOCKET NOS. E002/M-15-111, E002/M-17-817, E002/M-18-643, E002/M19-186, E002/M-19-559, E002/M-20-711, E002/M-20-745, E002/M-21-101, Attachment F: Commercial Pilot Evaluation Report (May 30, 2025)

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provides charging needs assessment and operational cost estimates for customers considering electrifying their fleet. This program engages customers considering electrification and gives them the information they need to decide on whether electrification is right for them. When paired with the rebate program described above, the program is intended to provide fleet operators with resources to understand their charging needs and create the cost and operational certainty necessary to execute a charging plan that suits their needs.

1. *Heavy-duty EV Charging Options*³⁸

The electrification of heavy-duty vehicles remains a significant challenge facing the industry, but one with solutions on the horizon. Electrifying heavy-duty vehicles require high-power charging solutions that tend to be capital intensive and require extensive planning. Additionally, multiple forms of charging will be necessary to support heavy duty fleet vehicles, specifically long-haul trucking operations. Long-haul trucking will require both depot charging as well as high speed public fast charging to make electrification viable. To support charging solutions that support the wide range of needs that heavy-duty vehicle electrification will require, customer programs need to be flexible and interconnected with system planning efforts to bring this charging online cost effectively while aligning with fleet operators' needs.

The Commercial EV Infrastructure Rebate and Advisory Program discussed in this TEP is designed in a way to support heavy duty charging at both charging depots as well as public fast charging. Under the program, EVSI rebates will be available for any charging type installed at a commercial premise, meaning both depot and public charging installations will be eligible. The program is designed with simplicity and flexibility in mind, allowing customers to utilize the funding for a wide range of needs. In addition to the EVSI rebates, rebates for public fast charging equipment will also be available to support charging installations that can provide in-route charging for heavy duty fleet operations.

The program will also act as a conduit between customers and our system planning organization to provide interconnection advisory to customers and project information to planning groups. By identifying high-powered charging installations earlier in the planning and construction process, the program can help the Company's system planning groups more efficiently allocate capital funds for capacity improvements while giving the program team grid insights to more accurately advise charging developers on interconnection timelines and costs.

³⁸ Provided in Compliance with Order Point 21.e of the Commission's May 9, 2024 Order in Docket Nos. E002/M-23-452.

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C. Public Charging³⁹

Lack of sufficient public charging access is frequently cited by prospective EV drivers as a primary barrier to EV adoption. For two years in a row now, nearly half of consumers who did not consider an EV as their next vehicle cited the lack of public charging as their number one reason for non-consideration⁴⁰. While the vast majority of EV charging currently takes place in the home, a robust public charging network is necessary to enable long distance travel for EV owners, provide charging for EV owners for whom home charging is not viable and ultimately make EV charging plans easier to understand and execute for prospective EV buyers.⁴¹ Public charging availability and construction rates in Minnesota and the Company's service territory are currently lagging more developed markets as well as what is necessary to support vehicle electrification goals set out by the state and the Company.

When public charging is discussed, public fast charging is generally the first use case that comes to mind. This is largely because this end use, usually consisting of clusters of high-powered EV charging stations with outputs more than 100 kW that can charge a vehicle in 30 minutes or less, most closely resembles the fueling experience of a gas station which drivers are most accustomed to today. Public fast charging is critical for long-distance travel where fast and efficient charging is necessary. It is also often necessary for EV owners without access to L2 charging at home or at their workplace. Additionally, public fast charging availability plays an important psychological role for prospective EV as well as existing EV owners, even if home charging is an option, as it allows them to feel confident that they will be able sufficiently charge their vehicles in the case of an emergency. Broad public fast charging availability within our service territory is important to increasing adoption and meeting customer expectations around EV charging.⁴²

Without discounting the importance of public fast charging to the EV transition, the Company also believes it is critical to support other forms of public and commercial charging that can meet charging needs in ways that are more beneficial to the grid and often more affordable and accessible for EV drivers. Driving an EV is broadly the

³⁹ Provided in Compliance with Order Point F.2.a of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

⁴⁰ [2025 U.S. Electric Vehicle Consideration \(EVC\) Study | J.D. Power](#)

⁴¹ National Renewable Energy Laboratory, Incorporating Residential Smart Electric Vehicle Charging in Home Energy Management Systems (Apr. 2021), <https://www.nrel.gov/docs/fy21osti/78540.pdf>.

⁴² Stephan Sommer and Colin Vance 2021 Environ. Res. Lett. 16 064092 "Do more chargers mean more electric cars?"; "Connecticut Statewide Electric Vehicle Charging Program" Program Cycle 1 EM&V Report, Prepared for Eversource Energy and the United Illuminating Company by Demand Side Analytics, LLC and the Cadeo Group, June 2024

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same experience as driving an ICE vehicle, with the major difference being the fueling type and process. A shift from fueling a vehicle with gasoline to fueling a vehicle with electricity requires a fundamental shift in fueling behaviors and costs that prospective EV buyers tend not to intuitively grasp before vehicle ownership or in-depth research.⁴³

Per a report from Plug In America, the role of public fast charging plays in EV ownership is frequently overestimated by car buyers considering an EV. This was based on a recent survey they completed of EV drivers. A copy of those survey results can be found as Attachment E. Charging behaviors of EV owners often diverge from their expectations prior to an EV purchase. Whereas ICE vehicles can be fueled in a matter of minutes at a gas station, fully charging an EV at a public fast charging site can often take a half hour or longer. While replicating the gas station experience is a necessary component of the overall public charging network, the Company believes that it is critical to educate customers about the benefits and opportunities of other charging methods. Applied to public charging, these methods look like public and workplace L2 charging or lower wattage DCFC than can charge vehicles over an hour or longer but may not align with traditional fueling expectations. We believe that these public charging solutions, which are often underrepresented in public discourse and funding opportunities tied to public charging, deserve support and attention as well. Deploying right-sized charging infrastructure in locations that align with driver dwell times at those locations can expand charging access in ways that can reduce strain on the grid and minimize system peaks created by public EV charging.

The Company agrees with the Commission⁴⁴ that the electric utility has a vital role to play in the expansion of public charging in all forms. The Company is uniquely positioned to support entities providing charging access and to support EV drivers at each point of project implementation, including supplying electrical capacity when and where it is most needed; reducing upfront costs through rebates or infrastructure; and supporting education and awareness efforts to help current and prospective EV drivers become confident in charging their EV. The section below will provide an overview of the public charging market as it exists today and how the Company plans to support and expand the public charging network within our service territory through the programs proposed in this plan.

⁴³ Xcel Energy Home Charging Analysis - Social IQ Results 2024-12-06.pdf (Burke, Inc. 2024) See Attachment B

⁴⁴ Order Point 5 of the Commission's February 1, 2019 ORDER MAKING FINDINGS AND REQUIRING FILINGS specifically lays out the Commission's expectations regarding the role of utilities in encouraging EV adoption and integration.

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1. *Public Charging Market Assessment*

The lack of adequate public charging availability across the country is a barrier to EV adoption that has been identified repeatedly by consumers, government entities and utilities.⁴⁵ As EV adoption has accelerated in the Company's service territory in the last five years, public charging availability has increased alongside it with most public charging sites available in our service territory being installed since 2023. However, current charging access and construction trends lag what is necessary to meet electrification goals laid out by the state as well as Company targets for EV adoption. Charging access today also falls well short of more advanced EV markets on an EV's per charging port basis.

As of Q3 2025, there are an estimated 490 public DCFC ports and 1,584 public level 2 ports available within the Company's service territory according to the US Department of Energy's Alternative Fuels Data Center.⁴⁶ This network supports an EV population of 65,689 battery electric vehicles according to registration data and plug-in hybrid vehicles which accounts for 1.8 percent of the total registered vehicles within the Company's service territory. This means that there are currently 134 EV's per public DCFC port and 42 EV's per public L2 port. These metrics lag those in the Public Service's Colorado service territory where EVs make up 4.2 percent of all registered vehicles.

Current public charging availability in our Minnesota service territory lags behind the availability of charging in Colorado, even with much lower rates of vehicle adoption and growth. Construction trends show that growth has accelerated in recent years but is still not on pace to meet state or Company adoption goals. Investment continues to accelerate in both public DCFC and public L2 charging however, there has been a noticeable dip in stations brought online in 2025 compared to recent years. Figures 3 and 4 below show the number of public stations brought online over the last decade in our Minnesota service territory. These figures demonstrate both the explosive growth in charging availability along with the reduction in charging ports energized in 2025.⁴⁷

⁴⁵ [2025 U.S. Electric Vehicle Consideration \(EVC\) Study | J.D. Power](#)

⁴⁶ Alternative Fuels Data Center from the US Department of Energy
<https://afdc.energy.gov/stations#/find/nearest>

⁴⁷ 2025 values included in these tables are extrapolated through the full year based on Q3 2025 data.

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Figure 3
Annual Public DCFC Port Installations

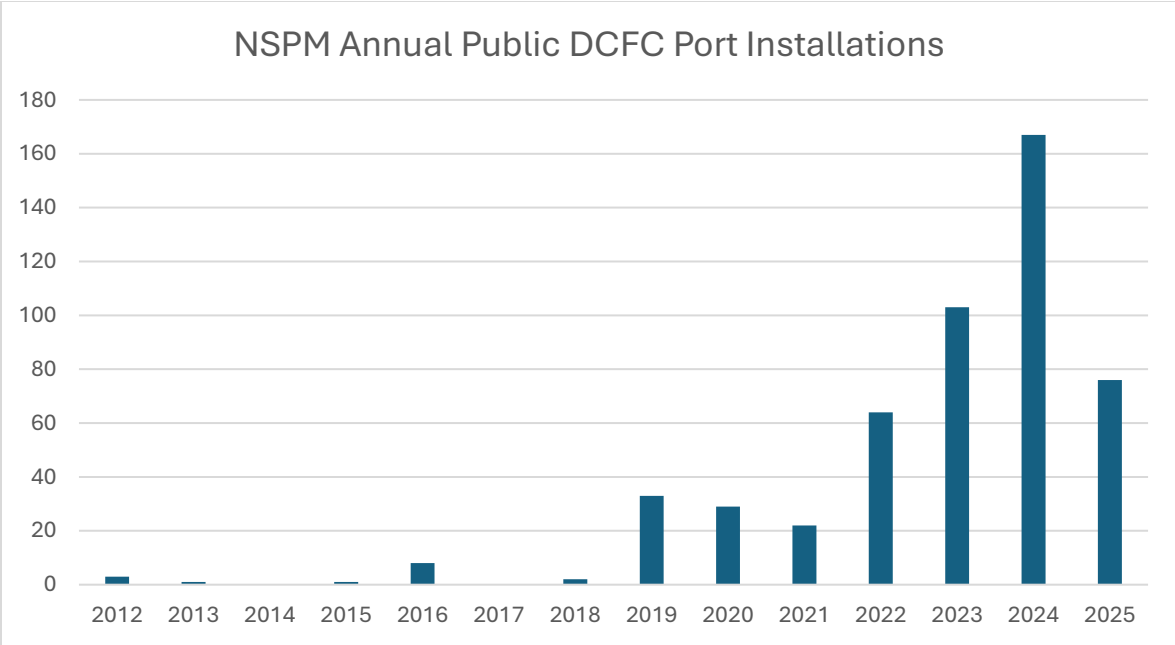
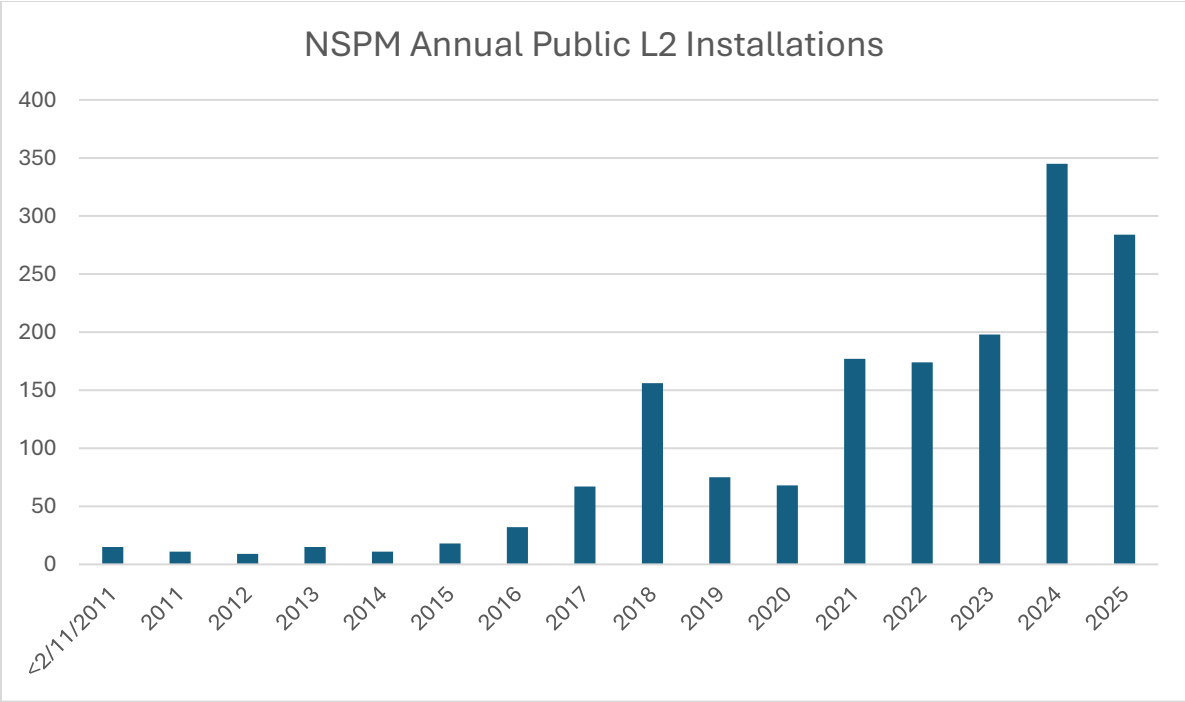


Figure 4
Annual Public Level 2 Installations



Federal and state agencies have provided funding and tools meant to support the public fast charging market in Minnesota that can help close this gap. As part of the

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Infrastructure Investment and Jobs Act signed in 2021, the state of Minnesota was awarded \$68 million of National Electric Vehicle Infrastructure (NEVI) funding to invest in public fast charging sites along routes identified as Alternative Fuels Corridors which include the I-35 and I-94 corridors that run through the Company's service territory. As of its August 2025 report, the Minnesota Department of Transportation (MNDOT) has awarded \$10.8 million across 24 fast charging sites, 10 of which fall within the Company's service territory.⁴⁸ Additional funding rounds are expected to open in 2026 with resulting projects expected to come online in 2027 and 2028.

These projects align well with the oft-cited customer concern of enabling long-distance travel through corridor charging and alleviating range anxiety, however this funding opportunity does not support broader charging solutions needed to meet the diverse charging solutions a comprehensive public charging network will need to support. Even with this influx of federal funds, the public charging market in our service territory is not on pace to meet market demands or goals as defined by both the state and the Company.

The State of Minnesota has set a goal of having one in five vehicles in the state electrified by 2030 while the Company has committed to enabling the charging infrastructure necessary to energize approximately one in five vehicles across its service territory by 2035. As part of the Company's 2023 TEP we provided modeling that showed the level of public charging availability within our service territory that would be necessary to serve 20 percent market penetration. This analysis showed that roughly 5,000 public DCFC ports and 30,000 public L2 ports would be necessary to meet the public charging demand at that level of market penetration. As shown in Figures 5 and 6 below, at the current rate of build out of the public charging network in our Minnesota service territory, these values will be achieved in 2038 for the public DCFC network and 2050 for the public L2 network. The blue lines in the figures show construction trends for both public DCFC and L2 ports according to Alternative Fuels Data Center (AFDC) data referenced above while the red lines demonstrate when those trends are expected to meet state and Company goals.

⁴⁸ *Minnesota Electric Vehicle Infrastructure Plan* from Minnesota Department of Transportation (September 2025) [https://urldefense.com/v3/__https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=38959541_!!NkAB54OY!4vtTrRhR0db_IGs8QIMgfFN1-GPoRHL6_cAzaCPYbDgc1XU1vp3RsoOAPjY-mabZ737ZSTOHwkSzbRLAglu6_9IeYFC9WOD4hxJSTw\\$](https://urldefense.com/v3/__https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=38959541_!!NkAB54OY!4vtTrRhR0db_IGs8QIMgfFN1-GPoRHL6_cAzaCPYbDgc1XU1vp3RsoOAPjY-mabZ737ZSTOHwkSzbRLAglu6_9IeYFC9WOD4hxJSTw$)

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Figure 5
Public DCFC Charging Forecast

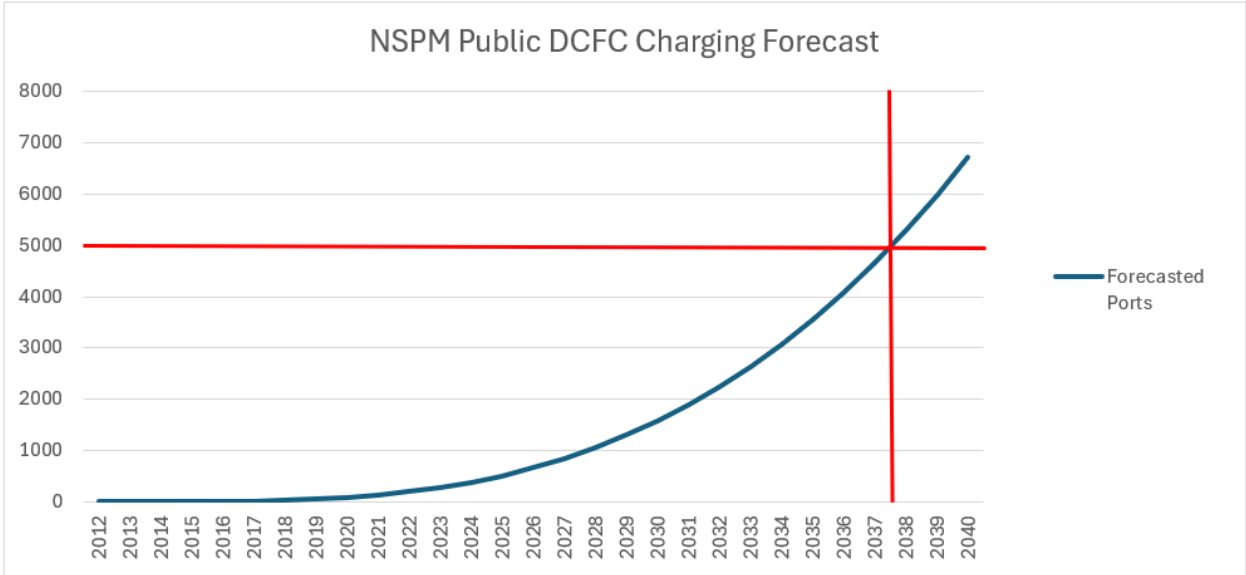
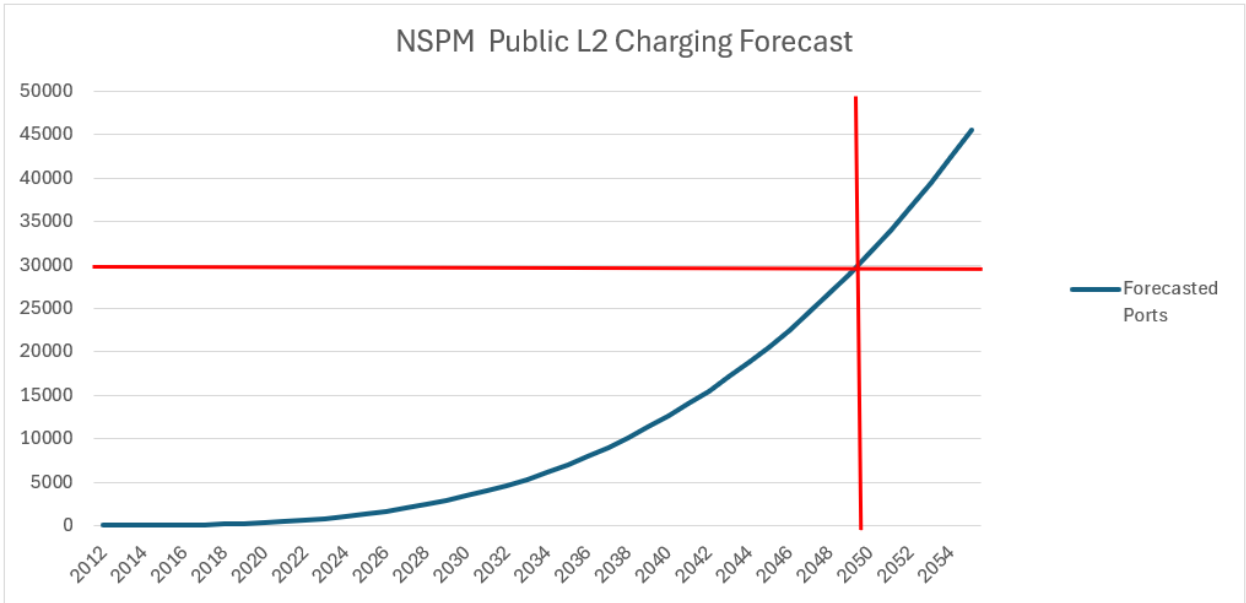


Figure 6
Public L2 Charging Forecast



Given charging availability's role in influencing EV purchasing decisions, the Company believes it is critical to expand access to drive EV adoption and meet electrification goals. The analysis shows that the current rate of public charging construction will need to be accelerated to provide the certainty customers are seeking and meet state and utility vehicle electrification goals.

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2. *Current Public Charging Offerings*

Current Company public charging offerings consist of our Public Charging Pilot and the Company-Owned DCFC Stations. As described earlier in this plan, the Public Charging Pilot involves the Company providing full turn-key design, installation and operation services for EVSI equipment while also providing customers with the option to rent L2 charging stations. Our Company-owned DCFC Stations consists of Company ownership and operation of six public DCFC sites in rural areas within our service territory that are traditionally underserved by the private market.

The Public Charging Pilot has been in market since 2021 and has been responsible for the installation of 174 DCFC ports and 372 L2 ports. Participating customers often had little EV charging installation knowledge with many projects being installed at municipal buildings and auto dealerships. DCFC installations tended to consist of between two and six low wattage charging ports,⁴⁹ often installed at municipal buildings largely intended to charge fleet vehicles while also remaining open to the public. It should be noted that since many of these are technically open to the public but not solely intended for public use, they are likely not reflected in the AFDC data shared above.

The pilot did not attract much investment from large public charging developers and other more publicly accessible locations due to the same program design and complex contracting requirements around division of ownership experienced with our Fleet pilot. The Public Charging pilot proved valuable to customers with little to no experience with EV charging. However, given the charging shortfalls outlined above and the need to accelerate the rate of investment by public charging developers in our service territory, the Company has determined that a transition away from full EVSI support to a program that is more agile, flexible and therefore able to meet the needs of the market is necessary to efficiently expand public charging access.

3. *Plans to Facilitate Greater Public Charging Access*

Findings from the Public Charging Pilot indicate a need to simplify program access and reduce participation barriers for high-visibility and high-value public charging.⁵⁰ This means designing a program that aligns with developer and site host needs. Based on the results of Public Service implementing a similar rebate program in Colorado,

⁴⁹ Less than 100 kW per port

⁵⁰ Compliance-Annual Report ELECTRIC VEHICLE (EV) CHARGING TARIFFS, PROGRAMS, AND PILOTS DOCKET NOS. E002/M-15-111, E002/M-17-817, E002/M-18-643, E002/M19-186, E002/M-19-559, E002/M-20-711, E002/M-20-745, E002/M-21-101, Attachment F: Commercial Pilot Evaluation Report (May 30, 2025)

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we believe that the Commercial EV Infrastructure Rebate and Advisory Program discussed in this TEP will expand access to financial support to a broader range of customers and help to accelerate the buildout of public charging in our service territory.

Offering rebates to public charging entities rather than Company-installed and owned equipment removes cumbersome contracting processes and confusion around operation and maintenance responsibilities. In addition to this benefit, public charging developers are often able to install EVSI and charging equipment faster and at lower cost than a Company-owned program because they have supply chains and procurement processes specialized in charger installations whereas Company-owned EVSI procurement and construction practices must align with our broader utility practices and processes.

Making the rebates assignable to developers or installers who pass the savings through to the charging station owner allows for a similar level of turnkey support to what is offered today through the Public Charging Pilot without any of the contractual complexity. The flat rebate amounts which will be outlined in Section III.A below make for easy to understand funding estimates while also making it easier for developers and site hosts to stack rebates with state and federal funding opportunities. The Company plans to work with MNDOT and other relevant organizations to align application and funding processes and simplify funding access for customers.

Public Service has implemented a similar transition from utility-owned EVSI to a consolidated rebate program in its Colorado service territory. This transition has proven successful in increasing public charging installations in its service territory while decreasing program costs and better aligning utility programs with state and federal funding efforts.

4. *Public Charging Experience in Colorado*

As discussed above, the transition from a utility-owned EVSI program to a consolidated EV infrastructure rebate offering in Public Service's Colorado service territory has proven to significantly expand the reach of the program while reducing costs. The Colorado program provides rebates for EVSI equipment as well as public fast charging EVSE with higher incentives for projects that are built in Disproportionately Impacted Communities (DIC's) or rural districts as defined by the state. This program transition has had similar results on the public charging market to the MDU market described above with significant increases in projects and ports funded coupled with decreases in costs per port. Figure 1 in Section I.C shows the changes in annual throughput between the two program designs.

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The reasons behind this increase in productivity and cost efficiency are the same as those behind the increases in both metrics for fleet and MDU installations described in previous sections. The elimination of extensive contracting requirements and overall simplification of the enrollment process and funding requirements has led to rapid program expansion and significant increases in the rate of planned public charging construction in Public Service's Colorado service territory.

Rebates in the Colorado program are assignable which has expanded solutions to a variety of charger ownership configurations and relationships between developers and site hosts. Public charging solutions have a wide range of configurations. Some developers lease land from a site host while owning and operating the stations while others sell equipment and installation services to a site host who ultimately own and operate the stations. By providing a flexible rebate that can be paid to either the developer or site host, with the station owner and operator ultimately entitled to the financial benefits of the rebate, our program can support all forms of public charging installations.

Given the success of the program in Colorado, the Commercial EV Infrastructure Rebate and Advisory Program proposed here plans to leverage many of the program design elements from the Colorado program that have led to the increase in public charging investment.

5. *Streetside Charging Opportunities*⁵¹

Streetside charging can act as a valuable charging resource for EV drivers that may not have access to in-home charging, particularly MDU residents. Streetside charging in areas of high MDU concentrations can make EV ownership viable and cost-effective for those customers. The Company has successfully supported streetside charging through its support of the EVIE Spot Network in Minnesota. The biggest barrier to these installations is often navigating the right-of-way requirements of local jurisdictions that often vary between communities. Given this complexity, the Company has found it difficult to support these installations at scale under the pilot models currently in market. We believe that a shift to the Commercial EV Infrastructure Rebate and Advisory Program discussed in this TEP will make it easier to support streetside charging through utility programs.

⁵¹ Provided in Compliance with Order Point 21.d of the Commissions May 9, 2024 Order in Docket No. E002/M-23-452.

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Developers and municipalities can work together to define requirements and design criteria that aligns with local needs with our program providing interconnection and financial support. Similar contractual arrangements as described in the public charging sections above can apply to streetside charging as well, which the rebate model is well-positioned to support. In short, as is true across commercial charging end uses, the solutions necessary to build and operate streetside charging vary widely, requiring a flexible, simple funding mechanism that can be applied across all installation and ownership types. We believe that the rebate proposal included in this plan can provide this support.

D. Addressing Flexible Load, Metering Costs, Encouraging Managed Charging, and Optimizing EV Benefits for Grid and System Efficiency⁵²

EVs pose an opportunity in the new environment of load growth facing utilities today. EV load is uniquely flexible when compared to other technologies, such as data centers and heat pumps, which are contributing to this load growth. EVs can store energy and are less prone to seasonal fluctuations in consumption than other high consumption technologies. They are also mobile forms of load, meaning they can charge at various locations and times. Duty cycles of most EVs often align favorably with grid conditions as they are often in use during the day, or peak times on the grid, and idle or charging overnight. Because of these characteristics, EVs can be utilized as a grid resource and help align charging with low cost, low carbon generation and increase utilization of existing grid infrastructure in cost-effective ways that generates charging revenue without requiring grid upgrades, ultimately creating downward pressure on rates.⁵³

An EV consumes roughly the equivalent amount of energy to a residential household today, meaning a customer living in a single-family home will often double their electricity consumption with the purchase of an EV. If utilizing a L2 charger, with peak demands typically between seven and nine kW, residential EV peak load has the potential to drive overall system peaks as well as local distribution peaks, resulting in costly grid infrastructure upgrades. However, by incentivizing EV owners to charge at times that benefit the grid, these upgrades can be avoided or deferred, and EV load can be managed in a way that enables cost effective grid management and increased reliability. The Company currently offers passive managed charging solutions to customers through various rate options and its passive OYC program that

⁵² Provided in Compliance with Order Point F.2.c of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

⁵³ *Making Electricity More Affordable with Electric Vehicles* from Alliance for Transportation Electrification (https://ate-ev.org/wp-content/uploads/2025/07/ATE_Making-Electricity-More-Affordable-with-EVs_FINAL.pdf).

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incentivizes customers for charging during off-peak windows. As stated earlier in this plan, we plan to replace OYC with our active managed charging program Charging Perks while further integrating lower touch and more cost-effective passive options into our product offerings.

Active managed charging is an effective tool that can be used to directly control EV charging to align charging with times of low cost to the grid and do so in ways that are more flexible and attuned to system needs that change in real time. Passive managed charging is an effective tool for providing static, bulk system benefits that incentive customers to avoid charging during system peaks. The added benefit of active managed charging is that it allows for more granular levels of control that can be used to alleviate grid constraints across the system, and specifically at the distribution level, to provide a wider range of grid benefits than is possible with a passive managed solution.

Actively managing charging is a complex undertaking. It requires complex enrollment processes and two-way communication between charging stations or vehicles and the utility. Communicating with vehicles or charging stations requires agreements between the Company and the auto or charger original equipment manufacturer (OEM), oftentimes through an aggregator or software platform provider. The fees associated with this communication access make program cost-effectiveness difficult.

OYC is designed to leverage this data access to track and evaluate charging behaviors of participants and provide an incentive to those that meet the required charging time within their selected off-peak window. This requires extensive data storage and analysis functionalities which add layers of cost in addition to the data access fees charged by the OEMs and aggregators.

The program does not prove cost effective due to the low system value provided by customers relative to program costs. Charging Perks leverages this same data infrastructure to directly control participants' charging schedules. This increased level of control allows us to expand program use cases and benefits that a managed charging program can provide to the grid using the same data infrastructure at similar cost.

By transitioning from OYC to Charging Perks, our managed charging offerings will be better suited to cost effectively align EV charging with periods of low cost and more aligned with portfolio goals. Significant investment is underway to simplify and streamline customer enrollment into Charging Perks which will be discussed in more detail in Section III.C. Ease of enrollment, both for customers and program

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administrators, has proven to be a barrier to program growth. Simplifying this process is critical to maximizing the cost effectiveness of active managed charging.

While we are proposing a transition away from OYC due to its cost and implementation complexities, passive managed charging is still a critical component of our managed charging strategy. We aim to expand passive management through programs described in this TEP. For passive managed charging to serve grid needs at scale in a cost-effective manner, it needs to be able to do so without cumbersome enrollment processes and data management requirements that are commonplace in the current iterations of active managed charging programs.

A common solution is TOU rates. TOU rates are currently offered to customers enrolled in our EVAAH program, which provide cost savings to customers that charge off-peak. Customers must have a charging station compatible with the programs' deductive billing processes to receive TOU rates through the EVAAH program. The Commission recently approved the Company's Residential TOU Rate service, which will be available to all residential customers as an opt-in rate. We expect this rate will be available starting in mid-2026.

Customers who are uninterested in participating in an active managed charging program or who do not have a compatible vehicle make or model to participate in Charging Perks (or OYC which relies on the same contractual relationships with auto and charging OEMs) can take advantage of TOU rates to save money on their charging costs and benefit grid stability. With a focus on primarily charging off-peak customers can save money on TOU rates over charging on standard rates due to the significantly lower energy charge offered during overnight hours.

This approach provides a much more extensive and cost-effective way of influencing customer charging behavior than programmatic passive solutions and complements active managed charging strategies described later in this document. The Company is continuing to work with automobile OEMs, aggregators, and standards organizations to find technological solutions to increase TOU responsiveness of EVs.

While the Company is not proposing any managed charging programs for commercial customers at this time, the commercial programs laid out here are designed in a way to enable customers to utilize charge management for bill savings. The Commercial EV Infrastructure Rebate and Advisory Program discussed in this TEP allows for diverse charging configurations with load sharing and charge management systems. By providing flexible rebate options, the Company hopes to enable customers to utilize these funds to implement innovative solutions that meet their needs. The Company is exploring use cases and options in the market today.

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1. *Potential Modifications to General Service Rates Demand Limiter for EV Charging*⁵⁴

The Company understands that demand charges can be an issue for customers with EV charging needs, especially for public charging providers with stations with lower utilization. EV charging is typically not provided on General Service or General Time of Day Service tariff⁵⁵ so a demand limiter changes to these services would not address the concerns EV charging customer and unnecessary harm the Company ability to earn our authorized rate of return established in the Company last rate case in Docket E002/GR-21-630. Public charging providers are provided service on the Electric Vehicle Public Charging Pilot Service.⁵⁶ The current demand limiter, which limits billed demand to no greater than the value in kW calculated by dividing kWh sales for the month by 100 hours, limits the overall impact demand charges can have on these customers and is a unique feature to Xcel Energy compared to most utilities across the nation. While we are exploring many new ways to better serve our Commercial customers with EV charging needs, we have reviewed the actual bill revenues with the current demand limiter of 100 hours use and customer specific costs of providing service to we believe the demand limiter as currently designed is working as intended. To date A90 service revenues are not exceeding customer specific EVSI and distribution-related costs and therefore we do not believe a change is warranted at this time. Finally, we believe a global demand charge related mechanism changes are best explored in rate case proceedings where they can be considered in conjunction with the totality of rate-related issues.

In the near term, the Company will be proposing a new General Service TOU rate in March 2026. This rate, though it may not be perfect for all customers with EV charging needs, may serve as a good option for certain customers depending on their charging needs and profiles.

E. Equity Considerations⁵⁷

The Company's Clean Transportation Portfolio is targeted at reducing identified barriers to transportation electrification in a cost-effective way while also promoting equity and environmental justice. We begin this section by discussing how our programs implemented with HOURCAR prioritize equitable access to electrified transportation. We then present the results of a geospatial analysis responsive to

⁵⁴ Provided in Compliance with Order Point 21.c of the Commission's May 9, 2024 Order in Docket No. E002/M-23-452.

⁵⁵ Rate Code A15

⁵⁶ Rate Code A90

⁵⁷ Provided in Compliance with Order Point 21.f of the Commission's May 9, 2024 Order in Docket No. E002/M-23-452.

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Order Point 21.f of the Commission’s May 9, 2024 Order in Docket No. E002/M-23-452, which asks how the Company’s EV programs serve those disproportionately impacted by transportation pollution, as well as renters, multifamily housing residents, communities of color, low-to-moderate income customers, and rural communities. We conclude by discussing remaining gaps.

2. *Programs with HOURCAR*

The Company’s specific equity efforts include its relationship with HOURCAR through the Public Charging Pilot to develop the EV Spot Network that is utilized by the EVIE Community Carshare service. In 2024, Evie Carshare measured about 4,278 unique users, about 165,462 trips, about 1.4 million miles traveled, and about 5,343 metric tons of greenhouse gas emissions reduced. HOURCAR estimates the service saved \$14.9 million in transportation costs. Within total utilization, 45 percent was derived from BIPOC/non-white users, as well as 44 percent from very low-income users and 22 percent from BIPOC/non-white users who are also very low-income.⁵⁸

The Company also works with HOURCAR as part of the MDU Pilot to support infrastructure buildouts for income-qualified carshare sites. The first HOURCAR multifamily carshare hub opened in August 2022 in Minneapolis and the second hub opened in late December in Little Canada. In 2024, there were 2,935 unique users, 26,181 trips, over 1.1 million miles traveled, and an estimated \$10.2 million saved on transportation costs.⁵⁹ Within total utilization, 36 percent came from BIPOC/non-white users, 52 percent came from very low-income users, and 21 percent came from BIPOC/non-white users who are also very low-income.⁶⁰ The Company is excited to continue to support HOURCAR’s multifamily applicants.

3. *Geospatial Analysis of Equity Criteria*

The Company reviewed its current customer EV offerings and how they interact with the specific groups mentioned by the Commission’s order. The Company conducted this analysis using location data of the customers and/or charging sites in our EV programs, census tract data, source data from the Minnesota Pollution Control Agency (MPCA) Environmental Justice (EJ) Tool, and MPCA pollution data.⁶¹

⁵⁸ HOURCAR. 2024 Impact Report, 2024-HOURCAR-Evie-Impact-Report-Digital-FINAL-RFS.pdf Accessed April 24, 2025.

⁵⁹ Id.

⁶⁰ Id.

⁶¹ MPCA, Environmental Justice Screening Tool, Understanding environmental justice in Minnesota (arcgis.com). The tool highlights areas of concern for Environmental Justice as defined in Minn. Stat. 216B.1691, Subd. (1) (Minn. Session Laws – 2023, Chapter 7, HF7, Sec. 3).

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a. Areas Disproportionately Impacted by Transportation Pollution

Using pollution data from the MPCA, the Company was able to determine roughly how many of our sites from each Commercial offering are located in areas where transportation is the number one source of pollution. Table 7 shows the percentages of commercial sites in areas disproportionately impacted by transportation pollution, by program.

Table 7
Commercial Sites Located in Areas Disproportionately Impacted by Transportation Pollution

Program	Percentage
MDU Pilot	50%
Fleet Pilot	61%
Public Charging Pilot	70%
Company-owned DCFC ⁶²	17%

Due to the way the data was collected on traffic pollution, we were unable to display the data in the same way for EVAAH. Figure 7 below is a screenshot of a mapping tool that shows number of EVAAH customers in a given census tract via a heat map (darker colors indicate a higher number of customers) overlaid with information indicating where traffic is the top three sources of pollution.

⁶² Company-owned DCFC stations are largely located in rural areas across our service territory since the program is aimed at serving locations unlikely to receive private investment. Those areas are less likely to have transportation as a top three source of pollution.

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Figure 7
Heat Map of EVAAH Customers with MPCA Pollution Data⁶³

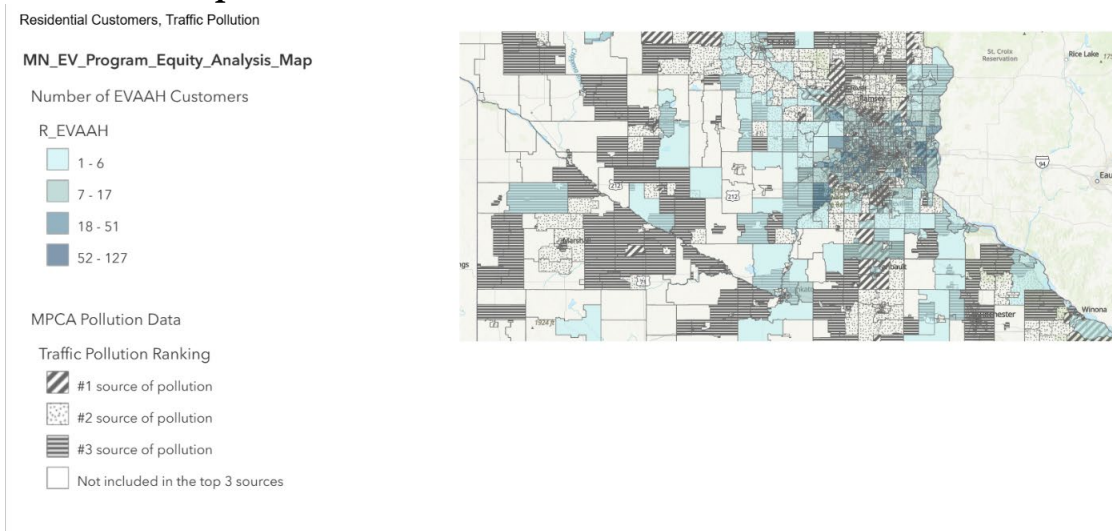
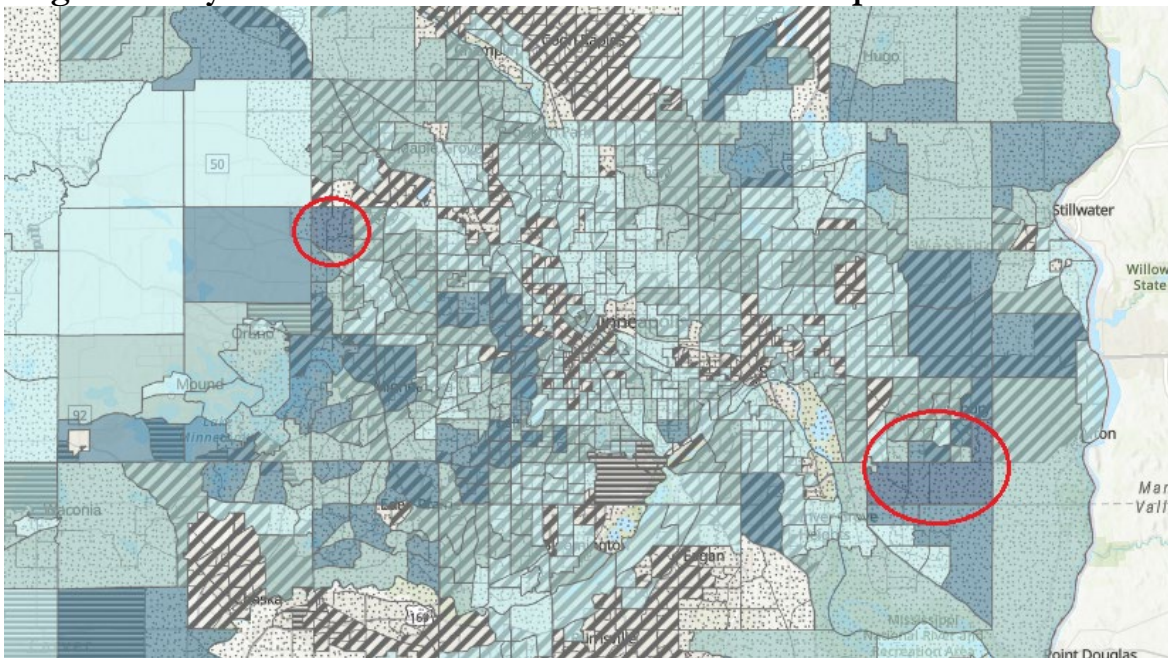


Figure 8 below is a version of the map that is focused on areas with a higher density of EVAAH customers, mainly in the metro area.

Figure 8
High Density Areas of EVAAH Customers and Transportation Pollution⁶⁴



⁶³ Information in this figure is from Company's GIS Mapping Tool

⁶⁴ Information in this figure is from Company's GIS Mapping Tool.

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Based on the mapping tool, for the two census tracts with the highest number of EVAAH customers (circled in red above, 51-127 customers) traffic was the second highest source of emissions for both.

b. Renters and Multifamily Housing Residents

The Company used census tract data to geographically analyze how many of our EV program customers are in areas where both renters and multi-family units make up over 50 percent of housing units. Table 8 below shows the percentage of EV program customers in those areas, broken down by program.

Table 8
EV Program Customers in Areas with Renters and Multi-Family Units

Program	Percentage
MDU Pilot	50%
Fleet Pilot	35%
Public Charging Pilot	49%
Company-owned DCFC ⁶⁵	0%
EVAAH	6%
OYC	6%

The Company's MDU Pilot is designed to encourage EV adoption among residents of MDUs (i.e. apartment and condominium buildings).

c. Communities of Color

One of the criteria in Minnesota statute defining an Environmental Justice Area is census tracts where 40 percent or more of the total population is nonwhite.⁶⁶ These census tracts are mapped in the MPCA EJ Tool.⁶⁷ Using that tool, the Company determined the percentage of sites in each of our programs that are located in those areas. Table 9 below shows the percentage of EV program customers located in census tracts where 40 percent or more of the people identify as people of color, by program.

⁶⁵ Company-owned DCFC stations are largely located in rural areas across our service territory since the program is aimed at serving locations unlikely to receive private investment. Those areas are less likely to have transportation as a top three source of pollution.

⁶⁶ Minn. Stat. § 216B.1691, Subd. 1(e)(1). See [Sec. 216B.1691 MN Statutes](#).

⁶⁷ See [Understanding Environmental Justice in MN](#).

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Table 9
EV Program Customers Located in Communities where 40 Percent of More of
Population Identify as People of Color

Program	Percentage
MDU Pilot	31%
Fleet Pilot	22%
Public Charging Pilot	32%
Company-owned DCFC ⁶⁸	0%
EVAAH	8%
OYC	10%

d. Low-To-Moderate Income Customers

Analysis of benefits to low-to-moderate income customers is more challenging because these definitions vary by program, county, and household size. We conducted an analysis using poverty rates as a proxy. One of the Minnesota statutory criteria defining Environmental Justice Areas is census tracts where 35 percent or more of households have an income that is at or below 200 percent of the federal poverty level.⁶⁹ These census tracts are mapped in the MPCA EJ Tool. Using that tool, the Company analyzed how many of our EV program customer sites serve census tracts meeting the Environmental Justice Areas definition due to poverty. Table 10 below shows the percentage of EV program customers in those tracts, by program.

Table 10
EV Program Customers in Census Tracts Meeting the Environmental Justice
Areas Definition due to Poverty

Program	Percentage
MDU Pilot	54%
Fleet Pilot	26%
Public Charging Pilot	36%
Company-owned DCFC	33%
EVAAH	4%
OYC	4%

Census tract poverty rates are here used as a proxy for areas with more low-to-moderate income customers. Definitions of low- and moderate-income vary in

⁶⁸ Company-owned DCFC stations are largely located in rural areas across our service territory since the program is aimed at serving locations unlikely to receive private investment. Those areas are less likely to have transportation as a top three source of pollution.

⁶⁹ Minn. Stat. § 216B.1691, Subd. 1(e)(2).

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Minnesota statute. For energy assistance and utility affordability programs, 50 percent of State Median Income (SMI) is commonly used as an income eligibility guideline, but this translates to different income thresholds depending on household size.⁷⁰ For the state's Energy Conservation & Optimization (ECO) program, the statutory definition of "low-income household" is based on income up to 80 percent of the Area Median Income for the geographic area (generally county) where the household is located,⁷¹ which for many counties is higher than 50 percent of SMI. There is not a corresponding statutory definition of "moderate-income household" in the ECO statute, but a commonly used guideline is income up to 150 percent of AMI. The Department of Commerce provides an Area Median Income look-up table, by county and household size, for 80 percent and 150 percent of Area Median Income.⁷²

These different statutory definitions, and different low- and moderate-income thresholds by county and by household size, make it difficult to conduct a geospatial analysis for how the EV programs are serving low-to-moderate income customers specifically, similar to the other criteria explored in this section. In addition, many of the Company's EV programs serve whoever uses the charger, which may be in a MDU building or public charging location; households of various size and income use these chargers, and the Company would not know the income or household size of the customers using the charger. Considering all this, we have not attempted to conduct an analysis for low-to-moderate income customers specifically, but instead used the statutory definition based on poverty rates at the census tract level as a proxy.

e. Rural Communities

Using census tract data, the Company analyzed locations of customers in its EV charging programs, considering those located in areas where 69 percent to 100 percent of residents are designated as rural. Table 11 below shows the percentage of EV program customers located in rural communities by program.

⁷⁰ See [Energy Assistance Program / Minnesota Department of Commerce - Energy](#).

⁷¹ Minn. Stat. § 216B.2402, Subd. 16. See [Sec. 216B.2402 MN Statutes](#).

⁷² Table available at [Home Electrification and Appliance Rebate program \(HEAR\) / Minnesota Department of Commerce - Energy](#).

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Table 11
EV Program Customers in Rural Communities

Program	Percentage
MDU Pilot	0%
Fleet Pilot	0%
Public Charging Pilot	3%
Company-owned DCFC	33%
EVAAH	3%
OYC	3%

4. *Remaining Gaps & Future Equity Considerations*

While the tables above show the Company’s EV programs are already delivering significant equity benefits in areas disproportionately impacted by transportation pollution, Environmental Justice Areas, and rural areas, with the updates to our Clean Transportation portfolio discussed in Section III, we believe these program offerings can further enhance equitable charging access and decrease adoption barriers across the socioeconomic spectrum. We will retain comparatively larger incentives for income-qualified customers through our EV Charger and Wiring Rebate program while also providing comparatively larger rebates to commercial customers building EV charging in EJ areas as defined by Minnesota statute through our Commercial EV Infrastructure Rebate and Advisory Program. In addition to a continued partnership with HOURCAR included as a part of our Residential Advisory Program discussed below, with easier access to rebate funds for MDU residents and broader outreach and education efforts, we believe that the programming discussed in this TEP will result in more equitable charging access throughout our service territory.

F. Coordination of EV and Energy Efficiency and Electrification Effort⁷³

There is inherent overlap between the Company’s overall electrification strategy and the energy efficiency framework of the state’s ECO Act. As a result, the Company plans to file two of the programs discussed in this TEP—our Commercial EV Infrastructure Rebate and Advisory Program, and our Residential Advisory Services and Guided Charging Installation Program—in its ECO portfolio early next year.

Beyond these new program proposals, there are additional opportunities to coordinate active ECO programs and EV efforts. For example, incorporation of home charging estimates and home wiring rebates within programs such as Home Energy Squad or

⁷³ Provided in Compliance with Order Point 21.g of the Commission’s May 9, 2024 Order in Docket No. E002/M-23-452.

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integration of educational materials on EV infrastructure rebates in commercial Energy Efficiency programming are just a few opportunities to be explored. Bundling EV solutions with Energy Efficiency programs in this manner allows customers to access holistic energy solutions without requiring them to engage with multiple contractors or points of contact in the Company. In our discussions of energy efficiency programming with the Environmental Justice Accountability Board (EJAB), this sort of bundling and streamlining of programs – simplifying the customer experience and the number of points of contact – has been an EJAB recommendation. The Company will continue to identify opportunities to simplify the customer experience and make it as easy as possible to find and execute solutions to their energy needs.

Another example of potential coordination between existing programs is coordinated dispatching of managed charging with other load management program. Different technologies have different load shapes and duty cycles, meaning a coordinated dispatching strategy could maximize grid benefits and simplify customer participation. Future distributed energy resource management system (DERMS) implementation will enable seamless product dispatching across programs and technologies that can maximize value while minimizing impacts on customers.

G. School Bus Electrification⁷⁴

In May 2024, the Commission approved the Company's proposed school bus demonstration project as a part of our 2023 TEP filing. Under this school bus demonstration project, the Company proposed to study and address barriers to school bus electrification, school bus bidirectional connection to the grid, and to better understand the costs and benefits of electric school buses as grid resources. With the future programs discussed in this TEP, we are no longer planning to own and operate equipment as part of a bidirectional school bus demonstration but instead will offer rebates and advisory support catered to bidirectional charging needs. The Commercial EV Infrastructure Rebate and Advisory Program discussed in this TEP will continue to support school bus electrification and promote bidirectional use cases to interested school bus operators.

The initial intention of the Electric School Bus Demonstration was to leverage the Company's Fleet pilot to provide installation and EVSI equipment for bidirectional charging of school buses. The constraints imposed on customers by the Fleet Pilot design apply to school bus electrification as well. The Company has conducted

⁷⁴ Provided in Compliance with Order Point 21.h of the Commission's May 9, 2024 Order in Docket No. E002/M-23-452.

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customer outreach in Minnesota while also using insights gathered by Public Service when implementing a bidirectional school bus rebate program in Colorado. Informed by our customer outreach as well as Public Service's experiences, we have found that barriers to electrification are frequently driven by a lack of awareness of bidirectional charging for school buses. In addition, charging solutions, bus operations, and contractual relationships between schools and operators vary significantly across cities and school districts, causing additional barriers. The high cost and operational complexity of bidirectional charging has also proven difficult for fleet operators to take on, especially when layered on top of the learning curve associated with standard bus electrification. Fleet operators are traditionally not familiar with electric school bus charging needs, duty cycles or capabilities, meaning electrification of any kind requires significant training and planning. Bidirectional charging increases the need for these resources dramatically.

To address these barriers and continue to support school bus electrification and bidirectional charging, the Company plans to offer a tiered incentive for school-bus DCFC equipment that provides \$20,000 per port for standard charging equipment and \$40,000 per port for bidirectional charging. These incentives can be stacked with EVSI rebates to further drive down costs. Program details can be found in Section III.A of this plan through our Commercial EV Infrastructure Rebate and Advisory Program. The change from a pilot with Company-owned equipment to a rebate model allows for a broader range of solutions and solution providers. Under the new rebate model, they can accept a rebate on behalf of a customer, pass the financial benefits through to them and operate charging solutions on their behalf. This benefits customers that may not have the capacity or internal knowledge base to do it themselves. The Company also does not have sufficient expertise to offer these services to school districts at scale, so the proposed rebate model offers an opportunity to partner with industry providers to create flexible solutions that can meet a variety of needs. This model has proven successful for a bidirectional school bus program that Public Service is currently implementing in Colorado.

Additionally, we want to support standard, or one-way, charging solutions as these have proven to be much more accessible and cost-effective for first time electric school bus operators. While we recognize the potential of school buses to be used as grid assets given their duty cycles, customers have indicated that the upfront cost, lack of significant industry options and low return on investment potential under current grid conditions of bidirectional charging can deter customers from utilizing programs that require bidirectional installations. By offering rebates for all school bus charging installations, we hope to encourage broader school bus electrification while also making bidirectional installations more attainable through a progressive rebate structure.

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The Company has participated in several meetings with the Department and attended informational webinars on their school bus grant program and will provide outreach to grantees for infrastructure through the rebate proposal contained here. The Company anticipates engaging with potential demonstration project customers upon approval and launch of the rebate program.

5. *Compensation for Electric School Bus V2X*⁷⁵

Today, school bus operators can benefit financially through a variety of mechanisms using bidirectional charging. A common approach is discharging bus batteries into the school or other facility the buses are parked at, known as Vehicle to Building (V2B), to provide peak shaving benefits and reduce demand charges. The bus batteries can also be leveraged as part of an interruptible rate or similar demand management product such as Peak Partner Rewards or Peak Flex Credit. This eliminates much of the upfront cost and complexity of discharging back to the grid while also allowing schools to leverage bus batteries for on-site resiliency benefits. Operators that discharge directly to the grid can take advantage of existing demand management products.

Future compensation methods may look similar to the Company's active managed charging proposal in Section III of this document where fleet operators are compensated based on the types of grid benefits they can provide. Vehicle to Grid (V2G) has potential value for distribution system management and renewable curtailment in a grid with higher rates of EV adoption and renewable generation. Work being done to understand charge management as part of our managed charging program implementation can be applied to future compensation models across vehicle classes, including bidirectional school bus charging.

III. NEW EV PROGRAMS

The Company has developed three programs that we intend to bring to market in the near future. These three programs are:

- Commercial EV Infrastructure Rebate and Advisory Program
- Residential Advisory Services and Guided Charging Installation Program
- Charging Perks (Active Managed Charging Program)

⁷⁵ Provided in Compliance with Order Point 12.a of the Commission's May 9, 2024 Order in Docket No. E002/M-23-452.

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Table 12 below summarizes the total budget and anticipated participants for these initiatives, while each program is discussed in more detail in the following subsections. The Company will seek recovery of the Commercial EV Infrastructure Rebate and Advisory Program and Residential Advisory Services and Guided Charging Installation Program through our ECO portfolio. We discuss the details of that process below.

Table 12
New EV Programs Budget
(\$ in Millions)

	2026	2027	2028	2029	Total
<u>New EV Programs Totals</u>					
Total Program Admin Costs	\$3.0	\$3.4	\$3.9	\$4.7	\$15.1
Total Rebate Costs	\$0.2	\$12.1	\$15.1	\$18.6	\$46.0
Total Costs	\$3.3	\$15.5	\$18.9	\$23.3	\$61.1
<u>Commercial EV Infrastructure Rebate and Advisory Program</u>					
Participants	0	223	275	337	835
Program Admin Costs	\$0.7	\$0.8	\$1.0	\$1.2	\$3.7
Rebate Costs	\$0.1	\$11.9	\$14.7	\$18.0	\$44.7
<u>Residential Advisory Services and Guided Charging Installation Program</u>					
Program Admin Costs	\$2.0	\$2.1	\$2.1	\$2.3	\$8.5
<u>Charging Perks Active Managed Charging Program</u>					
Participants ⁷⁶	1,625	4,075	8,423	13,940	13,940
Program Admin Costs	\$0.3	\$0.5	\$0.8	\$1.2	\$2.9
Rebate Costs	\$0.1	\$0.2	\$0.4	\$0.6	\$1.3

The Company hosted a stakeholder meeting for interested parties on July 16, 2025 to discuss the results of the evaluation of our Commercial EV Pilots and to preview the new programs presented in this TEP. A summary of the meeting is included as Attachment F. In addition, the Company also participated in a stakeholder meeting on September 9, 2025 organized by Commission Staff where we shared a high-level summary of our TEP along with information about our IDP.

⁷⁶ Participants are cumulative.

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A. Commercial EV Infrastructure Rebate and Advisory Program⁷⁷

The Commercial EV Infrastructure Rebate and Advisory Program is the new, permanent successor to the Commercial EV Pilot programs⁷⁸ currently offered by the Company. Sections I and II provide insight into how this new program draws on learnings from those pilots as well as programs in other jurisdictions to apply program design elements and implementation best practices that have proven to increase charging availability in a cost-effective manner. The program is designed to expand access to public, fleet and multifamily charging by offering rebates on EVSI equipment and select EVSE equipment. By offering rebates rather than Company-owned equipment, the program better positions the Company to partner with developers and site hosts to provide solutions that can meet a variety of needs. Pilot findings indicate a need to offer a more flexible form of funding and advisory support than the pilots provided. As discussed above, the initial results of the similar program operated by Public Service in Colorado indicate that the model proposed here is successful at expanding access to funding and Advisory Services, ultimately resulting in more cost-effective charging installations.

Below we provide program design, reporting, and budget details for the Commercial EV Infrastructure Rebate and Advisory Program. The program will be filed as a modification to the Company's 2024-2026 ECO Triennial Plan in January 2026, with plans to open funding applications in the summer. This timeline aligns with MNDOT's plans to reopen NEVI funding rounds, making it easier for applicants to partake in both funding opportunities, maximizing the reach and cost effectiveness of both programs.

1. Program Design

The program is designed to provide customers with advisory and financial support at the level necessary to overcome barriers to EV installation and make solutions to their charging needs attainable. The full turnkey experience that the pilots offered proved valuable for certain customer types, however as stated above, the rigid nature of those pilots limited their value for a broad segment of our customer base. The transition to a rebate model is accompanied by robust advisory services and a market-oriented program structure that enables customers to independently select qualified private sector providers. By empowering customers to make procurement decisions aligned with their individual project needs, the program promotes replicable turnkey solutions

⁷⁷ MDU portion of this section provided in Compliance with Order Point 21.b of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

⁷⁸ Fleet, Public Charging, and MDU

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while maintaining flexibility in support provided. Applicants will be able to engage with program staff and other resources as available through the program as needed to receive information on interconnections processes, installing contractor information and charging needs assessments for fleet customers through our existing fleet advisory services, known as FEAP. From there, customers will be encouraged to apply for rebates to support the installation of their projects. Rebates will be available for both EVSI equipment and select EVSE equipment. Table 13 below shows the anticipated EVSI rebate amounts.

Table 13
Commercial EVSI Rebates

Charging Type	Standard (\$/Port)	EJ (\$/Port)
Level 2	\$6,500	\$10,000
DCFC	\$13,000	\$20,000

Table 14 below shows the anticipated EVSE rebate amounts.

Table 14
Commercial EVSE Rebates

Charging Type	Standard (\$/Port)	EJ (\$/Port)
Multifamily Level 2	\$1,200	\$1,800
Public DCFC	\$25,000	\$35,000
Charging Type	Standard (\$/Port)	Bidirectional (\$/Port)
School Bus DCFC	\$20,000	\$40,000

EVSI rebates will be available to any Minnesota customer installing charging equipment at a commercial premise. Rebated EVSI equipment must serve energized and operational EVSE to qualify. We plan to provide higher rebate amounts for customers installing charging stations in EJ communities, as defined by the MPCA tools described in Section II, to encourage installations in places that are traditionally less likely to have adequate EV charging access.⁷⁹ Rebates will be paid per energized port as a flat amount and capped at total eligible project costs as defined in the program terms and conditions. The flat amounts listed in Table 14 are estimated to cover 40 percent of eligible costs for standard rebates and 60 percent of eligible costs for projects in EJ communities. Offering flat rebate amounts rather than a percentage

⁷⁹ The Company acknowledges that this is not a traditional definition of “income qualified” and is identifying a particular group of customers. We look forward to working with the Department of Commerce to align on this approach.

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of project cost provides more cost certainty for customers and simplifies incentive stacking across different funding sources.

The EVSE rebates listed in Table 14 will be available to any Minnesota commercial customer installing charging for use by multifamily residents, public fast charging or fast charging serving electric school buses. These three subsets of use cases have been identified as having a uniquely high impact on adoption or as facing high barriers to charging installation. They will therefore benefit from additional funding support. Multifamily L2 and Public DCFC rebates are structured the same way as the EVSI rebates, with flat rebate amounts, capped at total eligible project costs as defined in the program terms and conditions, covering an estimated 40 percent of eligible project costs for standard rebates and 60 percent of eligible project costs for projects built in EJ communities. School Bus DCFC incentives will be treated differently to support bidirectional charging installations as outlined in Section II.G. A standard rebate will be available to customers installing DCFC for school bus charging while school bus operators installing bidirectional DCFC will be eligible for an comparatively larger rebate as shown in Table 14. EVSE rebates will be stackable with EVSI rebates in Table 13.

All rebates available in this program will be assignable by the customer to a third party of their choosing. Under this structure, customers who own and operate a charging station will be allowed to assign their rebate to the installing contractor or charging developer who can apply the rebate to reduce the billed amount to the customer, creating a point-of-sale rebate. This reduces cost barriers to customers or site hosts that may not have the cash on hand to pay for a project in full and recoup rebate dollars later. Assignable rebates also allow for CaaS providers to accept rebates for an installation and include cost reductions provided by a rebate in their pricing. CaaS providers are well-suited to serve the wide-ranging needs of MDU and fleet customers and this funding structure enables these project types and expands the reach of the program. All entities taking rebates on behalf of a customer will be required to demonstrate that cost savings are passed through to the customer at project completion.

2. Plan for Existing Pilot Participants

Implementation of the Commercial EV Infrastructure Rebate Program will have no impact on existing Fleet, Public Charging, or MDU pilot participants or those currently completing their projects through the incremental funds approved in the 2023 TEP. Pilot customers signed ten-year agreements with the Company to provide operation and maintenance services on Company-owned equipment. Those contracts will be honored through their full term with existing billing arrangements remaining in

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place. Pilot tariff sheets and rates will remain in place to serve participants through their contract term but will no longer be open to new customers.

3. *Program Operations*

Customers will submit project information through a digital application tool on the Company's website. Upon the initial submission, the customer will be put in contact with program staff and be given the opportunity to discuss project details and ask questions. Program staff will provide interested customers with information regarding high level charging needs, interconnection process and timelines, and general program processes. Fleet operators submitting an inquiry will have the option to use our FEAP product, which will provide them with a detailed charging needs assessment based on their fleet electrification plans. Once through this intake process, customers will submit a detailed funding application which will be reviewed by program staff, ultimately resulting in an approved funding amount for the project or a denial if program requirements are not met.

Program staff will work with charging developers and installing contractors to provide customers with resources for a variety of charging installation types. A list of pre-qualified vendors will be maintained by program staff that can be shared with customers seeking installation support for their projects. This list will contain a wide range of organizations, from installing electricians through CaaS providers, with customers being provided resources based on their level of knowledge, installation capabilities and the needs of their project.

Once funding is reserved for a project, program staff will remain in contact with program participants and installing contractors to ensure projects are completed and retain line of sight to project timelines. Working with customers to maintain an accurate record of project completion estimates increases budget forecasting accuracy but more importantly provides valuable planning insights for our system planning groups. With the project data provided to the Company through this program, the Company can better forecast when and where EV charging load is expected to come online in the near term while also leveraging existing data and our understanding of the projects submitted to forecast the charging load shape at that site. The data generated by this program will help system planning groups better prioritize capacity improvement projects and increase load forecasting accuracy across the system. Over time, this increased forecasting accuracy will improve our ability to make capacity available when and where it is needed, reducing interconnection timelines and costs. Taken together, this program achieves portfolio goals laid out in this plan by increasing charging availability, improving grid readiness and generating charging revenue while making grid spending more efficient.

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4. *Reporting Requirements*

This program will be filed as a modification to our ECO portfolio and therefore will comply with reporting requirements defined in the ECO plan.

5. *Participation and Costs*

Table 15 below provides the anticipated number of projects completed, installed ports, and overall budget for the Commercial EV Infrastructure Rebate and Advisory Program from 2026 through 2029. The program will be filed as a modification to the Company's 2024-2026 ECO Triennial Plan in January 2026.

Table 15
Commercial EV Infrastructure Rebate and Advisory Program Participation and Budget

Year	2026	2027	2028	2029	Total
Projects Completed	0	223	275	337	835
EJ Projects Completed	0	67	82	101	250
Installed Ports	0	1,464	1,818	2,242	5,524
EJ Installed Ports	0	439	545	673	1,657
Rebate Spend	\$130,000	\$11,879,000	\$14,663,000	\$18,005,000	\$44,677,000
Program Admin	\$731,000	\$785,000	\$976,000	\$1,205,000	\$3,697,000
Total Budget	\$861,000	\$12,664,000	\$15,639,000	\$19,210,000	\$48,374,000

B. Residential Advisory Services and Guided Charging Installation Program

Residential Advisory Services will continue to serve as a trusted resource for our customers, maintaining core offerings such as education, programs, and marketing delivery methods that have consistently demonstrated value. Moving forward, our efforts will be more sharply focused on helping customers strategically plan and successfully execute EV charging initiatives. As part of this shift, we will begin phasing out tools and services that do not directly support this mission, such as vehicle selector tools, and introduce new resources, including the Guided Charging Installation program. These changes are designed to refine our approach and continue to reduce the many barriers to residential EV charging design and implementation.

As the broader EV industry continues to mature and address vehicle education gaps in the residential market, the Company is well-positioned to now fully concentrate on its core competency: delivering electricity to power EVs. With most residential EV

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charging occurring at home while vehicles are idle—and with overnight or off-peak charging offering the greatest potential to improve energy affordability—the Company will prioritize home charging education as the central focus of its restructured Residential Advisory Services and Guided Charging Installation Program.

To support this refined focus, the Company performed a multi-phased research assessment with the objective to identify prospective EV buyers, understand their specific needs related to EV charging, and inform the development of targeted tools, educational resources, marketing, and support to address barriers to EV charging. The study identified two core residential customer segments. These segments demonstrate a higher likelihood of EV adoption, are receptive to influence from the Company, and share similar expectations of the Company related to EVs and home charging. Both groups seek guidance in determining the most suitable home charging configuration, understanding the steps required for implementation, and accessing programs and rebates.

These two primary segments have unique attitudes and behaviors that differentiate them from each other. One segment is more spontaneous and seeks a fast, trusted route to home electrical evaluation and installation, and another prefers a more deliberate, research-intensive process that may begin well in advance of vehicle purchase.

1. *Guided Charging Installation Program*

To serve both segments effectively, the Company plans to launch a Guided Charging Installation Program which will provide a single, flexible educational pathway on our website designed to accommodate varying levels of engagement. Starting from the Company's EV homepage, this pathway will provide comprehensive information and digital tools in a decision-making flow that will support customers throughout their charging planning and implementation journey. Importantly, customers may engage with the online pathway at their own pace and are not obligated to proceed through all stages. For example, those who prefer early research may choose to stop once they have received a fully digital home electrical evaluation and detailed charging installation plan knowing what they now need to install home charging equipment once they are ready to purchase an EV. Those that want charging installed quickly can proceed to scheduling. This approach ensures that all customers—regardless of their timeline or level of readiness—have access to relevant, actionable resources that support informed EV adoption and charging decisions.

Through the Guided Charging Installation Program, the Company will offer comprehensive education on home charging options, including distinctions between

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L1 and L2 charging equipment, and use cases for public charging, as well as mobile versus hardwired installation approaches. Customers will be able to submit information about their home through a trusted third-party digital platform where they will receive a detailed, no-obligation quotation outlining necessary electrical upgrades, such as panel modifications, breaker replacements, wiring requirements, and household load calculations, tailored to their preferred charging setup.

Should customers choose to proceed, they may schedule installation through either the existing EVAAH program or a customer-paid alternative. During this process, they will be offered applicable rebates for panel and/or home wiring upgrades and invited to participate in Charging Perks, the Company's proposed managed charging solution.

By establishing a clear pathway that integrates education, decision-support tools, home electrical system assessments, and targeted incentives, the Company's programs will directly address barriers to home charging adoption and is expected to enhance overall EV adoption and ensure that customers are equipped with the resources necessary to make informed, cost-effective, and grid-aligned charging decisions.

2. *Residential Advisory Services Awareness and Education*

Other components of the Company's Residential Advisory Services include paid search & media, events, support for auto dealers, and email campaigns that drive people to the Company's EV Website where they will access the educational resources, tools and programs that meet their needs and help them overcome any barriers to developing and executing their individual charging plan.

On our EV website and in addition to the education and tools mentioned above, we aim to provide educational information, tools, and links to external resources. Current research suggests the following categories at the time of this writing but will be subject to change as the EV & EV charging industry and/or the emerging customer changes.

- Public Charging
- Charging Economics and EV rates
- Environment and Grid Readiness
- EV Charging Tips & Tricks
- Home Electrical information as it relates to EV Charging

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3. *Reporting Requirements*

This program will be filed as a modification to our ECO portfolio and therefore will comply with reporting requirements defined in the ECO plan.

4. *Participation and Costs*

Table 16 below provides the anticipated number of quotes that will be provided through the Guided Charging Installation Program process and the overall annual Residential Advisory Service Budget for 2026 through 2029. The program will be filed as a modification to the Company's 2024-2026 ECO Triennial Plan in January 2026.

Table 16
Residential Advisory Services Participation and Budget
(\$ in Millions)

	2026	2027	2028	2029	Total
Guided Charging Installation Program Digital Quotes Delivered	2,500	3,000	3,200	3,400	12,100
Guided Charging Installation Program Operation	\$0.17	\$0.15	\$0.15	\$0.15	\$0.62
Customer Marketing & Insights	\$0.89	\$0.96	\$0.93	\$1.11	\$3.89
Outreach, Events, & Sponsorships	\$1.00	\$1.00	\$1.00	\$1.00	\$4.00
Total	\$2.06	\$2.11	\$2.08	\$2.26	\$8.51

C. Charging Perks Active Managed Charging Program⁸⁰

The Company is proposing to sunset its passive managed charging program, OYC, and replace it with the active managed charging program, Charging Perks. The goal of this transition is to offer a more holistic and cost-effective managed charging portfolio. To accomplish this, Charging Perks will leverage the data infrastructure and vendor networks of OYC and expand on the grid services that the program provides through active charge management. At the same time, the Company's Residential TOU Rate service will become available to Minnesota customers in mid-2026 which has the potential to provide financial benefits to EV owners and similar grid benefits to OYC at a fraction of the complexity and cost. Through program changes elsewhere in our portfolio we hope to promote this rate as a low-touch, easily accessible managed charging solution that provides broad bulk-system benefits while utilizing

⁸⁰ Provided in Compliance with Order Point 21.a of the Commission's May 9, 2024 Order in Docket Nos. E002/M-23-452.

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Charging Perks to provide more sophisticated grid benefits such as optimization of existing distribution infrastructure, renewable curtailment avoidance and emergency demand response.

The following section will provide an overview of the Charging Perks program, how the Company plans to operate it to maximize grid benefits and how it fits into a broader managed charging ecosystem aimed at minimizing the grid impacts of EVs.

Today, Charging Perks faces many of the same cost-effectiveness challenges as OYC, which are described earlier in this plan. The program is not cost-effective under current grid conditions, however, as EV adoption and renewable generation increase on our system over the coming years, active management of EV charging will be critical. A CBA for the program is provided as a part of Attachment G. Within this section, we will discuss how Charging Perks will operate to maximize grid value today, while forging a pathway to future cost-effectiveness and sophisticated grid management. Due to the cost-effectiveness challenges posed under existing ECO rules and the ways in which the proposed control strategies may deviate from traditional ECO demand management programs, we are not proposing to include Charging Perks in our January ECO modifications but will request cost recovery in a future electric rate case proceeding.

1. Program Design

Charging Perks utilizes the same set of software vendors as OYC to access vehicle charging data and directly manage participants' charging schedules to shift consumption away from system peaks. This is generally done through subtle shifts to customers' charging with the customer specifying preferred "ready-by" times and the software platform setting a charging schedule that meets customer needs while avoiding periods of high energy cost for the Company. The Company gains access to customer charging through agreements signed between the software provider and vehicle and/or charger OEMs. This means that customers must have a vehicle or charging station covered by these agreements to participate. Currently, we estimate that through existing agreements the program has access to 46 percent of vehicles on the road today with the number of eligible vehicle and charger models expanding rapidly. OEMs charge the software vendors a fee for this access which is then passed through to the Company. These data access fees are a primary driver of program costs for managed charging programs and apply to both Charging Perks and OYC.

By expanding control strategies through active managed charging, the program can provide a broader range of grid benefits for similar implementation costs as OYC. We plan to utilize Charging Perks to provide both bulk system and local distribution

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system benefits. Whereas OYC and other passive managed charging solutions can avoid bulk system peaks through price signaling, Charging Perks is capable of alleviating localized system constraints at the feeder and transformer levels. By dispatching customized control strategies to program participants based on the load profiles of distribution assets serving them, the program can defer asset upgrades, thus avoiding system costs and increasing program value. The program is designed to provide a benefit to participants based on the relative grid value they provide. Customers that are served by heavily constrained areas of the grid that enroll in Charging Perks have the potential to provide greater value to the grid in the form of avoided distribution investment. They provide this value by shifting charging away from distribution asset peaks and deferring upgrades to those assets. Customers that are able to benefit the distribution system can also be controlled to avoid generation and transmission, or bulk system, peaks thus providing greater value than customers served by less constrained parts of the grid.

Based on analysis, provided as Attachment G, the Company is proposing to credit distribution optimized Charging Perks participants \$75 per year while standard Charging Perks customers will be credited \$25 per year. These credits will be applied to customers' bills annually each year they remain in the program. All customers will receive a \$50 sign-up credit upon enrollment regardless of how their charging is managed. Table 17 below summarizes the proposed Charging Perks bill credit amounts.

Table 17
Proposed Charging Perks Bill Credit Amounts

Bill Credit Type	Standard Customer	Dist. Optimized Customer
Enrollment Incentive	\$50	\$50
Annual Incentive	\$25	\$75

Standard customers' charging will be controlled to align with high periods of renewable penetration. Renewable energy forecasts will be provided to our managed charging vendors on a regular basis who will adjust participants' charging schedules to maximize consumption at times of high renewable penetration on the system in accordance with customer preferences. Customers identified as Distribution Optimized Participants will be controlled in a way that avoids distribution asset peaks, thus extending the life of the asset and reducing system costs. These customers provide incremental value to the grid for two reasons: they are capable of value-stacking grid benefits by avoiding costs at both the generation and distribution levels and at the level of a feeder or transformer it requires fewer controlled vehicles to have a meaningful impact on system operations creating a higher impact per-vehicle when

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they are optimized in this fashion. For these reasons, they will be credited a higher annual incentive compared to standard controlled customers.

For the duration of this TEP, customers will be grouped, categorized and dispatched based on the feeder that serves them. Current system capabilities allow for feeder level dispatching which the program will leverage to alleviate strain on selected feeders. Customers will be classified as “Standard” or “Distribution Optimized” customers based on the load characteristics of the feeder that serves them. Table 18 below shows the feeder criteria that will be considered when defining control groupings.

Table 18
Feeder Criteria

Criteria	Description
Feeder Loading Frequency	Duration of loading above nameplate capacity
Feeder Loading Magnitude	Maximum loading in excess of nameplate capacity
Program Participation	Number of controlled EV's per feeder
Scheduled Upgrades	Is an upgrade planned to meet existing overloads?

It should be noted that while the transition from OYC to Charging Perks provides increased functionality and cost efficiencies, Charging Perks in its current state is not cost effective under traditional analyses. This is due to the cost and complexity of implementation paired with the fact that most unmanaged charging has been shown to take place away from traditional system peaks that have historically driven the cost-effectiveness of demand management programs. EV managed charging presents a unique scenario given the high demand of L2 EV charging when compared to other end-uses in the home and the massive load growth potential of EV's. While optimization at current grid conditions and EV market penetration may not prove cost-effective, EV load growth has the potential to shift system level peaks while also creating strain on distribution grids at mass adoption.

Because of this phenomenon, it is critical to begin investment in active managed charging now, understand its use cases and determine scaling needs and a sustainable growth plan over the coming decade. This program will generate data and supplement work being done in our Colorado service territory today to determine the value of active and passive managed charging across the system. Ultimately this work is meant to determine the optimal program size, program structures and technology investment necessary to integrate EV load into our system in way that maximizes the potential for EVs to positively impact the system.

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2. *Plan for Existing Pilot Participants*

With the launch of Charging Perks and the Residential TOU Rate service in Minnesota, the Company is proposing to close its OYC program due to program costs, implementation complexity and ultimately a redundant value proposition given the new products available. OYC currently has 1,270 active participants as of October 1, 2025. OYC leverages the same software platforms that will be used for Charging Perks with similar OEM eligibility across programs, meaning the vast majority of current participants will have the opportunity to enroll in Charging Perks with either their vehicle or charger. For those who may not be eligible to enroll in Charging Perks due to lack of vehicle or charging station compatibility, the whole home TOU rate will be available in 2026 which will provide similar or greater monetary benefits than OYC to EV owners with no change in charging behavior.

A communications plan will be put into effect upon approval of the Charging Perks proposal notifying customers of the pilot change and informing them of their options. Eligible customers will be given the opportunity to auto-enroll in Charging Perks while all pilot participants will be provided information on the new TOU rate and how to enroll. The transition plan will include a “wind-down” period to give participants the opportunity to find a solution that meets their needs. We propose keeping OYC open until both Charging Perks and the Residential TOU Rate service are available for customer enrollments. Program staff will communicate with OYC participants throughout the launch process to keep them apprised of timelines and program availability.

3. *Program Operations*

Enrollment in managed charging programs has historically been cumbersome for customers and utilities. Customers are often enrolled through third-party applications with that data needing to be matched to a customer account billing account. In the past, this has required customers to enter account information when signing up for the program which has proven to be a significant deterrent to scaling enrollment in Public Service’s Colorado program. To combat this issue, data tools are being developed that will allow the enrollment of customers based solely on their address and contact information. This will drastically reduce data entry needs at the front end, allowing for a simple enrollment flow that better integrates with our software partners and auto-OEM’s. This functionality is expected to be available when the program is launched in Minnesota. Customer information will be securely stored and monitored by the program staff with the data necessary for dispatching vehicle control shared with our software partners.

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The program team will track where enrollments occur on our distribution system to identify those enrollments best suited to be optimized for distribution needs. The primary feeder serving each participant will be logged at the time of enrollment with participation on each feeder tracked in real time. On an annual basis, the program team will work with the system planning organization to identify feeders that are best suited for distribution optimization utilizing the criteria listed previously in this section. Customers will be identified as either “Standard” or “Distribution Optimized” customers and have their annual participation incentive adjusted accordingly. Customers will be notified once this is determined as the group that they fall into may change year to year based on shifting grid conditions. The Company understands that shifting incentive levels requires a robust communication plan to keep customers informed, build trust, and ultimately retain participants.

Charging behaviors will be optimized through our software partners based on a variety of data inputs. For Standard Customers, the Company will send daily generation forecasts to our software providers. With this information, they will make minor adjustments to customer charging to align charging with times of high renewable generation on the grid. Customers will set their preferences, as in when they need their car charged by, and the software provider will set their charging schedule in a way that meets their needs while optimizing according to program goals. Customers will have the option to opt out of the charging schedule set by the software provider at any time. Customers classified as Distribution Optimized will not have any difference in their charging experience. They will set their scheduling preferences and have minor adjustments made to their charging, however rather than maximizing charging during periods of high renewable generation, their charging schedule will be optimized to avoid feeder loading peaks. Initially, this will be done utilizing forecasted feeder loading with the intention of utilizing real-time loading data once Company DERMS and ADMS systems are able to provide that functionality.

The program also has the capability to dispatch more traditional demand-response events at times of high system stress. These would involve stopping a customer’s charge during these times. Home charging occurs infrequently and often at times that do not align with these system peak, limiting the effect of traditional demand response approaches. Because of this and the need to collect data around the primary optimization strategies stated here, the Company does not anticipate calling many demand response events during this TEP. Data collected through implementation of this program will be used to determine the ideal mix of control strategies moving forward.

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4. *Reporting Requirements*

We propose to track and report the following metrics:

- Program market penetration (% of EV's in the service territory that are controlled)
- Break out of participation by optimization schedule (standard customers vs. distribution optimized)
- Avoided generation costs by customer
- Avoided transmission and distribution cost by customer
- Program costs broken out into the following categories
 - Vendor costs
 - Customer incentives
 - operating costs
- Cumulative bill impacts of the program

5. *Participation and Costs*

Table 19 below provides the anticipated number of participants and total program budget for the Charging Perks Active Managed Charging Program from 2026 through 2029.

Table 19
Charging Perks Active Managed Charging Program Participation and Budget

Year	2026	2027	2028	2029	Total
Participants ⁸¹	1,300	3,260	6,738	11,152	11,152
Customer Credits	\$113,700	\$216,200	\$406,000	\$590,300	\$1,326,200
Program O&M	\$347,900	\$497,500	\$841,200	\$1,192,100	\$2,878,700
Total Program Budget	\$461,600	\$713,700	\$1,247,200	\$1,782,400	\$4,204,900

D. Five-Year Transportation Electrification Budget

Table 20 summarizes the Company's expected future expenditures for its current and anticipated transportation electrification pilots and programs for the next five years.

⁸¹ Participants are cumulative

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Table 20⁸²
Transportation Electrification Spending: 2026 – 2030
(\$ in Millions)

Budget Category	Capital	O&M	Marketing and Comms.	Other⁸³	Total
EVSI ⁸⁴	\$13.9	\$3.3	\$0	\$0	\$17.2
EVSE ⁸⁵	\$13.1	\$0	\$0	\$0	\$13.1
O&M & Mrktg. Comm.	\$0	\$1.8	\$0	\$0	\$1.8
IT	\$0	\$0.3	\$0	\$0	\$0.3
Charging Perks	\$0	\$5.8	\$0	\$0	\$5.8
Commercial ECO Programs	\$0	\$0	\$0	\$71.0	\$71.0
Residential ECO Programs	\$0	\$0	\$0	\$27.6	\$27.6
Total	\$27.0	\$11.2	\$0	\$98.6	\$136.8

IV. COST RECOVERY

With the proposed timing of the buildout and implementation of our Charging Perks Program, we anticipate requesting cost recovery for the program in a future rate proceeding.

As to the other two new offerings, and as mentioned previously, the Company plans to pursue cost recovery of the Commercial EV Infrastructure Rebate and Advisory Program and Residential Advisory Services through ECO. The Company believes that these proposals qualify as an offering under the Efficient Fuel Switching portfolio in ECO, using the Conservation Improvement Program Rider. The Company plans to submit proposals for the above-mentioned programs in ECO in early 2026.

V. PROPOSED TARIFF CHANGES

The Company is proposing a variety of tariff modifications in this TEP. The modifications generally fall into four categories. The first category is energy rate and monthly customer charge updates. The second is related to the closure of our Commercial EV Pilots to new customers. The third category is related to the closure

⁸² Provided in Compliance with Order Points A.29.i and F.11 of the Commission's December 8, 2022 Order in Docket Nos. E002/M-21-694 and E999/CI-17-879.

⁸³ Other includes all costs we anticipate including in our ECO portfolio

⁸⁴ Includes both EVSI and distribution upgrade costs.

⁸⁵ Forecast includes residential EVSE only, though some EVSE may also be supported through commercial pilots.

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of our Optimize Your Charge Pilots. Finally, the fourth category is modifications necessary to allow net metered customers to also participate in EV programs. We discuss each of these categories in greater detail below.

The proposed tariff modifications are included in Attachment H. Attachment H includes the following pages of our Minnesota Electric Rate Book:

- Section No. 5, Sheet No. 7.1
- Section No. 5, Sheet No. 7.2
- Section No. 5, Sheet No. 8
- Section No. 5, Sheet No. 8.2
- Section No. 5, Sheet No. 8.3
- Section No. 5, Sheet No. 16
- Section No. 5, Sheet No. 16.1
- Section No. 5, Sheet No. 16.2
- Section No. 5, Sheet No. 16.3
- Section No. 5, Sheet No. 16.4
- Section No. 5, Sheet No. 50.6
- Section No. 5, Sheet No. 50.7
- Section No. 5, Sheet No. 50.8
- Section No. 5, Sheet No. 50.9
- Section No. 5, Sheet No. 50.10
- Section No. 5, Sheet No. 51
- Section No. 5, Sheet No. 51.1
- Section No. 5, Sheet No. 51.2
- Section No. 5, Sheet No. 51.3
- Section No. 5, Sheet No. 52
- Section No. 5, Sheet No. 52.1
- Section No. 5, Sheet No. 52.2
- Section No. 5, Sheet No. 52.3
- Section No. 5, Sheet No. 52.4
- Section No. 5, Sheet No. 52.5
- Section No. 5, Sheet No. 52.6
- Section No. 7, Sheet No. 115
- Section No. 7, Sheet No. 115.1

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E. Energy Rate and Monthly Customer Charge Updates

1. *Aligning Residential and MDU Pilot Energy Rates with Residential TOU Rates*

As a part of this TEP, we are proposing to align the energy rates and TOU Rate Periods of our EV programs with the rates that will be used for our approved Residential TOU Rate. Historically, our EV Accelerate at Home Program and Multi-dwelling Unit Pilots have both used the same pricing as our Residential TOU rates. The Company originally proposed similar tariff modifications in our Residential TOU Rate docket, but the Commission denied that request without prejudice.

Table 21 below shows the revised time periods and energy rates that we propose to use for our EV Accelerate at Home Program and Multi-dwelling Unit Pilot.⁸⁶

Table 21
Revised Proposed Residential TOU Rate Design
(Rates in cents per kWh)⁸⁷

TOU Rate Period	Time Period	Summer Energy Rate	Winter Energy Rate
On-Peak	6 PM-9 PM Weekdays	21.329	17.314
Mid-Peak	All Other Hours	13.468	11.485
Off-Peak	12 AM-6 AM, All Days	7.479	7.479

Modifications to implement the new energy rates and time periods reflected in the table affect Minnesota Electric Rate Book Section No. 5, Sheet Nos. 7.1, 7.2, 8.2, 8.3, and 52.5.

2. *EV Accelerate at Home Monthly Customer Charge*

In conjunction with implementing these TOU rates for our EV programs, we are also proposing to modify the monthly customer charge used for our EVAAH Subscription Service to align that pricing with the new TOU rates. The monthly customer charge for the subscription service option considers the cost of providing off-peak charging,⁸⁸ along with the cost of charging equipment and services provided as a part

⁸⁶ Please note that the energy rates have not yet been formally approved by the Commission. The Commission has already approved the time periods, with the exact energy rates proposed in our August 14, 2025 Compliance Filing in Docket No. E002/M-23-524.

⁸⁷ Does not include fuel costs.

⁸⁸ The Subscription Service option provides participants with up to 1,000 kWh of off-peak charging per month as a part of the monthly customer charge.

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of the subscription program. The calculation of the new monthly customer charges for the subscription service option can be found in Attachment I. The modifications to the EV Home Subscription Service monthly charge affect Minnesota Electric Rate Book Section No. 5, Sheet No. 8.2.

In addition, we request approval of modifications to the monthly customer charges for our other EVAAH options, Pay-As-You-Go and Voluntary Charger Service. These monthly customer charges cover the cost of operations and maintenance for the programs, including charging equipment maintenance and data services charges. The calculation of these monthly customer charges can also be seen in Attachment I. The requested modifications related to EVAAH monthly customer charges affect Minnesota Electric Rate Book Section No. 5, Sheet Nos. 7.1 and 8.

F. Closure of Commercial EV Pilots

As discussed above, the Company is proposing to close our Commercial EV Pilots, to be replaced by a Commercial EV Infrastructure Rebate program. Under our proposal, we would keep the pilots operating for customers already enrolled in the programs, allowing them to participate through the end of their contract terms, while closing the pilots to new enrollees. In conjunction with that proposal, the Company is proposing modifications to the tariffs of each Commercial EV Pilot to reflect that the pilots are now closed to new participants. Specifically, we propose to replace the current tariff language under the Availability sections with the following, “This pilot is now closed and not available to new customers.” The affected pages of our Minnesota Electric Rate Book are Section No. 5, Sheet Nos. 51, 52, and 52.4.

G. Closure of Optimize Your Charge Pilots

As discussed above, the Company is proposing to end our Optimize Your Charge pilot, to be replaced by our proposed Charging Perks program. In conjunction with that proposal, the Company is proposing modifications to the Optimize Your Charge tariff pages reflecting that the pilot is closed and no longer available. We propose deleting the language from all Optimize Your Charge tariff pages and replacing the language with the word “CANCELED”. This is our standard procedure for tariff pages for closed programs and pilots when the tariff pages are not reused. The affected pages of our Minnesota Electric Rate Book are Section No. 5, Sheet Nos. 16, 16.1, 16.2, 16.3, and 16.4 for the residential Optimize Your Charge pilot and Section No. 5, Sheet Nos. 50.6, 50.7, 50.8, 50.9, and 50.10 for the commercial Optimize Your Charge pilot.

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H. Allowing Net-Metered Customer Participation

The current tariffed version of the Customer Service Agreements (CSAs) for our EVAAH currently exclude customers who are currently participating in a net metering tariff. With changes made as a part of our Residential TOU Rate proceeding, along with the implementation of Advanced Metering Infrastructure meters in Minnesota, the Company can now facilitate participation in an EV program for customers also participating in a net metering tariff. As such the Company is proposing modifying two tariff pages to remove the language that restricted net metering customers. The affected pages of our Minnesota Electric Rate Book are Section No. 7, Sheet Nos. 115 and 115.1.⁸⁹

CONCLUSION

The Company is pleased to submit this TEP for the Commission's consideration. Our 2025 TEP lays out our vision for the future of transportation electrification in our Minnesota service territory. In this TEP we provide information about three new EV programs that the Company intends to bring to market in the near future:

- Commercial EV Infrastructure Rebate and Advisory Program
- Residential Advisory Services and Guided Charging Installation Program
- Charging Perks Active Managed Charging Program

In addition, we provide information and discussions in compliance with established reporting requirements. We respectfully request that the Commission accept this TEP in Compliance with those established reporting requirements. Finally, we respectfully ask that the Commission approve our proposed tariff modifications included in this TEP.

Dated: October 31, 2025

Northern States Power Company

⁸⁹ Please note that the included modifications to these pages also include modifications changing the name of our Residential TOU Rate Pilot.

Source (Docket Nos. or Minn. Law.)	Order Date	Reporting Requirement	Reference
21-694 17-879	8-Dec-22	A. Baseline Distribution System and Financial Data	
		21. Total number of electric vehicles in service territory, by type where possible (e.g. light duty, transit, medium duty, heavy duty)	Included with our Integrated Distribution Planning filing, submitted October 31, 2025. <i>See</i> Chapter 7, Table 7-3
		22. Total number and capacity of public access electric vehicle charging stations, broken out by:	
		a. Number and capacity of known public access Level 2 Charging Stations	Included with our Integrated Distribution Planning filing, submitted October 31, 2025. <i>See</i> Chapter 7, Table 7-4
		b. Number and capacity of Level 2 Charging Stations enrolled in a utility program, broken out by program	
		c. Number and capacity of known public access direct current fast charging (DCFC) stations	
		d. Number and capacity of DCFC installed through a utility EV program, broken out by program	
		e. All other known EV charging stations (by type, ex DCFC, Level 2)	
		<i>Financial Data</i>	
		26. Historical distribution system spending for the past 5-years, in each category:	
		i. Electric Vehicle Programs	
		1) Capital Costs	Section I.B.2, Table 3
		2) O&M Costs	
		3) Marketing and Communications	
		4) Other (provide explanation of what is in "other")	
		29. Planned distribution capital projects, including drivers for the project, timeline for improvement, summary of anticipated changes in historic spending. Driver categories should include:	
		i. Electric Vehicle Programs	
		1) Capital Costs	Section III.D, Table 20
		2) O&M Costs	
		3) Marketing and Communications	
		4) Other (provide explanation of what is in "other")	
		<i>Electric Vehicles</i>	
		34. A sumamry table with the following information for each EV rate offering or program during the reporting period:	
		a. Number of customers and/or vehicles enrolled at the end of the reporting period	Section I.B.1, Table 2
		b. Total energy consumed (MWh) during each EV tariff charging period	
		c. Peak demand (MW) and the date and time at which it occurred.	
		35. Any system upgrades performed to accommodate EV charging, total costs paid by utility and by customer, and average cost per upgrade. Cost should be reported separately for the following customer groups: Residential, Government Fleet, Private Fleet, and Public Charging, Other (specify).	Section I.B.3, Table 4
		C. Distributed Energy Resource Scenario Analysis	
		1...For electric vehicle forecasts scenarios, Xcel shall provide base-case, medium, and high adoption, capacity, and energy forecasts by sector (light duty, medium duty, and heavy duty).	Included with our Integrated Distribution Planning filing, submitted October 31, 2025. <i>See</i> Chapter 1, Table 1-9
		F. Transportation Electrification Plan	
		1. Xcel shall provide a summary of the utility’s ongoing transportation electrification efforts, including existing programs and projects in development over at least the next 2 years.	Section I.B.1, Table 1
		2. Xcel shall provide a discussion of how it plans to facilitate:	
		a. availability and awareness of public charging infrastructure, including an assessment of the private sector fast charging marketplace for the utility’s service territory;	Sections I.B.6 and II.C.1
		b. availability of residential charging options for both single family and multiple unit dwellings;	Section I.B.4
		c. programs or tariffs in development to address flexible load or reduce metering and data costs; and	Section II.D

Source (Docket Nos. or Minn. Law.)	Order Date	Reporting Requirement	Reference
		d. fleet electrification.	Section I.B.5
		3. Xcel shall provide a discussion of how it plans to optimize EV benefits, including a discussion of how to align charging with periods of lower customer demand and higher renewable energy production and by improving grid management and overall system utilization/efficiency.	Section I.B.3
		4. Xcel shall include a discussion of how it plans to encourage more customers with electric vehicles to participate in managed charging.	Section I.B.4
		5. Xcel shall provide a discussion that addresses divestment issues and identifies possible divestment strategies for its DCFC Network approved in Docket 20-745 at the conclusion of the pilot program.	Section I.B.6.a
		6. Xcel shall provide evaluations of non-pilot EV programs that examine the cost-effectiveness of the programs as currently designed and potential changes that could improve their cost-effectiveness.	Section II.A.1
		7. Xcel shall provide a summary of customer EV education initiatives. The Company does not need to provide specific examples of outreach materials.	Section I.B.7
		8. Xcel shall provide summaries of any proposals or pilots, including links to full reports, submitted to other regulatory agencies or jurisdictions (for example, proposals submitted under Conservation Improvement Programs or pilots run in other states).	Section I.C Attachment C
		9. Xcel shall provide citations with links to the most recent reports for any ongoing EV pilots or programs.	Section I.B.1
		10. Xcel shall provide historical spending for the past 5-years on all transportation electrification initiatives, broken down across the sections of its budget.	Section I.B.2, Table 3
		11. Xcel shall provide future spending for the next 5-years on all transportation electrification initiatives, broken down across the sections of its budget.	Section III.D, Table 20
23-452	9-May-24	12. The Commission approves the Electric School Bus V2G Demonstration with the following modifications:	



EV INTENDER PROFILING

NOVEMBER 2024

*This final report has been provided to Xcel
Energy by Burke Inc. without editing.*

Learning Objectives

Electric vehicle intender analysis and persona development

Xcel Energy seeks to better understand customers most likely to adopt an electric vehicle and to identify subgroups within to aid in product/program and messaging development.

Research Questions

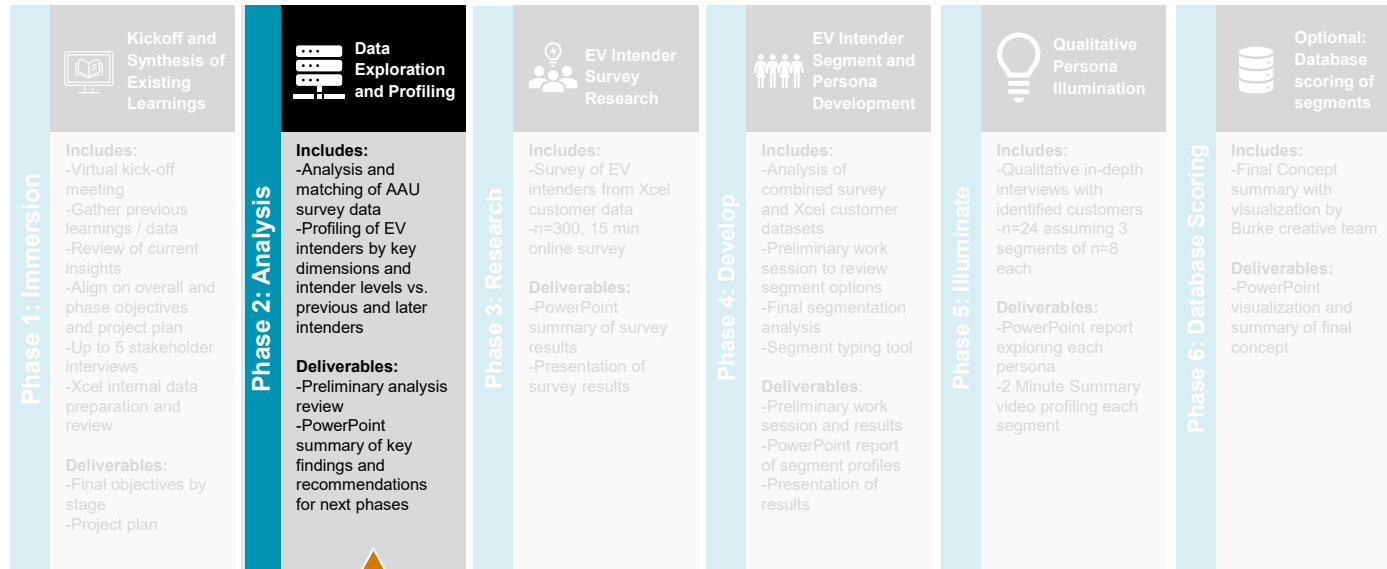
- What is the demographic and psychographic profile of EV intenders? How do the profiles differ among levels of intention?
- What common characteristics exist across those most likely to adopt electric vehicles?
- How do these characteristics differ from early and later intenders?
- What sub-groups can be identified among EV intenders leveraging available data sources?
- What motivators and barriers exist for EV intenders?
- What is the timeframe of EV adoption and its relation to the market size within the Xcel Energy service area?
- How can Xcel Energy help in addressing the needs and barriers for EV intenders?

Business Impact

- This initiative will enable Xcel Energy in program/product development, education and communication to EV intenders to best support the growth of EV adoption within the Xcel Energy service territory.

Approach Overview

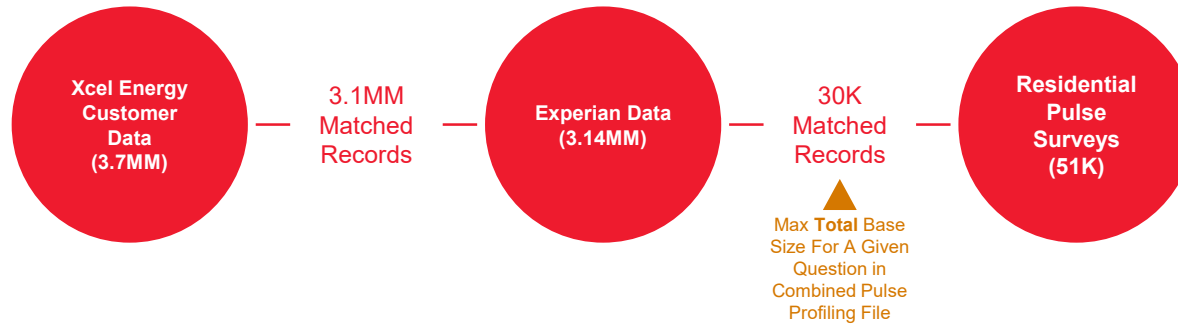
To achieve the stated objectives, a multi-phase engagement will be undertaken, building on learning from each phase to maximize the insights and potential activation of this effort.



We Are
Here

DATA SOURCES USED

Three primary sources of data were combined to establish a pool that could be used for profiling off of the Experian EV Intender variable.



EXPERIAN EV INTENDER VARIABLE

This exploratory phase focuses on splitting Xcel Energy Customers on their level of intent regarding purchasing a new electric vehicle (EV). Initial hypotheses posit that three groups exist among Xcel Energy customers: the first adopters who are set on purchasing an EV, the “next wave” of adopters, and those that are farthest behind when it comes to purchasing an EV. The “next wave” adopters have been identified as the target audience for Xcel Energy EV charging initiatives.

EV Intender Description

Experian’s Auto Audiences are built on the statistical analysis of our industry leading North American Vehicle and ConsumerView Databases. This Auto in the Market audience indicates consumers **likely to be in the market to buy an Alternate Fuel Electric vehicle in the next 180 days**.

Variable Values

1 <i>Extremely Likely</i>	2 <i>Highly Likely</i>	3 <i>Very Likely</i>	4 <i>Somewhat Likely</i>	5 <i>Likely</i>	6 <i>Somewhat Unlikely</i>	7 <i>Very Unlikely</i>	8 <i>Highly Unlikely</i>	9 <i>Extremely Unlikely</i>	0/Blank
% (#) of customers									
2.2% (66K)	2.3% (69K)	2.4% (74K)	5.1% (156K)	5.1% (154K)	4.8% (145K)	30.1% (919K)	27.1% (826K)	21% (640K)	
Early Adopters			Next Wave Adopters Target Segment			Late Adopters		Excluded	

Summary of Findings

SUMMARY OF FINDINGS

Analysis of Xcel Energy customers based on the Experian EV Intender variable yields a distinct group of Next Wave Adopters (3-6) consisting of almost 1-in-5 (17%) Xcel Energy customers

- Despite the differentiation, Xcel Energy pulse survey data indicates low *stated* likelihood (3% T2B) to purchase an EV in the next 12 months across all segment levels

At the three-segment level, the Next Wave Adopters show differentiation from both the Early and Late Adopter Segment

- The Next Wave Adopters tend to mirror the Early Adopters more so than the Late Adopters

EV owners and intenders skew towards being male, more educated, married with children at home and homeowners with home values over \$500k

- These demographics generally follow a linear pattern toward these groups as EV intention increases

EV ownership and intention levels directly correlate with likelihood to have smart devices / technology

SUMMARY OF FINDINGS

Within the Next Wave Adopters there is evidence that suggests additional segmentation could be undertaken to tease out differentiating characteristics among the individual classifications (3, 4, 5, 6).

- Given the full Next Wave Adopter segment is less than 20% of customers, consideration should be given to the level of additional segmentation undertaken
- Given the closeness with the Early Adopters, looking at the 1-6 classified intenders could allow for further segmentation
 - Self-stated pulse survey findings indicate only 14% of those classified 1-2 are current EV owners

EV INTENDER SIZING

Splitting the Xcel Customer base by the Experian EV Intender variable indicates that almost 1-in-5 customers fall in the target intender range.



Experian Variable: Auto_Buy_Fuel_Electric - indicates consumers likely to be in the market to buy an Alternate Fuel Electric vehicle in the next 180 days.
1=Extremely Likely, 2=Highly Likely, 3=Very Likely, 4=Somewhat Likely, 5=Likely, 6=Somewhat Unlikely, 7=Very Unlikely, 8=Highly Unlikely, 9=Extremely Unlikely
Blank=Not Scored, 0=Unknown – not included in %'s above
Base Size: n=3,103,336

THREE-SEGMENT PROFILING | SUMMARY

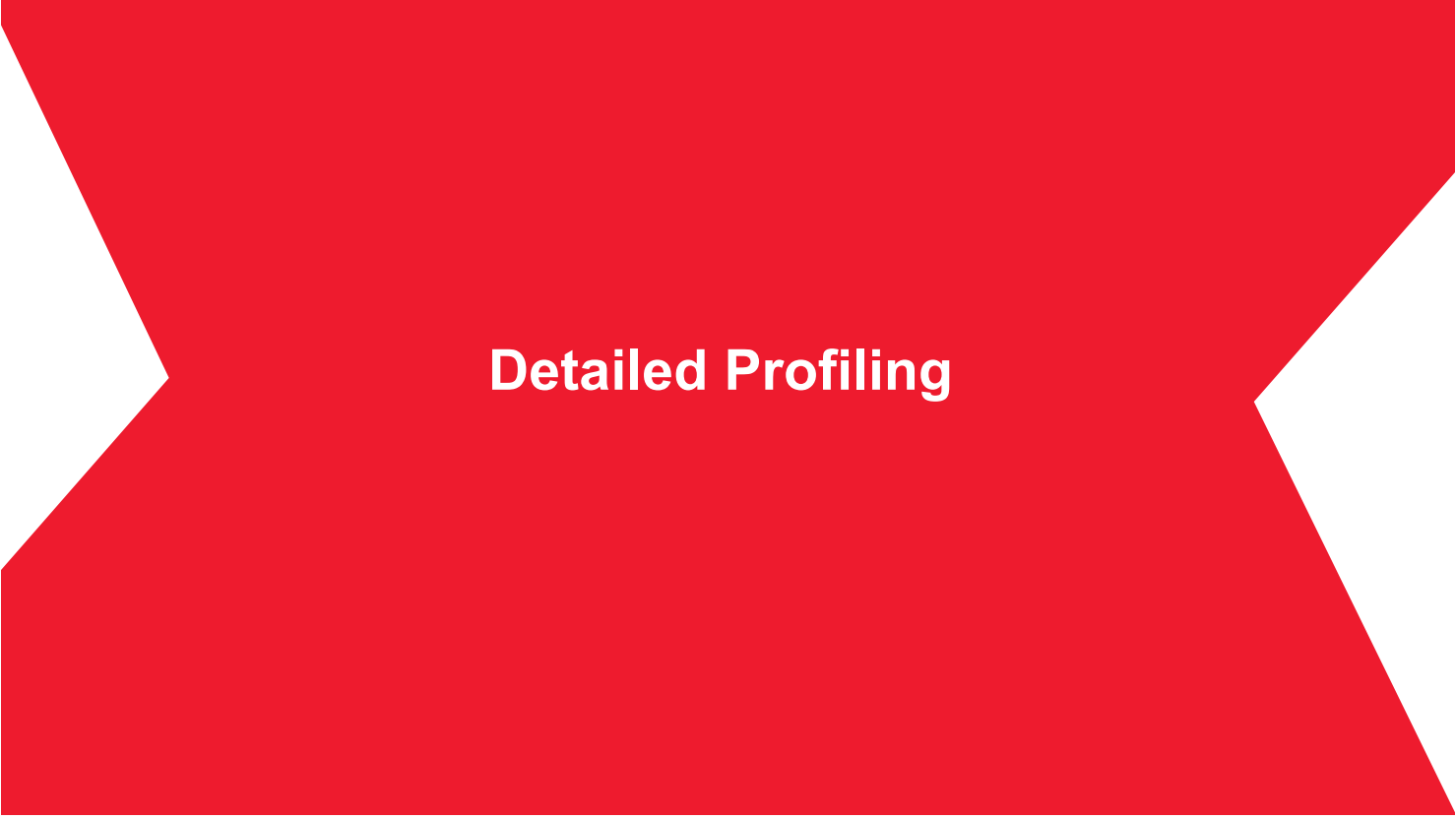
Below is a summary of differences between adopter groups organized by thematic areas.

Early Adopters (1-2 Classified)	Next Wave Adopters (3-6 Classified)	Late Adopters (7-9 Classified)
Demos <i>Most likely to be...</i> • Male • Educated (Bachelor's +) • Married • Homeowner of \$500K+ XCEL Segments • More concentrated in Comfort Curators Experian Segments • Likely to be Behavioral and Think Greens • Likely to be Power Elite Mosaic Household • Likely to have high household profitability Connected Devices • Most likely to have connected devices EV Perceptions • Most interested and familiar with EV's	Demos <i>More likely to be...</i> • Male • Educated (Bachelor's +) • Married • Homeowner of \$500K+ XCEL Segments • Distributed across several segments, highest for Comfort Curators Experian Segments • Likely to be Behavioral and Think Greens • Likely to be Booming With Confidence Mosaic Household • Likely to have high-to-good household profitability Connected Devices • More likely to have connected devices EV Perceptions • More interested and familiar with EV's	Demos <i>Least likely to be...</i> • Male • Educated (Bachelor's +) • Married • Homeowner of \$500K+ XCEL Segments • Distributed across several segments, highest for Digital Drivers Experian Segments • Likely to be Potential Greens • Likely to be Singles and Starters Mosaic Household • Likely to have good-to-poor household profitability Connected Devices • Least likely to have connected devices EV Perceptions • Least interested and familiar with EV's

NEXT WAVE ADOPTER DEEP DIVE | SUMMARY

Comparing the individual classifications that make up the Next Wave Adopters, we see some differences within each compared to the overall group. In addition to differences compared to the group total, there are significant differences between individual classifications on several metrics.

Next Wave Adopters (3-6 Classified)	3 Classification	4 Classification	5 Classification	6 Classification
Demos <i>More likely to be...</i> - Male - Educated (Bachelor's +) - Married - Homeowner of \$500K+ XCEL Segments - Distributed across several segments, highest for Comfort Curators Experian Segments - Likely to be Behavioral and Think Greens - Likely to be Booming With Confidence Mosaic Household - Likely to have high-to-good household profitability Connected Devices - More likely to have connected devices EV Perceptions - More interested and familiar with EV's	Demos - Younger - More educated - More likely married - Higher home value XCEL Segments - Highest on Comfort Curators Experian Segments - More likely Power Elite - Higher profitability Connected Devices - More likely to have smart appliances, thermostat, lighting, plugs EV Perceptions - More likely own EV, familiar with EV	Demos - More likely male - More educated XCEL Segments - Highest on Comfort Curators Experian Segments - Higher profitability Connected Devices - More likely to have security system, smart appliances, thermostat, speaker, smoke detector EV Perceptions	Demos - More evenly distributed across most segments Experian Segments - Less likely Power Elite Connected Devices - Less likely to have smart appliances, thermostat, speaker EV Perceptions - Less familiar with EV's	Demos - Less likely male - Less educated - Less likely married - Lower home value XCEL Segments - More evenly distributed across segments, highest on Utility Utilitarians Experian Segments - Less likely Power Elite - Lower profitability (still "Good" though) Connected Devices - Less likely to have smart speaker, smoke detector EV Perceptions



Detailed Profiling

EV INTENDER DEMOS

On many demos, there is a clear linear decline from Early-to-Late Adopters.

Indicates highest score
Indicates 2nd highest score
Indicates 3rd highest score

Data Source	Demo	1-2	3-6	7-9
Pulse	Gender - Male	63%	57%	43%
Pulse	Age - Mean	48	47	47
Pulse	Age - Under 40	11%	12%	17%
Experian	Education Bachelor degree +	67%	58%	27%
Experian	Married	97%	90%	57%
Experian	Home value \$500K+	93%	88%	17%
Experian	Avg. # of Adults in Home	2.8	2.7	1.8
Experian	1+ Child in Household	23%	21%	15%
Experian	SFDU Dwelling Type	95%	92%	59%
Experian	Homeowner (probable)	98%	93%	50%

Base (Pulse) n=248 | 1,092 | 4,866

Base (Experian) n=1,008 | 4,122 | 25,567

EV INTENDER DEMOS

3's and 4's tend to be higher on key demos,
while 6's are lower than the full 3-6 total.

	Indicates >4+ points higher than 3-6 total
	Indicates >4- points lower than 3-6 total
	Within +/- 4 points than 3-6 total
BOLD	Indicates sig diff to at least one other individual classification

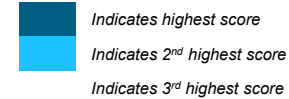
Data Source	Demo	3-6	3	4	5	6
Pulse	Gender - Male	57%	59%	61%	56%	53%
Pulse	Age - Mean	47	43.6	48.1	46.4	48.6
Pulse	Age - Under 40	12%	14%	11%	12%	12%
Experian	Education Bachelor degree +	58%	67%	64%	56%	52%
Experian	Married	90%	96%	92%	91%	84%
Experian	Home value \$500K+	88%	92%	91%	87%	81%
Experian	Avg. # of Adults in Home	2.7	2.7	2.9	2.7	2.6
Experian	1+ Child in Household	21%	21%	21%	22%	19%
Experian	SFDU Dwelling Type	92%	94%	95%	92%	88%
Experian	Homeowner (probable)	93%	96%	96%	93%	89%

Base (Pulse) n=1,092 | 150 | 295 | 338 | 309

Base (Experian) n=4,122 | 589 | 1,108 | 1,246 | 1,179

EV INTENDER XCEL SEGMENTS

Early adopters largely reside in the Comfort Curators segment, while the Next Wave and Late Adopters are more split across segments.



Data Source	Experian Segments	1-2	3-6	7-9
Xcel	Comfort Curators	59%	33%	7%
Xcel	Price Pressured	0%	1%	8%
Xcel	Eco Advocates	13%	22%	21%
Xcel	Utility Utilitarians	13%	24%	29%
Xcel	Digital Drivers	15%	19%	35%

Base (Xcel) n=126,512 | 498,329 | 2,166,883

EV INTENDER XCEL SEGMENTS

3-intenders make up a higher concentration of the Comfort Curator segment but are a lower concentration of Eco Advocates and Utility Utilitarians.

	Indicates >4+ points higher than 3-6 total
	Indicates >4- points lower than 3-6 total
	Within +/- 4 points than 3-6 total
BOLD	Indicates sig diff to at least one other individual classification

Data Source	Experian Segments	3-6	3	4	5	6
Xcel	Comfort Curators	33%	47%	39%	30%	24%
Xcel	Price Pressured	1%	1%	1%	1%	2%
Xcel	Eco Advocates	22%	18%	21%	24%	25%
Xcel	Utility Utilitarians	24%	17%	21%	25%	28%
Xcel	Digital Drivers	19%	17%	18%	20%	21%

Base (Experian) n=498,329 | 69,815 | 147,050 | 145,473 | 135,991

EV INTENDER EXPERIAN SEGMENTS

The three adopter groups split apart across various Experian segment variables.

■ Indicates highest score
■ Indicates 2nd highest score
■ Indicates 3rd highest score

Data Source	Experian Segments	1-2	3-6	7-9
Experian	Green Aware - Behavioral Greens	32%	37%	22%
Experian	Green Aware - Think Greens	38%	36%	19%
Experian	Green Aware - Potential Greens	13%	14%	47%
Experian	Green Aware - True Browns	17%	14%	12%
Experian	Mosaic Household - Power Elite	47%	21%	2%
Experian	Mosaic Household - Booming with Confidence	23%	27%	5%
Experian	Mosaic Household - Promising Families	9%	14%	9%
Experian	Mosaic Household - Singles and Starters	1%	2%	28%
Experian	ConsumerView_Profitability_Score - High	85%	64%	19%
Experian	ConsumerView_Profitability_Score - Good	14%	28%	22%
Experian	ConsumerView_Profitability_Score - Fair	1%	8%	37%
Experian	ConsumerView_Profitability_Score - Poor	-	*	22%

Base (Experian) n=1,008 | 4,122 | 25,567

EV INTENDER EXPERIAN SEGMENTS

Individual classifications pull apart on various Experian segment variables.

	Indicates >4+ points higher than 3-6 total
	Indicates >4- points lower than 3-6 total
	Within +/- 4 points than 3-6 total
BOLD	Indicates sig diff to at least one other individual classification

Data Source	Experian Segments	3-6	3	4	5	6
Experian	Green Aware - Behavioral Greens	37%	37%	34%	37%	38%
Experian	Green Aware - Think Greens	36%	37%	38%	35%	34%
Experian	Green Aware - Potential Greens	14%	11%	13%	15%	16%
Experian	Green Aware - True Browns	14%	15%	15%	13%	12%
Experian	Mosaic Household - Power Elite	21%	37%	22%	17%	15%
Experian	Mosaic Household - Booming with Confidence	27%	28%	31%	27%	22%
Experian	Mosaic Household - Promising Families	14%	11%	14%	15%	14%
Experian	Mosaic Household - Singles and Starters	2%	1%	1%	2%	3%
Experian	ConsumerView_Profitability_Score - High	64%	77%	71%	61%	53%
Experian	ConsumerView_Profitability_Score - Good	28%	21%	24%	31%	33%
Experian	ConsumerView_Profitability_Score - Fair	8%	2%	6%	8%	13%
Experian	ConsumerView_Profitability_Score - Poor	*	-	*	*	1%

Base (Experian) n=4,122 | 589 | 1,108 | 1,246 | 1,179

EV INTENDER CONNECTED PROFILE

Connected devices follow a linear drop from Early-to-Late Adopters.

 Indicates highest score
 Indicates 2nd highest score
 Indicates 3rd highest score

Data Source		% Currently Have...	1-2	3-6	7-9
Pulse		Home Security System	54%	42%	25%
Pulse		Smart Appliance	46%	34%	24%
Pulse		Smart or Connected Thermostat	63%	50%	30%
Pulse		Digital Voice Assistant/Smart Speaker	51%	49%	39%
Pulse		Smart Or Connected Lighting	39%	30%	19%
Pulse		Smart Or Connected Smoke/Carbon Monoxide Detectors	58%	49%	43%
Pulse		Smart Plugs	39%	26%	18%
Pulse		Smart TV	87%	80%	72%

Base (Pulse) n=247-255 | 1,068-1,107 | 4,814-4,945

EV INTENDER CONNECTED PROFILE

Smart device ownership splits the full Next Wave segment into two more distinct groups.

	Indicates >4+ points higher than 3-6 total
	Indicates >4- points lower than 3-6 total
	Within +/- 4 points than 3-6 total
BOLD	Indicates sig diff to at least one other individual classification

Data Source	% Currently Have...	3-6	3	4	5	6
Pulse	Home Security System	42%	43%	46%	41%	39%
Pulse	Smart Appliance	34%	41%	38%	30%	32%
Pulse	Smart or Connected Thermostat	50%	56%	55%	46%	47%
Pulse	Digital Voice Assistant/Smart Speaker	49%	51%	57%	45%	45%
Pulse	Smart Or Connected Lighting	30%	35%	31%	29%	29%
Pulse	Smart Or Connected Smoke/Carbon Monoxide Detectors	49%	48%	54%	50%	45%
Pulse	Smart Plugs	26%	31%	28%	24%	25%
Pulse	Smart TV	80%	83%	80%	77%	81%

Base (Pulse) 1,068-1,107 | 146-152 | 288-301 | 338-346 | 293-309

EV INTENDER EV PERCEPTIONS

Interestingly, all three groups have low stated purchase intent of an EV based on Pulse responses.

Indicates highest score
Indicates 2nd highest score
Indicates 3rd highest score

Data Source	EV Perceptions	1-2	3-6	7-9
Pulse	Currently Own EV (<i>self-stated</i>)	14%	8%	2%
Pulse	Definitely/Probably will purchase EV in next 12 months (<i>self-stated</i>)	5%	3%	2%
Pulse	8,9,10 Familiarity with EVs (<i>self-stated</i>)	45%	37%	24%
Pulse	8,9,10 Interested In EVs (<i>self-stated</i>)	31%	22%	13%
Pulse	Somewhat/Completely Agree EV Charging Stations Are Easy For Me To Access (<i>self-stated</i>)	26%	21%	13%
Pulse	Somewhat/Completely Agree There Are Knowledgeable EV Dealers near Me (<i>self-stated</i>)	38%	32%	18%

Base (Pulse) n=87-147 | 400-702 | 1,968-3,397

EV INTENDER EV PERCEPTIONS

There is some variation between individual classifications, but many are in line with the group's total.

	Indicates >4+ points higher than 3-6 total
	Indicates >4- points lower than 3-6 total
	Within +/- 4 points than 3-6 total
BOLD	Indicates sig diff to at least one other individual classification

Data Source EV Perceptions		3-6	3	4	5	6
Pulse	Currently Own EV (<i>self-stated</i>)	8%	13%	8%	8%	5%
Pulse	Definitely/Probably will purchase EV in next 12 months (<i>self-stated</i>)	3%	-	3%	4%	2%
Pulse	8,9,10 Familiarity with EVs (<i>self-stated</i>)	37%	44%	40%	31%	38%
Pulse	8,9,10 Interested In EVs (<i>self-stated</i>)	22%	13%	25%	23%	23%
Pulse	Somewhat/Completely Agree EV Charging Stations Are Easy For Me To Access (<i>self-stated</i>)	21%	22%	21%	21%	21%
Pulse	Somewhat/Completely Agree There Are Knowledgeable EV Dealers near Me (<i>self-stated</i>)	32%	29%	39%	30%	32%

Base (Pulse) n=400-702 | 56-105 | 106-176 | 128-223 | 110-199

Experian Variable: Auto_Buy_Fuel_Electric

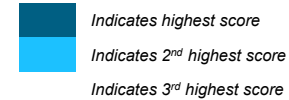
1=Extremely Likely,2=Highly Likely,3=Very Likely,4=Somewhat Likely,5=Likely,6=Somewhat Unlikely,7=Very Unlikely,8=Highly Unlikely,9=Extremely Unlikely

Blank=Not Scored, 0=Unknown – not included in %'s above

Base Size: n=3,103,336

EV INTENDER XCEL PERCEPTIONS

Earlier adopters tend to have lower perceptions of Xcel Energy.



Data Source	Xcel Perceptions	1-2	3-6	7-9
Pulse	Xcel Energy actively works to help preserve the environment_8,9,10	29%	31%	37%
Pulse	Xcel Energy cares about my community_8,9,10	20%	29%	39%
Pulse	Xcel Energy offers solutions for managing my energy costs_8,9,10	29%	30%	39%
Pulse	Xcel Energy works to keep costs low for customers_8,9,10	20%	19%	28%

Base (Pulse) n=35 | 163 | 739

EV INTENDER XCEL PERCEPTIONS

The individual classifications pull apart on perceptions of Xcel.

	Indicates >4+ points higher than 3-6 total
	Indicates >4- points lower than 3-6 total
	Within +/- 4 points than 3-6 total
BOLD	Indicates sig diff to at least one other individual classification

Data Source	Xcel Perceptions	3-6	3	4	5	6
Pulse	Xcel Energy actively works to help preserve the environment_8,9,10	31%	31%	35%	22%	38%
Pulse	Xcel Energy cares about my community_8,9,10	29%	31%	30%	25%	33%
Pulse	Xcel Energy offers solutions for managing my energy costs_8,9,10	30%	19%	41%	22%	38%
Pulse	Xcel Energy works to keep costs low for customers_8,9,10	19%	8%	32%	13%	22%

Base (Pulse) n=163 | 26 | 37 | 55 | 45

Experian Variable: Auto_Buy_Fuel_Electric

1=Extremely Likely,2=Highly Likely,3=Very Likely,4=Somewhat Likely,5=Likely,6=Somewhat Unlikely,7=Very Unlikely,8=Highly Unlikely,9=Extremely Unlikely

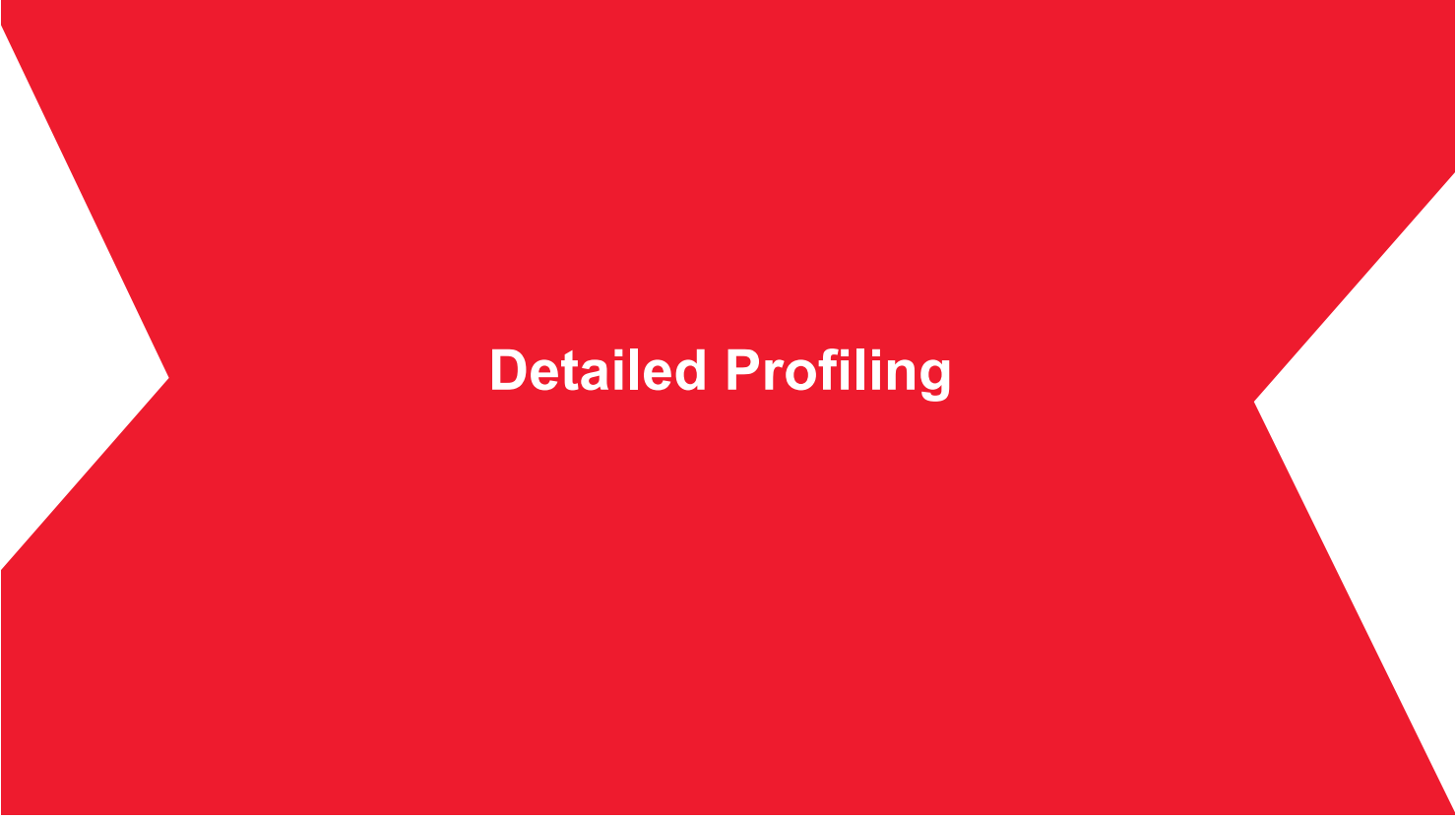
Blank=Not Scored, 0=Unknown – not included in %'s above

Base Size: n=3,103,336

NEXT STEPS

Kickoff Social IQ Analysis for further market context on attitudes towards charging

Conduct survey research among intender target to analyze and conduct a segmentation within the intenders



Detailed Profiling

EXPERIAN MOSAIC USA SEGMENT OVERVIEW

Power Elite: This group consists of wealthy, influential individuals who live in exclusive neighborhoods. They have high incomes, advanced degrees, and are often business leaders or professionals.

Booming With Confidence: This group includes prosperous, middle-aged couples and families who live in suburban and exurban areas. They have high incomes, are well-educated, and enjoy an active lifestyle.

Promising Families: These are young, middle-income families living in suburban and exurban areas. They are homeowners, have stable jobs, and are focused on raising their children.

Singles and Starters: This group includes young, single professionals and students living in urban areas. They have moderate incomes, rent their homes, and enjoy an active social life.

EXPERIAN GREEN AWARE SEGMENT OVERVIEW

Experian Green Aware segments the 126 million U.S. households within Consumer View into four distinct groups. Each group differs in their attitudes and behaviors toward purchasing products that are environmentally safe and working with companies that are eco-conscious

Behavioral Greens: These consumers have the most environmental attitudes and behaviors. They are highly engaged in eco-friendly practices and are likely to support green initiatives and products.

Eco-Efficient (Think Greens): This group is moderately engaged in eco-friendly practices. They are aware of environmental issues and make efforts to support green initiatives, but their engagement is not as high as Behavioral Greens.

Green Skeptics (Potential Greens): These consumers are skeptical about the impact of green initiatives and products. They may engage in some eco-friendly practices but are generally cautious about fully embracing the green movement.

True Browns: These consumers are the least environmental and most distrustful of green causes. They are less likely to engage in eco-friendly practices or support green products.



EV HOME CHARGING SOCIAL IQ RESULTS

DECEMBER 2024

This final report has been provided to Xcel
Energy by Burke Inc. without editing.

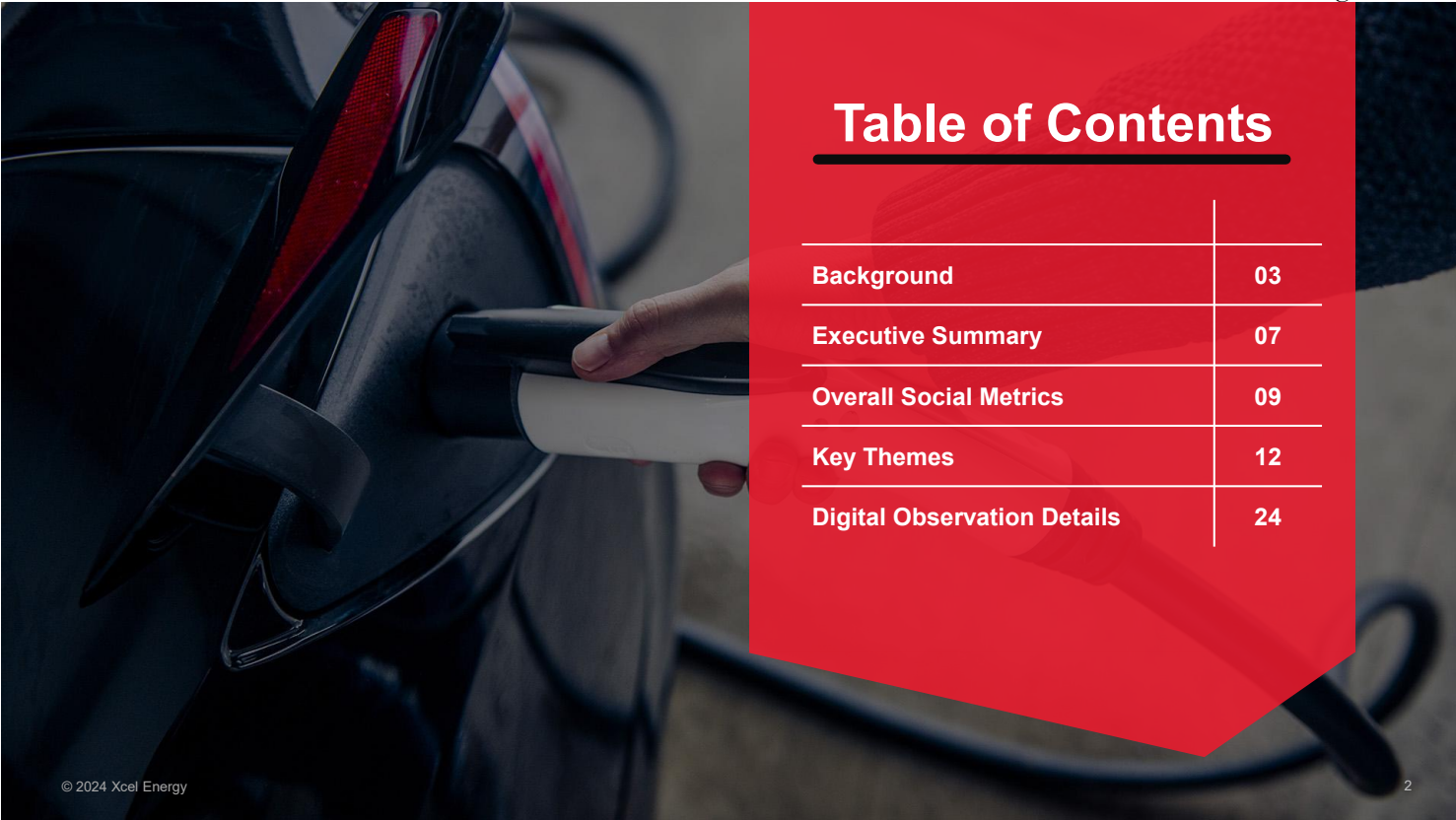


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Background

Xcel Energy aims to understand the Electric Vehicle (EV) market with insight from social media. Social media posts related to home EV charging will support Xcel Energy in developing EV home charging plans to meet the needs of customers who own, lease, or are considering owning or leasing an EV.

RESEARCH APPROACH

Burke's social listening-certified experts collected, analyzed, and distilled social media insights related to home charging for EVs. They created a custom query based on EV charging (using various key terms, phrases, hashtags/handles) to pull social media posts over a 24-month period. After tuning the topic to exclude unrelated content, Burke's experts examined the volume of social conversation, observed consumer sentiment, and uncovered insights and themes to help Xcel Energy better understand the market for EV charging.

SPECIFIC AREAS OF INTEREST EXPLORED

- Benchmarking
- EV Charging Experiences and Challenges
- Influence of Charging Infrastructure on EV Adoption
- EV Charging and Energy Costs
- Desires for Improved Charging Technology
- Reasons for EV Adoption or Hesitancy
- Apps/Features
- Electric Suppliers
- Electrical Contractors/Electricians
- Intenders vs. Users

Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

A few things to keep in mind...

SOCIAL MEDIA DATA IS	SOCIAL MEDIA DATA IS NOT
A place where anyone can post about real-life experiences and opinions	A place where researchers can control the discussion
Comprised of real-world people in the context of their lives	A representative sample of the population
Where people love to share what they perceive is worth sharing	Typically, a place for mundane or common occurrences
Increasingly where people get their news and information and communicate with one another	An objective source where information is filtered or checked for accuracy of statements



Net Sentiment Explanation

NET SENTIMENT

Net Sentiment is a score that expresses the ratio of positive to negative sentiment about a brand or topic calculated using this formula:
$$((\text{Positives} - \text{Negatives}) / (\text{Positives} + \text{Negatives}))$$



My experience
so far has been
fantastic!

POSITIVE



The product is
okay I guess.

NEUTRAL



Your support
team is
useless.

NEGATIVE

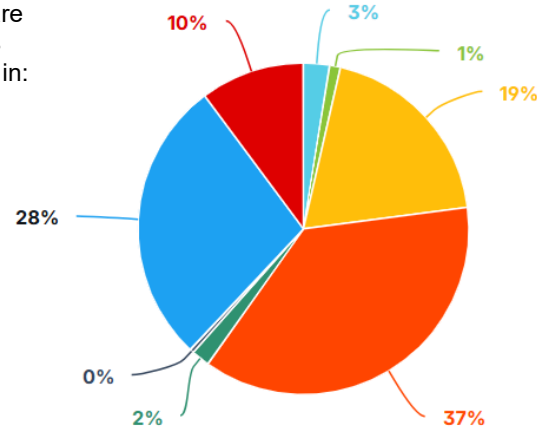
A Net Sentiment score of 5 means that all opinions of the topic or brand are positive; a score of -5 means that all opinions of the topic or brand are negative.

To analyze Net Sentiment in more detail, compare the topic or brand's Net Sentiment score to that of its peer group or brands in the same category. Based on an analysis, Brandwatch found that most topics or brands have a Net Sentiment score close to 0. A score below 0 means that the Net Sentiment for the topic or brand is lower than most, while a score above 0 means that the Net Sentiment is higher than most other topics or brands.

Social Listening Sources

SOURCES

The following sources are included in this analysis among all posts filtered in:



NOTE: Online news sources were removed from this analysis due to the social "noise" introduced from this source.

● Blogs ● Facebook Public ● Forums ● Reddit ● Review ● Tumblr ● X ● YouTube



Executive Summary

Key Takeaways

1

Home Charging Infrastructure is a Critical Concern: Social media posts consistently focus on the **availability of reliable home charging and issues like home electric capacity** as a pivotal element for EV adoption. Many **intenders cite a lack of home charging options as a significant personal deterrent** to EV adoption.

2

Sentiment Drivers: Home charging challenges (installation process, electric bill increases, convenience, home, and electric grid capacity), as well as installation costs, **are the primary drivers of negative sentiment** regarding home charging, indicating a need for tailored solutions to ease these concerns.

3

Opportunities for Energy Providers: Xcel Energy can differentiate itself by **partnering with customers to offer simplified installation processes, incentives, and affordable solutions** for home charging setups, including potential solar and backup battery integrations.

4

Diverse Consumer Needs: While current EV **users share stories about optimizing their charging setups, intenders emphasize barriers to adoption**. The polarity suggests a need for distinct strategies to address each group's concerns and needs.

5

Engaging with Emerging Technologies: Consumers express **curiosity about advanced charging solutions**—such as smart chargers and integrating with solar-powered options—but **awareness, affordability, and ease of integration remain hurdles** to broader acceptance.

6

Targeted Outreach: Platforms like **Reddit dominate EV-related conversations**, offering an opportunity for Xcel Energy to **engage with potential customers where these discussions are actively taking place**.

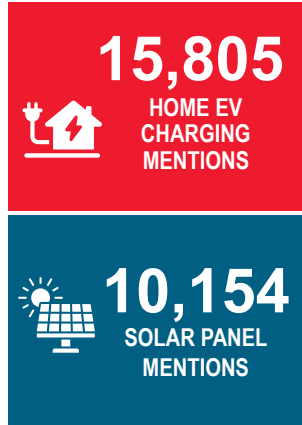




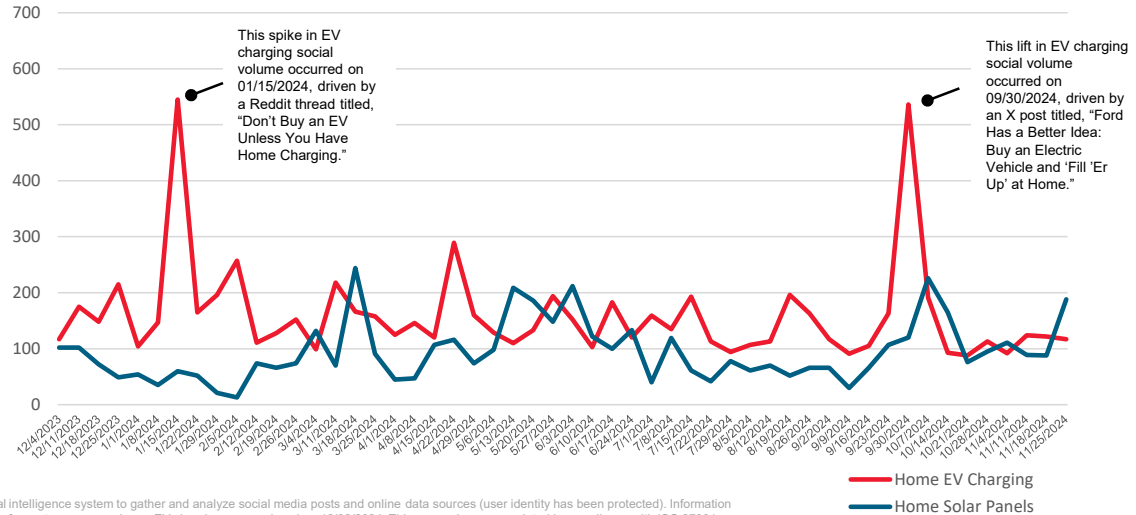
Overall Social Metrics

Home EV charging is an active topic, with higher social volume than solar panels, with most mentions coming from Reddit and X

OVERALL SOCIAL VOLUME

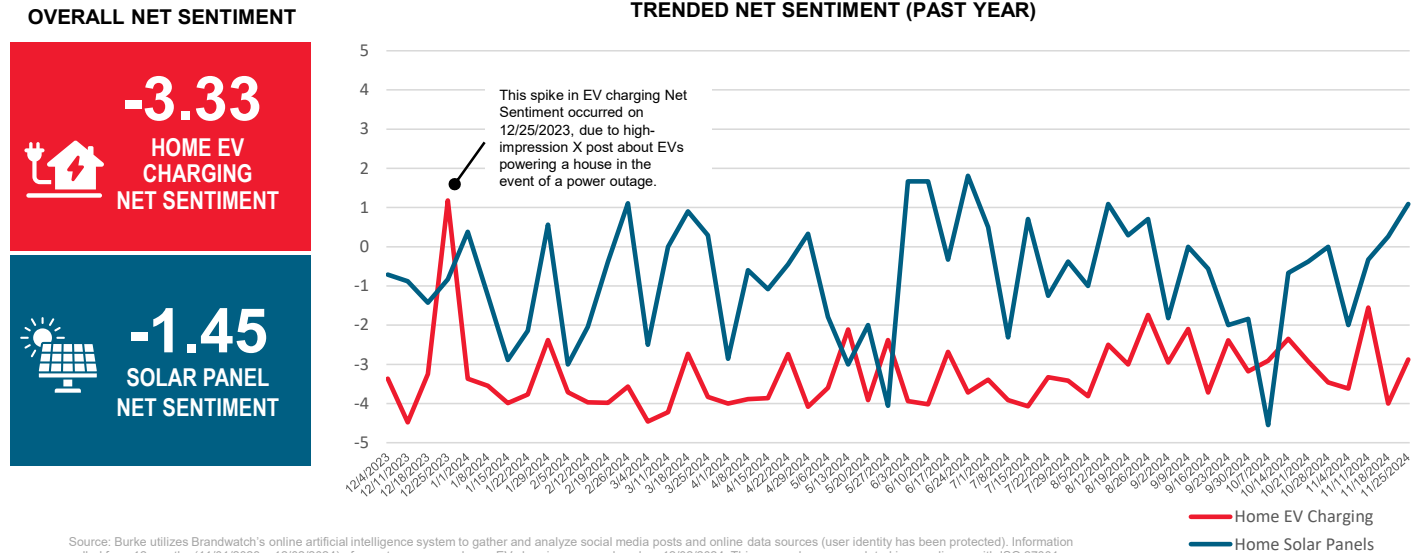


TRENDED SOCIAL VOLUME (PAST YEAR)



Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 12 months (11/01/2023 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

Net Sentiment for home EV charging is more negative as compared to activity for solar panels



Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 12 months (11/01/2023 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

Key Themes

Home charging infrastructure-related concerns, challenges, and energy costs are significant negative sentiment drivers in the social conversation

	Overall	Experiences and Challenges	Influence of Home Infrastructure on Adoption	Charging and Energy Costs	Desires for Improved Technology*	Reasons for Adoption or Hesitancy	Apps/ Features	Electric Suppliers	Electrical Contractors/ Electricians*	Intenders vs. Users*
Social Volume (Total Mentions P24M)	15,805	2,132	2,338	1,842	161*	2,519	2,293	1,153	171*	Intenders: 236* Users: 161*
Net Sentiment	-3.32	-3.11	-3.35	-3.10	-1.94	-2.90	-2.80	-2.92	-1.84	Intenders: -3.19 Users: -3.48
Trending Topics	1. Make it easy 2. Home chargers 3. Buying an EV	1. Buying an EV 2. Home Charging	1. Home Charging 2. Home Electric Power Grid	1. EVs vs. PHEVs 2. Residence Type	N/A	1. Buying an EV 2. Home Setup 3. Affordability	1. Buying an EV 2. Home Batteries 3. Home Charging	1. Electric Company 2. Charging Needs 3. Charging Challenges	N/A	N/A

*Caution: social volume for the topic is low (<300)

Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

HOME CHARGING EXPERIENCES AND CHALLENGES: Most related posts are Reddit threads with users sharing their challenges or intenders asking for tips on home charging

EV CHARGING EXPERIENCES AND CHALLENGES

SOCIAL IQ

Burke
SOCIAL IQ

SOCIAL LISTENING METRICS

MENTIONS

2,132

Mentions are social posts that include a reference to the topic

REACH

1.56M

Reach is the sum of people who have seen content related this the topic

NET SENTIMENT

-3.11

Below average for social conversation

A measure of how positive or negative the conversation is on a scale of -5 to +5

T H E M E S

BUYING AN EV

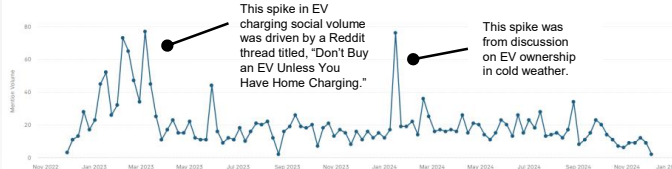
Home charging option perceptions influence EV adoption. Without an easy solution, purchasing one may seem impractical.

HOME CHARGING

Users share experiences and insights on the benefits of home chargers, playing a crucial role in enhancing the EV ownership experience.

OTHER DETAILS

MENTIONS OVER TIME

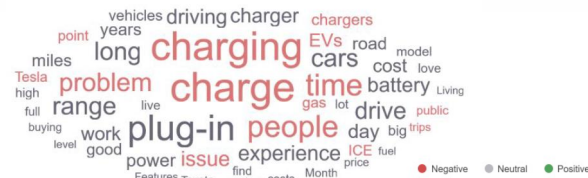


POST EXAMPLES

"It's a massive issue with infrastructure currently for sure. I wouldn't buy an EV without ability to home charge it, both for convenience and financial reasons, but I am fortunate to own a home with a driveway and benefit from super cheap overnight charging. As more and more EVs come onto the market and our roads, the issue will be infrastructure..." Reddit, 7/16/2024

"Looking to buy an EV soon and was hoping to ride home level 1 charging for my 35-mile daily round trip commute. Could I get 30ish miles overnight with level 1 if I charge it every day and at least 1 full day over a weekend? Since it sounds like daily charging isn't a problem if keeping it between 20-80, all I..." Reddit, 8/12/2024

TOP KEYWORDS



Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

INFLUENCE OF HOME CHARGING INFRASTRUCTURE: Charging infrastructure challenges (reliability, needed home electrical upgrades, and power grid concerns) can hinder EV adoption

INFLUENCE OF EV CHARGING INFRASTRUCTURE ON ADOPTION

SOCIAL LISTENING METRICS

MENTIONS

2,338

Mentions are social posts that include a reference to the topic

REACH

1.54M

Reach is the sum of people who have seen content related this the topic

NET SENTIMENT

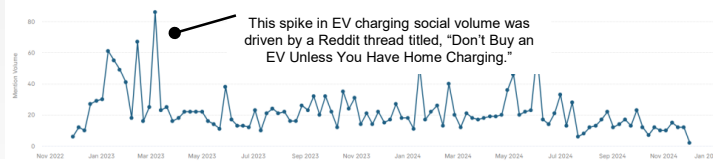
-3.35

Below average for social conversation

A measure of how positive or negative the conversation is on a scale of -5 to +5

OTHER DETAILS

MENTIONS OVER TIME



POST EXAMPLES

"Interesting - so how much would I have to spend to a) buy an electric car and b) adapt my electricity supply so the car battery can power the house?... X, 11/15/2024

"I love having an electric but our house doesn't have enough load to put in a level 2 charger and it would cost tens of thousands and months to upgrade. That's the problem." Reddit, 03/21/2024

"The economics of whether to buy an EV or PHEV, or ICE car depends on where you live. If you live somewhere like California with insanely expensive gas, then an EV or PHEV might make sense, especially if you live in a city with a not-for-profit Municipal electric company like the Sacramento Municipal Utility District, where we get overnight EV charging for 10¢/kW-hr in winter, 12¢ in summer..." Forum, 05/04/2024

TOP KEYWORDS



T H E M E S

HOME CHARGING

Posts discuss challenges with finding reliable charging options.

HOME ELECTRIC

Users share hurdles faced when upgrading their homes, from outdated electrical panels to the expense of new circuits.

POWER GRID

Some users express concerns about whether their region's grid can support upgrading their homes for EVs, especially in areas prone to power outages.

When posts mention terms related to infrastructure, meanings can be nuanced

	SUB-THEMES	INSIGHTS	EXAMPLE POSTS
CHARGERS 	Types of chargers (e.g., Level 1, Level 2, DC fast chargers) Installation processes (e.g., cost, complexity, and contractor issues) Charger reliability (e.g., broken stations, network availability) Convenience and accessibility (e.g., home vs. public chargers)	Focused on availability, reliability, and installation challenges. Many users discuss the challenges of finding reliable chargers. Home charging installation is frequently mentioned, often coupled with concerns about high costs or permits.	<i>"Installing a home charger cost me \$1,500 after the rebate, but I don't trust the public ones around here!"</i> <i>"Level 2 chargers make charging overnight convenient; wish my apartment had them."</i> <i>"I'd only consider an EV or plug in hybrid if you own a house with your own charger and live in an area with good charging infrastructure."</i>
HOME ELECTRIC 	Electrical panel upgrades to accommodate high amperage chargers Circuit limitations in older homes Permit and inspection processes for new installations Concerns about upfront costs of upgrades	Highlights the hidden costs and technical hurdles of upgrading homes for EV charging. Users highlight the hurdles they face upgrading their homes, from outdated electrical panels to the expense of new circuits. Some worry about safety issues (e.g., overloaded circuits or improper installations).	<i>"Had to upgrade my panel to install the EV charger—set me back \$3,000. Worth it but ouch!"</i> <i>"My home circuit can't handle Level 2 charging—thinking of sticking to public stations."</i> <i>"The electrician said I'd need a breaker box upgrade to install the charger; that alone will take months!"</i> <i>"Why don't builders include EV-ready panels in new homes already? It's 2024!"</i>
POWER GRID 	Grid capacity concerns, especially during peak demand Blackouts and infrastructure strain caused by increased electricity usage Local utilities and their preparedness for widespread EV adoption	Captures macro-level concerns about grid readiness and sustainability. Users express concerns about whether their region's grid can support upgrading their homes for EVs, especially in areas prone to power outages. Some advocate for renewable energy integration to mitigate grid strain.	<i>"Would love to get an EV for my next car, but the grid in my area can't handle a thunderstorm—let alone thousands of EVs!"</i> <i>"The local power company warned us about peak-hour surcharges for charging EVs—how is this sustainable?"</i> <i>"More EVs mean more grid investment—are our utility companies ready for this challenge?"</i>

CHARGING AND ENERGY COSTS: The debate on EVs vs. PHEVs and the cost of an EV, in general, comprises most of the conversation related to energy costs

EV CHARGING AND ENERGY COSTS

SOCIAL LISTENING METRICS

MENTIONS

1,842

Mentions are social posts that include a reference to the topic

REACH

1.11M

Reach is the sum of people who have seen content related this the topic

NET SENTIMENT

-3.10

Below average for social conversation

A measure of how positive or negative the conversation is on a scale of -5 to +5

T H E M E S

EVS VS. PHEVS

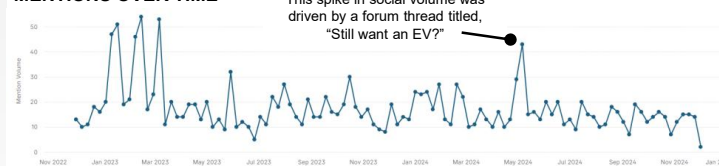
While PHEV sales are rising, concerns about home charging options and costs persist.

RESIDENCE TYPE

In residential buildings (like condos), the need for charging (chargers in general or having enough) poses challenges for owners.

OTHER DETAILS

MENTIONS OVER TIME



POST EXAMPLES

"If you live somewhere without level-2 charging (Apartment complex, street park, etc.) then you shouldn't buy an EV. **Most of the advantages (No gas station visits, low cost of "refueling", always having a full charge) go away if you're stuck using DC fast charging infrastructure...**"
X, 07/08/2024

"Charging at home is cheaper but still a bit **too high and unreliable**. It makes more sense to get an EV once you set up an off-grid or partial off-grid solar system to mitigate the cost in the long run. And that's really the problem for me, the **high upfront cost of the car...**" Reddit, 11/11/2024

TOP KEYWORDS



Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

DESIRES FOR IMPROVED TECHNOLOGY: Some users are waiting for better technology in the future before considering EVs; others share information or are curious about existing tech

DESIRES FOR IMPROVED CHARGING TECHNOLOGY

SOCIAL LISTENING METRICS

MENTIONS

161*

*Caution: social volume for the topic is low (<300)

Mentions are social posts that include a reference to the topic

REACH

136.1k

Reach is the sum of people who have seen content related this the topic

NET SENTIMENT

-1.94

Below average for social conversation

A measure of how positive or negative the conversation is on a scale of -5 to +5

OTHER DETAILS

MENTIONS OVER TIME



POST EXAMPLES

"I heard about smappee and wondered how good it is, haven't seen many reviews for EV charging. Would it actually save me more money than just getting a random home charger in my garage and try and calculate my energy consumption by myself? What would be the best way to calculate how much energy goes to my car without a smart counter? As far as I know a smart charger like smappee would cost me about 2k, any cheaper/better alternatives?" *Reddit, 10/13/2024*

"Besides the power outages and cannot charge, they just said on the radio that saltwater from the hurricane is getting into EV batteries causing them to short out. Per the broadcast, one owner had his car in the garage. It shorted out and caught fire damaging his home." *Forum, 09/28/2024*

"I know quite a few people who do not want to wait more than 15 minutes to charge and don't have home charging so will not buy an EV. **Everyone thinks that technology will solve this, but charge times are going to increase as the battery size shrinks...**" *Blog, 02/11/2024*

"I am not an EV fan at this juncture. **At some point in the future as the battery technology continues to improve and the infrastructure expands, I think they will be great. In the short term though, big issues.** Your emphasis on getting a personal charger may work for now as the people who have the cash to buy an EV probably have a house and garage in many cases. But there are lots of folks in this country who don't. I would also be squeamish about having a charging EV in my garage, especially if I am elsewhere. There is a reason that lithium batteries are screened by the airlines. Battery fires." *YouTube, 01/21/2024*

REASONS FOR EV ADOPTION OR HESITANCY

OTHER DETAILS

TOP KEYWORDS



The affordability of EVs is a hotly debated topic, with opinions divided on whether one should buy an EV.

APPS AND FEATURES: Social media posts stress the importance of reliable and affordable home charging solutions, preferably with solar integration, for a seamless experience

EV CHARGING APPS AND FEATURES

SOCIAL LISTENING METRICS

MENTIONS

2,293

Mentions are social posts that include a reference to the topic

REACH

1.66M

Reach is the sum of people who have seen content related this the topic

NET SENTIMENT

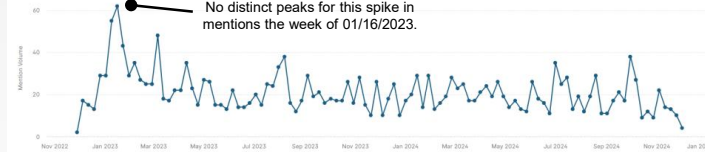
-2.80

Below average for social conversation

A measure of how positive or negative the conversation is on a scale of -5 to +5

OTHER DETAILS

MENTIONS OVER TIME

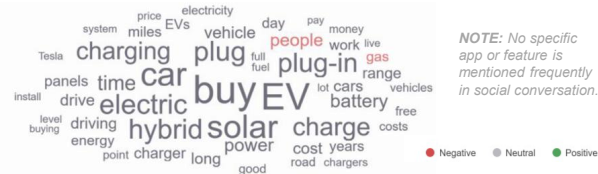


POST EXAMPLES

"Battery attachment rates in the US are set to soar to 25% this year because the only thing cooler than solar, is adding batteries But I can't help but think that party is coming to an end when everyone realizes they get a (bigger!) home battery (for free) when they buy an EV 🤔." X, 10/04/2024

"I love the idea of charging my EV with my solar panels, then using it at night to run my house. I know it's complicated/difficult to do now - but plugging the car in to my home charger, then flipping a switch to change from charging to power source (when not in use, obviously) would be awesome. You'd think PGE would love this too, to obviate their sundown problem." Reddit, 03/18/2024

TOP KEYWORDS



T H E M E S

BUYING AN EV

Renewable energy advocates urge the adoption of EVs together with solar power to combat environmental challenges.

HOME BATTERIES

Related posts discuss the increasing battery attachment rates and consumers' realization of the value of home batteries.

CHARGING AT HOME

Charging an EV at home is highlighted as a significant cost-saving and convenience factor, especially compared to public charging options.

SOCIAL
IQ

Burke
SOCIAL IQ

Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001

ELECTRICAL SUPPLIERS: Electric suppliers play a crucial role in addressing home charging needs and challenges for current and prospective EV users

ELECTRIC SUPPLIERS

SOCIAL LISTENING METRICS

MENTIONS

1,153

Mentions are social posts that include a reference to the topic

REACH

880.6k

Reach is the sum of people who have seen content related this the topic

NET SENTIMENT

-2.92

Below average for social conversation

A measure of how positive or negative the conversation is on a scale of -5 to +5

T H E M E S

ELECTRIC COMPANY

Posts note that EV owners leverage night-time charging rates and installation support from electric companies.

CHARGING NEEDS

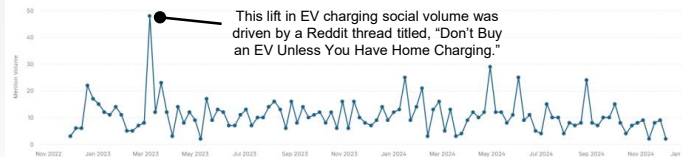
An electric company's response to a customer request for EV charging stations shows the willingness to support EV integration.

CHARGING CHALLENGES

The cost and practicality of charging EVs at home are discussed, highlighting the challenges of upgrading electrical panels and getting support from electric companies.

OTHER DETAILS

MENTIONS OVER TIME



POST EXAMPLES

"...kept getting the run around from his last power company. He told them he's **getting two EVs and needed charging stations for them. Power company promised to install a 400-amp service to his house.**" *Forum, 11/16/2023*

"We're looking at a Volvo XC60 mild hybrid vs plug in hybrid but **trying to figure out if it would be worth it to get the PHEV if we don't have home charging.** The dealership is running a special where we could get the PHEV for only ~\$1k more than the mild hybrid. But would it still make sense if without home charging? **Can my electric company help me?**" *Reddit, 11/30/2024*

TOP KEYWORDS



Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

ELECTRICAL CONTRACTORS/ELECTRICIANS: Social posts reflect frustration with electrician costs and the complexity of installing home EV charging solutions

ELECTRICAL CONTRACTORS AND ELECTRICIANS

SOCIAL
IQ

Burke
SOCIAL IQ

SOCIAL LISTENING METRICS

MENTIONS

171*

Mentions are social posts that include a reference to the topic

*Caution: social volume for the topic is low (<300)

REACH

59.7k

Reach is the sum of people who have seen content related this the topic

NET SENTIMENT

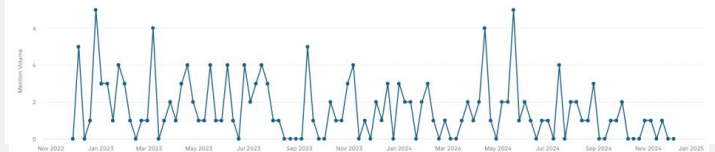
-1.84

Below average for social conversation

A measure of how positive or negative the conversation is on a scale of -5 to +5

OTHER DETAILS

MENTIONS OVER TIME



POST EXAMPLES

"To buy an #electric #car, I must (for all practical purposes) **get an #electrician to install an appropriate outlet in my garage.** I had someone come this morning and give me an estimate. I received a return call from a second electrician. This #electrician wanted to charge me \$69 for the tech to come out to examine my place and provide an estimate. **I have to pay \$70 just to find out how much I have to pay them for actual work?** That's insane. The second #electrician didn't even offer to credit the \$70 against what I wind up paying for actual work. I think I can do this without competitive bidding if that's what it comes to. I can live with the quote I received." X, 09/12/2023

"I have a 2022 Santa Fe plug-in hybrid. Currently I have it charging in a standard outlet, which I believe is 110 V. But from an empty battery to a full charge it takes almost 13 hours. **I know there are fast charger options out there but I can't find much information about setting one up at home.** Is there a different plug I can buy? And then tell my electrician to install an outlet in my garage for that voltage? Should I be hard wiring it instead?" Reddit, 06/10/2023

"Then the responsibility falls on the owner to install charging facilities in their home/garage. **If you can afford to buy an EV you can afford to hire an electrician to install a power point. And if you can't charge it safely then don't buy an EV.** This person ran an extension cord from their home, across the footpath to their car on the road. The least they could do would be to park in their own driveway or allocated carpark and run a cord there instead. At least then it's not a hazard to everyone else." Reddit, 07/05/2024

"...you can **pay an electrician to install a home charger in your property** as close to the street as possible. But this one of course would be potentially the pricier one since you would need to run a line from your fuse box to that location, which can vary widely on **pricing depending on electrician and the length of cable** you would need. But there are some chargers you can buy with a pedestal/post like the Tesla Wall Charger that can definitely make that a possibility." Reddit, 04/18/2024

Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

INTENDERS VS. USERS: EV intenders focus on barriers to adoption, while users highlight real-world charging challenges

INTENDERS VS. USERS

SOCIAL LISTENING METRICS

MENTIONS

Intenders: 236*

Users: 161*

Mentions are social posts that include a reference to the topic

*Caution: social volume for the topic is low (<300)

REACH

Intenders: 101.2K

Users: 78.3K

Reach is the sum of people who have seen content related this the topic

NET SENTIMENT

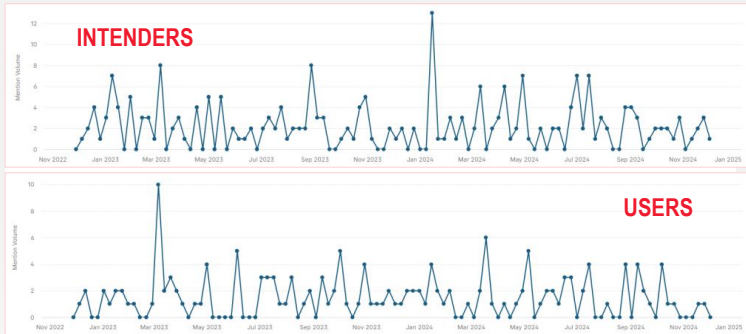
Intenders: -3.19

Users: -3.48

A measure of how positive or negative the conversation is on a scale of -5 to +5

Both are below average for social conversation

OTHER DETAILS



POST EXAMPLES

INTENDER: "...If I buy an EV, it will probably have a big old battery due range anxiously and not home charging. So **my EV would have a big environmental impact getting made**, EV makers have been well criticized for waste and environmental impact at build." *Forum, 09/10/2024*

INTENDER: "Charging infrastructure is **by far the biggest issue right now**. There's not enough of it, and not enough diversity of it (curbside, Level 2, Level 3, multi-family. Until that happens, people won't have the confidence to buy an EV." *Reddit, 08/30/2024*

USER: "Just heard that power is restored in some areas but long lines still at gas stations. Wonder how long a line at personal home chargers? If anything **this should convince people to buy an EV.**" *Forum, 10/12/2024*

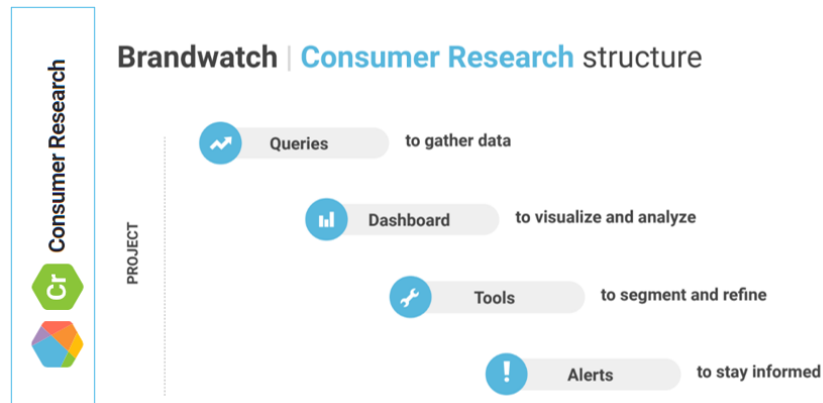
USER: "I just today got a plug-in hybrid. It came with a trickle charger for 110 volt outlet. I **plugged it in in my garage and it was charging fine. 2 hours later I lost power in the garage.**" *Reddit, 09/22/2024*



Digital Observation Details

Platform Included in this Research

For the purposes of this social media research, Burke utilized Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources.



Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

Digital Observation Methodology

Overview

Posts from across the social web were collected over the past 24 months (unless otherwise mentioned) ending on December 1, 2024. Only English language posts were used for analysis.

The following terms were used to create a custom topic, with various filters applied throughout the analysis:

```
1 (( "home" OR "house" OR "apartment" OR "condo" OR "residence" OR "loft" OR "townhouse" OR "duplex" OR "cottage" OR "bungalow"  
   OR "villa" OR "garage" OR "driveway" )  
2  
3 NEAR/20 ( "EV charg*" OR "electric* vehicle charg*" OR "electric* car charg*" OR "charg* my EV" OR "plug in hybrid" OR  
   "charg* station" OR "consider* EV" OR "consider* electric vehicle" OR "consider* electric* car" OR "think* about electric*  
   vehicle" OR "think* about electric* car" OR "buy* an EV" OR "buy* an EV" OR "buy* an electric* vehicle" OR "buy* an electric  
   car" ))
```

Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

Digital Observation Methodology Cont'd.

Cleaning

Using Brandwatch's Tuning tool, we can easily filter out extraneous information such as political content, curse words, ads, and other noise in the social media posts brought in using the topic. The following terms were excluded after the tuner assisted us in removing invalid and non-human traffic:

```
5 NOT ("lawsuit" OR "dream car" OR "home grown" OR "home market" OR "Australia" OR "public health" OR "general public" OR  
"public transport" OR "public road" OR "larger public" OR "public transit" OR "public infrastructure" OR source:pbs.twimg.  
com OR "Caleb Jud" OR Edmunds OR "tiny house" OR "GB News poll" OR "100% NetZero" OR "bans the banning" OR "gas stove" OR  
"Peugeot 408" OR "heat pump" OR "New Jersey" OR "Trump" OR "Biden" OR "Harris" OR "not have a house" OR "Canadians say" OR  
"may have injured" OR "half of Canadians")
```

Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

Digital Observation Methodology Cont'd.

Cleaning

Using Brandwatch's Tuning tool, we can easily filter out extraneous information such as political content, curse words, ads, and other noise in the social media posts brought in using the topic. The following terms were excluded after the tuner assisted us in removing invalid and non-human traffic:

Exclusions Unselect All

Select the types of mentions you want excluded from your query and we'll add the boolean for you. It'll use up some of your query's character limit.

We can only exclude in five languages and only one at a time: English, French, Spanish, German, and Japanese.

[Learn more about Exclusions](#)

☒ For sale & second hand	☒ Marketplace website deals
☒ Competitions & Giveaways	☒ Job adverts
☒ Pornographic content	☒ Profanities
☒ Real estate adverts	☒ Automated market research/...
☒ Gain followers exclusions	☒ Automated app announcements
☒ Deals & promotions	

TOTAL POSTS FILTERED IN
15,805 (25.4%)

TOTAL POSTS FILTERED OUT
46,408 (74.6%)

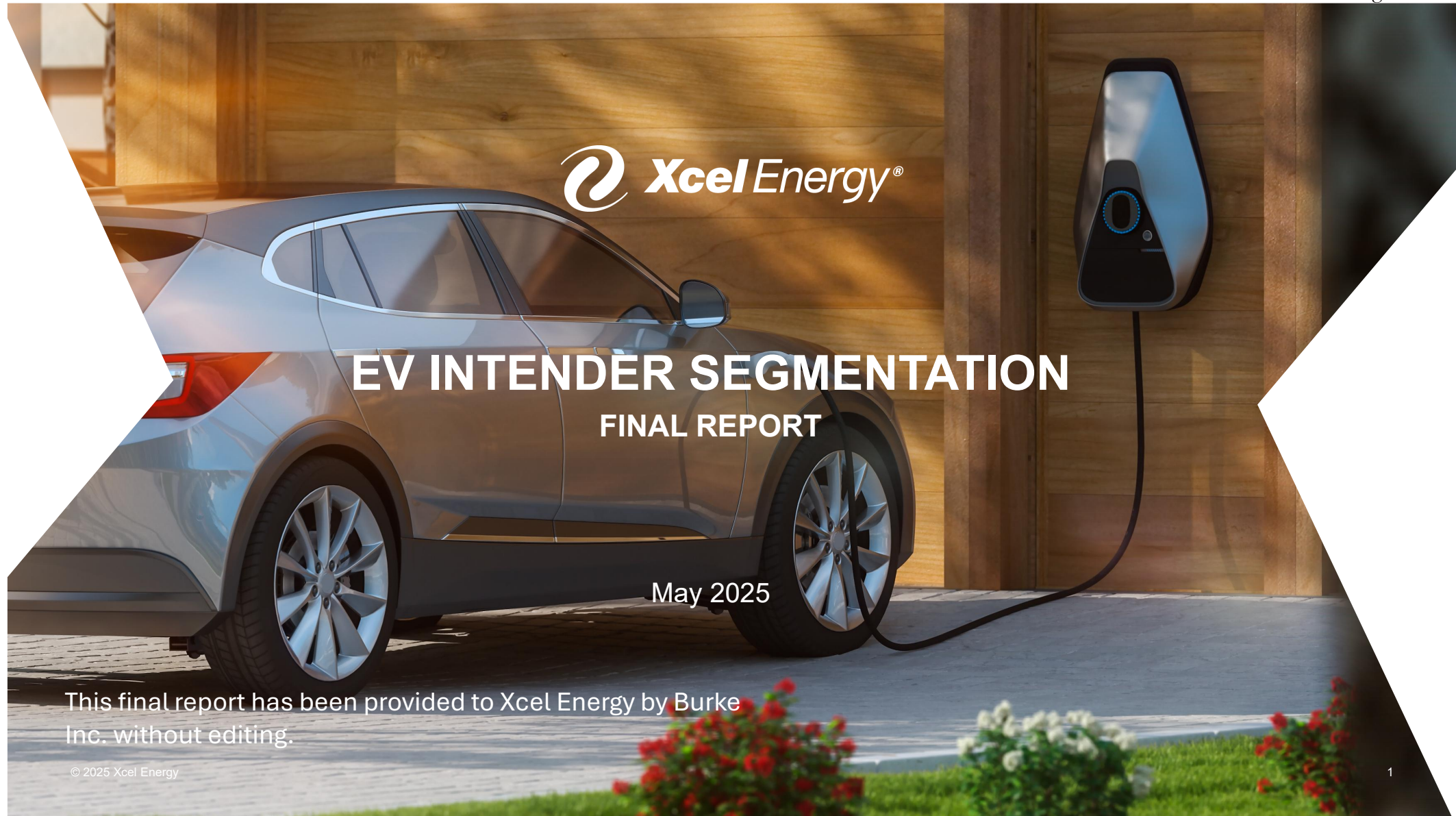
Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.

Digital Observation Methodology Cont'd.



- This research was prepared by Burke, Inc., an ISO 20252 and 27001 certified company, in compliance with the established standard for market, opinion, and social research for Xcel Energy.
- Posts from across the social web were collected over the past 24 months (unless otherwise mentioned) ending on December 2, 2024.
- Only English-language posts were used for analysis.
- Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources.
- Social media user identity has been protected.
- Full methodological details are available upon request.
- Through a combination of redundant on-site and off-site electronic file management systems, Burke retains project materials for client research for at least seven years.

Source: Burke utilizes Brandwatch's online artificial intelligence system to gather and analyze social media posts and online data sources (user identity has been protected). Information pulled from 24 months (11/01/2022 – 12/02/2024) of a custom query on home EV charging was analyzed on 12/02/2024. This research was completed in compliance with ISO 27001.



REPORT CONTENTS

1. Objectives and Methodology
2. Segment Introduction
3. Segment Comparisons
4. Segment Profiles
 - EV Owners
 - Prepared Preservationists
 - Unaware, but Open-Minded
 - Confident Cynics

RESEARCH OBJECTIVES & METHODOLOGY

OBJECTIVES:

1

UNDERSTAND motivations for EV adoption

*Sets the stage for **growth**.*

2

SEGMENT EV Intenders

*Sets the stage for **development and targeting** of products and messaging.*

METHODOLOGY:

- 15-minute online survey administered February 28 – March 17, 2025

SAMPLE:

- n=908
- 18+, not a current employee of an energy utility company
- Must own at least one vehicle
- Sub-quota of n=150 per intender level group
- Respondents sourced from Xcel Energy customer list

WE SPOKE TO **OVER 900 XCEL ENERGY CUSTOMERS** DEEMED TO BE **EARLY OR NEXT WAVE ADOPTERS** OF ALTERNATE FUEL ELECTRIC VEHICLES, REPRESENTING ABOUT 22% OF THE CUSTOMER BASE

Likelihood to be in the market to buy an Alternate Fuel Electric vehicle in the next 180 days

1 Extremely Likely	2 Highly Likely	3 Very Likely	4 Somewhat Likely	5 Likely	6 Somewhat Unlikely	7 Very Unlikely	8 Highly Unlikely	9 Extremely Unlikely	0/Blank
% (#) of customers									
2.2% (66K)	2.3% (69K)	2.4% (74K)	5.1% (156K)	5.1% (154K)	4.8% (145K)	30.1% (919K)	27.1% (826K)	21% (640K)	
EARLY ADOPTERS		NEXT WAVE ADOPTERS				LATE ADOPTERS			Excluded

SEGMENTING THESE CUSTOMERS WILL ALLOW XCEL ENERGY TO...

SET THE STAGE FOR GROWTH

by understanding motivations for EV adoption

SET THE STAGE FOR DEVELOPMENT & TARGETING

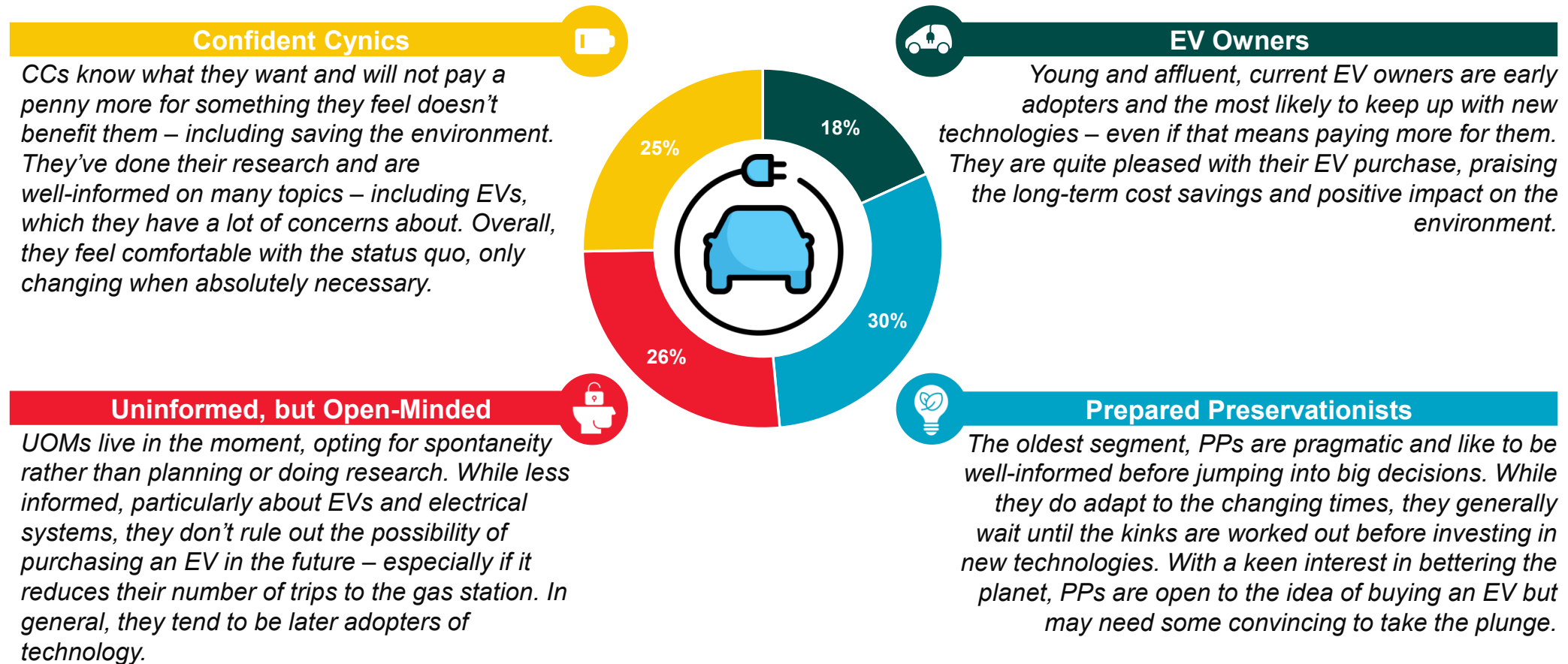
of products & messaging



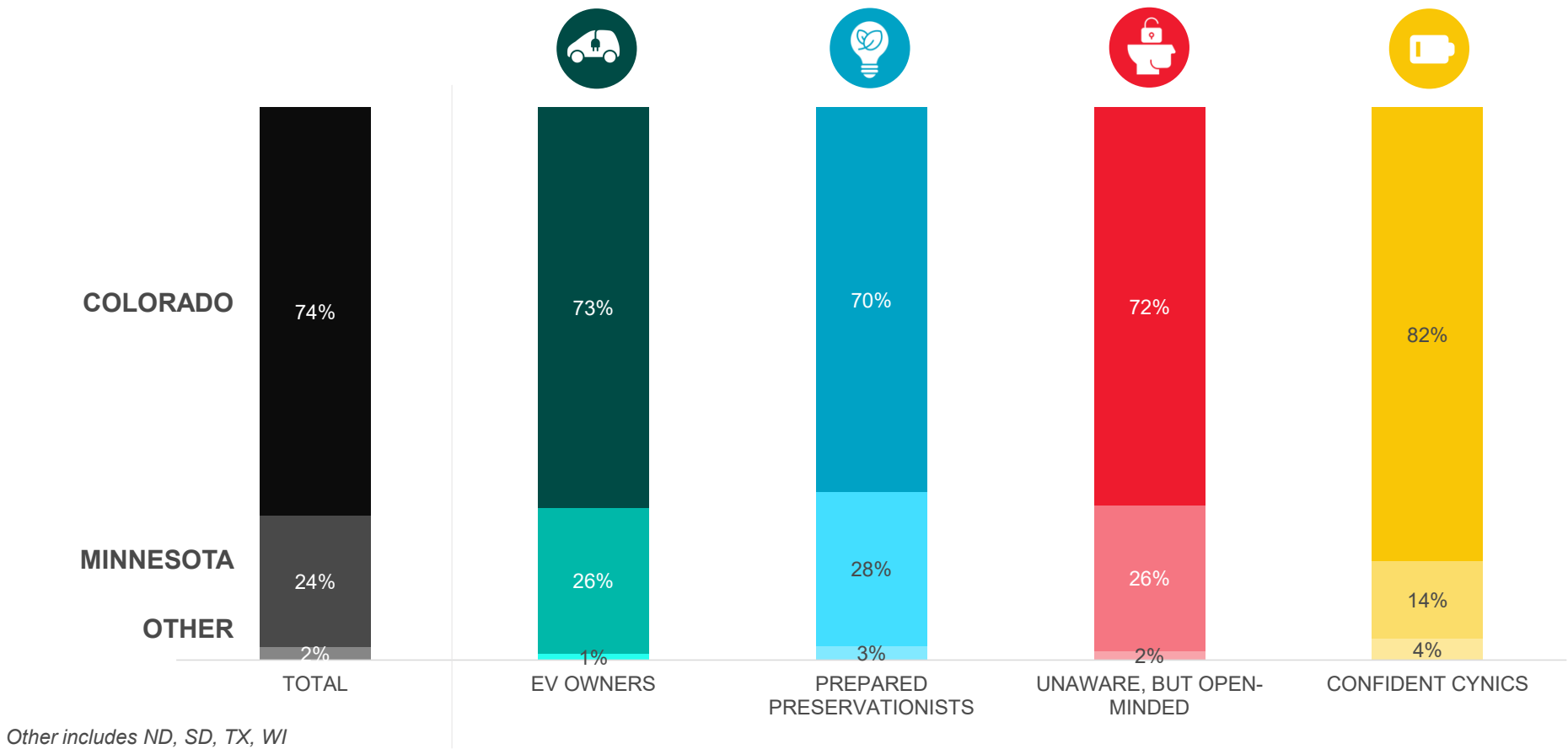
A photograph of a person wearing a green jacket, with their hands resting on the hood and door of a dark green car. The car's surface is highly reflective, showing the person's hands and the surrounding environment. The background is slightly blurred, showing some greenery.

SEGMENT INTRODUCTION

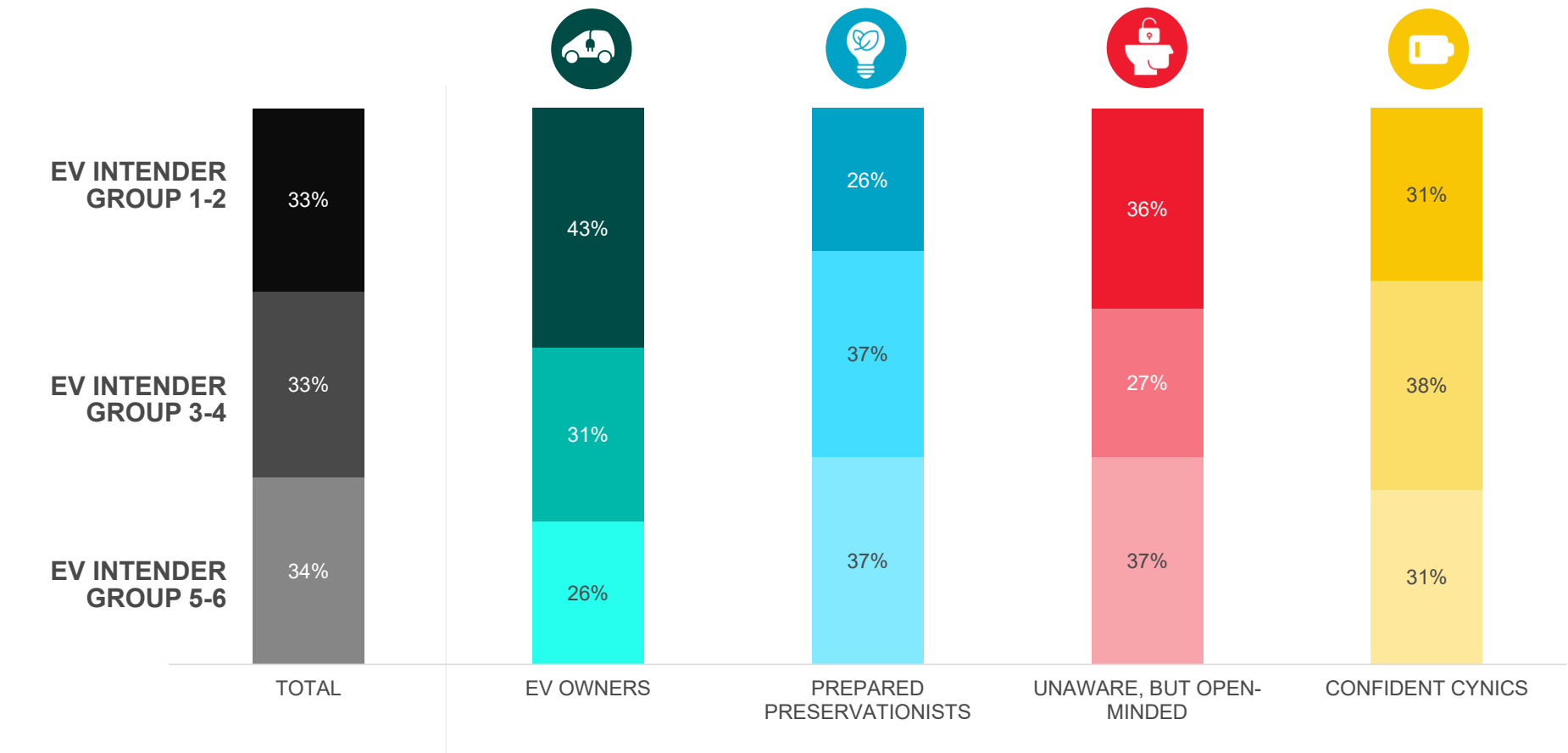
SEGMENT INTRODUCTION



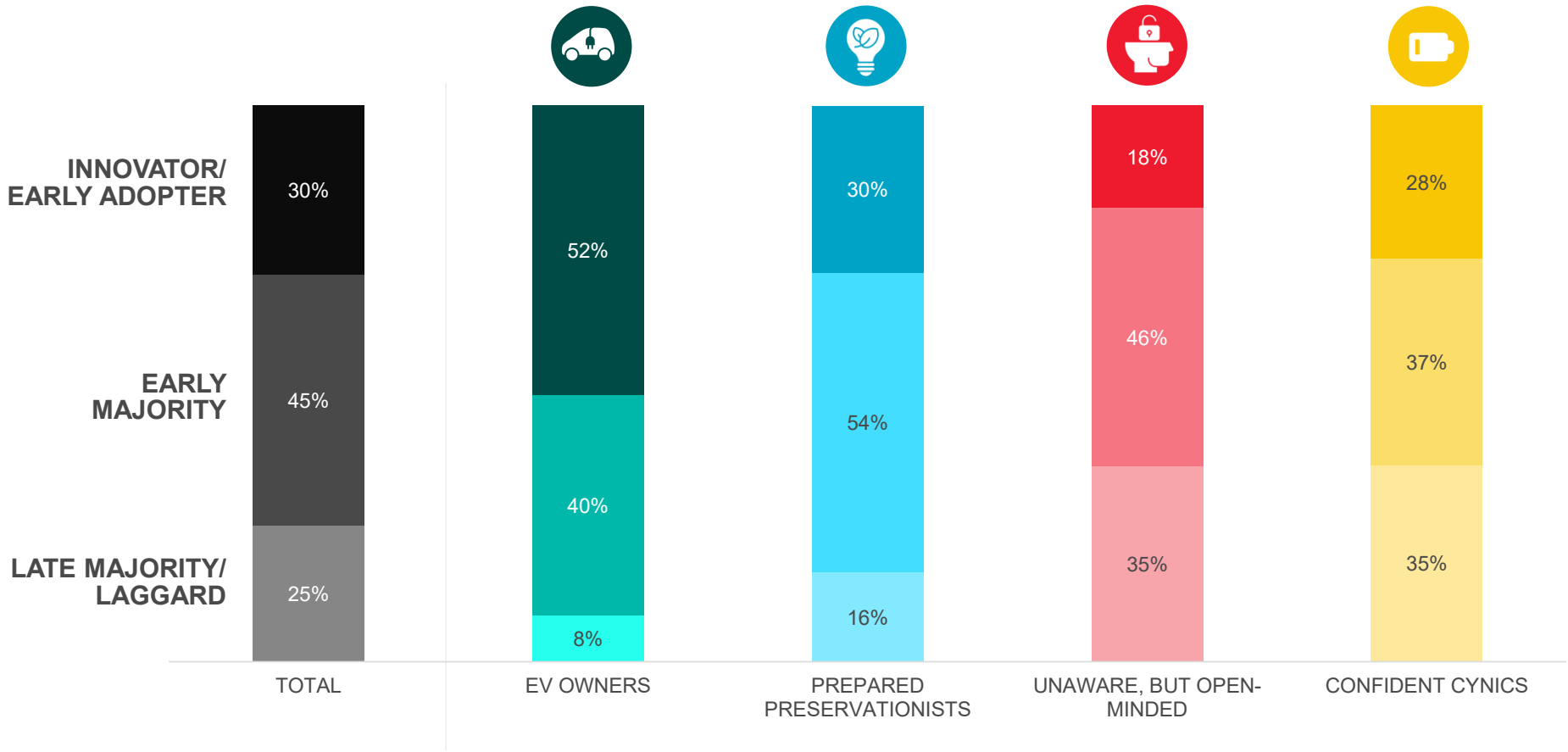
SEGMENT COMPARISON: SIZE BY STATE



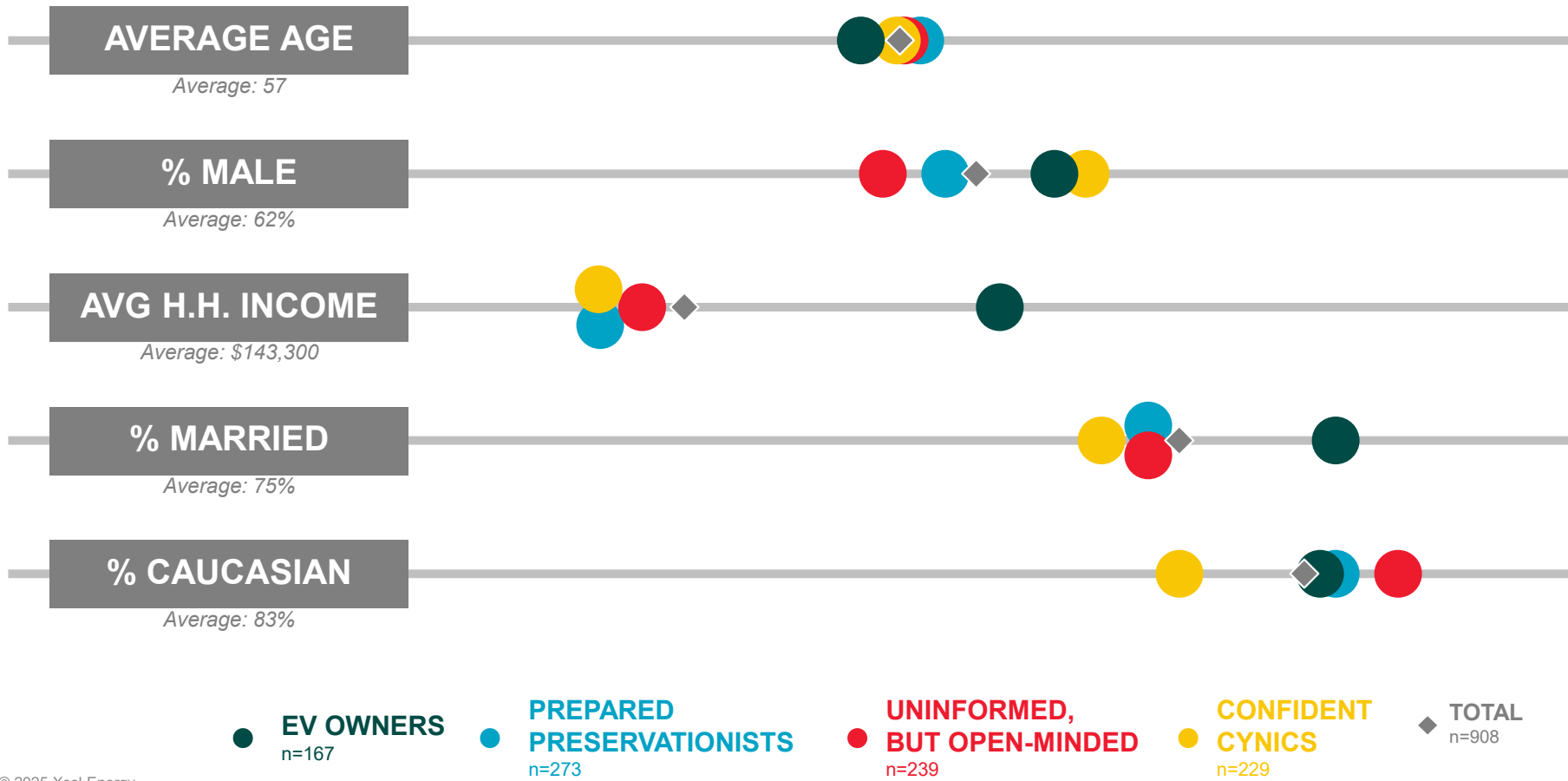
SEGMENT COMPARISON: SIZE BY EV INTENDER GROUP



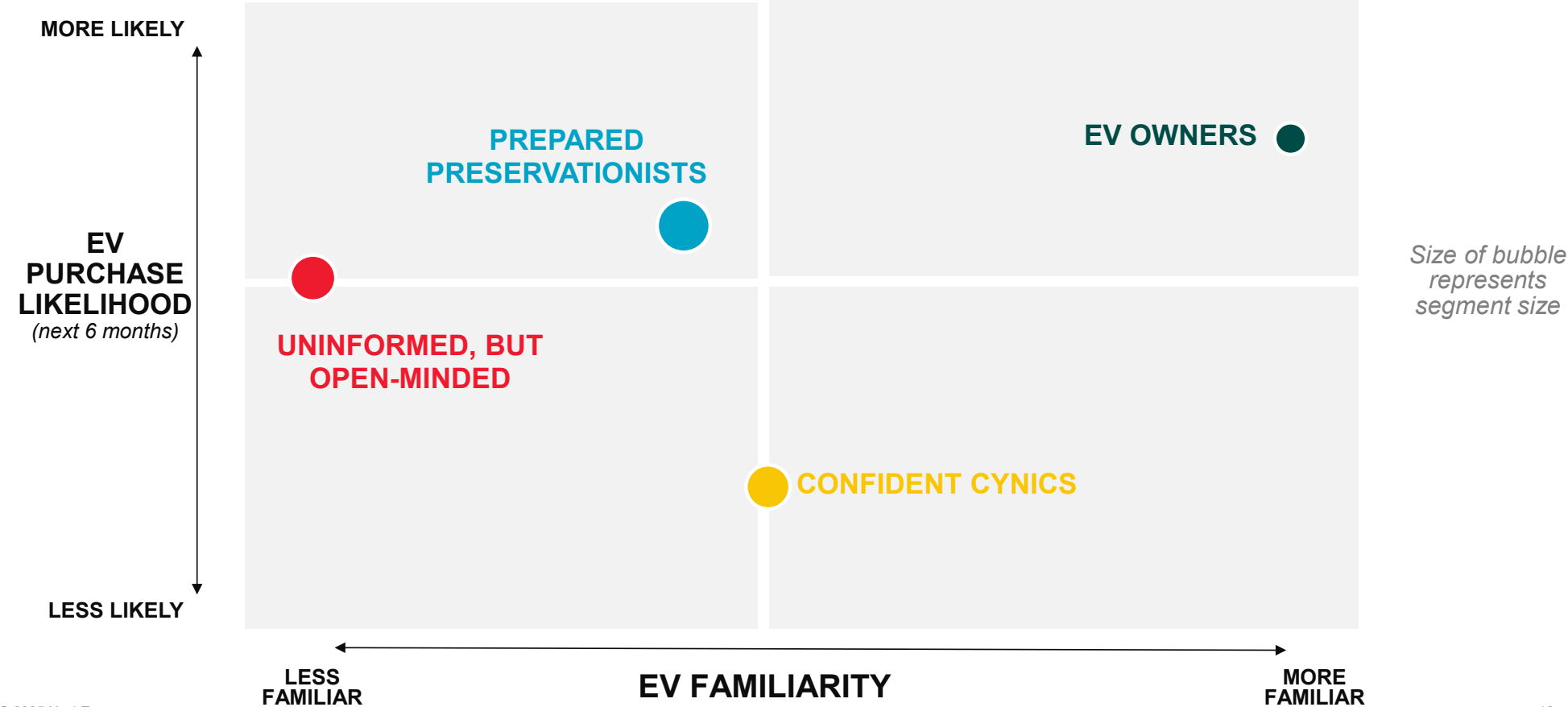
SEGMENT COMPARISON: SIZE BY TECHNOLOGY ADOPTION



SEGMENT COMPARISON: DEMOGRAPHICS



SEGMENT COMPARISON: EV FAMILIARITY AND PURCHASE INTENT



TARGET SEGMENT COMPARISON

PREPARED PRESERVATIONISTS	UNINFORMED, BUT OPEN-MINDED
Demographics • Similar age, gender, ethnicity, household income <i>More likely to be...</i> • EV Intender Level 3/4 • Technology approach: Early adopter Psychographics • More likely to agree with nearly all psychographics Familiarity <i>More likely to be...</i> • Familiar with home's electrical system • Familiar with EVs and Level 1 & 2 chargers • Familiarity with EV charging and charger installation EV Benefits <i>More likely to feel the EVs are beneficial because...</i> • Reduced reliance on fossil fuels • Less ongoing maintenance • Better public health • More cost-effective over time • Lower total cost of ownership • Less likely to break down • Safer than non-EVs Sources of EV Charging Information <i>More likely to consult...</i> • EV charger manufacturer website • Utility company • In-store sales associate • More likely to be willing to work with utility company to create a charging plan	Demographics • Similar age, gender, ethnicity, household income <i>More likely to be...</i> • EV Intender Level 1/2 • Technology approach: Late majority Familiarity <i>More likely to be...</i> • Unlikely to purchase an EV in the next 6 months EV Concerns <i>More likely to be concerned with...</i> • Long-term EV reliability • Ongoing costs to maintain EVs EV Benefits <i>More likely to feel the EVs are beneficial because...</i> • Cutting-edge technology

EV OWNERS



"I love being on the cutting edge of new tech – especially when it helps save the world and also saves me money. So, buying an EV just made sense. I've got my home charger set up and now I'm looking for ways to get the most out of my investment."



EV OWNERS

SEGMENT PILLARS





- 1

WHO ARE THEY?
Young and affluent, these customers like to be at the forefront of new trends and technology and have the means to be among the first to explore and try them out.
- 2

WHERE ARE THEY IN THEIR JOURNEY?
Trying to do their part to save the environment, these customers have taken the plunge into EV ownership, with most already having installed a charger at home.
- 3

HOW CAN WE HELP THEM?
Already knowledgeable about EVs and chargers, these customers want to make the most out of their purchase, desiring Xcel Energy's help in designing a charging plan and with understanding additional incentives they can take advantage of.



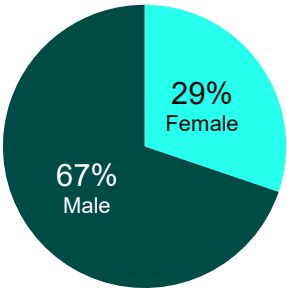
EV OWNERS

DEMOGRAPHICS



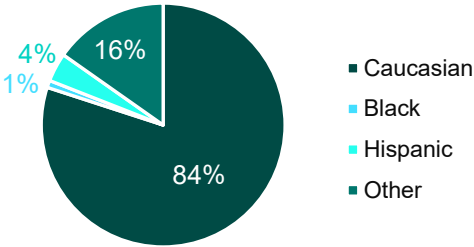


55 
YEARS OLD (AVG)



\$164k
HH INCOME (AVG) 

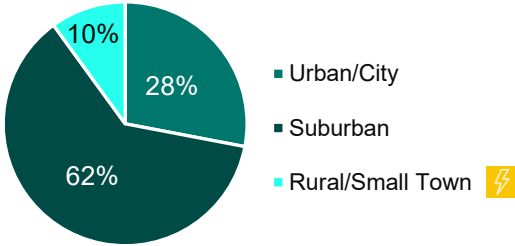
ETHNICITY



 MARRIED  NOT MARRIED



URBANICITY



 Indicates significantly higher vs. Total at 95% CL
 Indicates significantly lower vs. Total at 95% CL
 Indicates highest segment

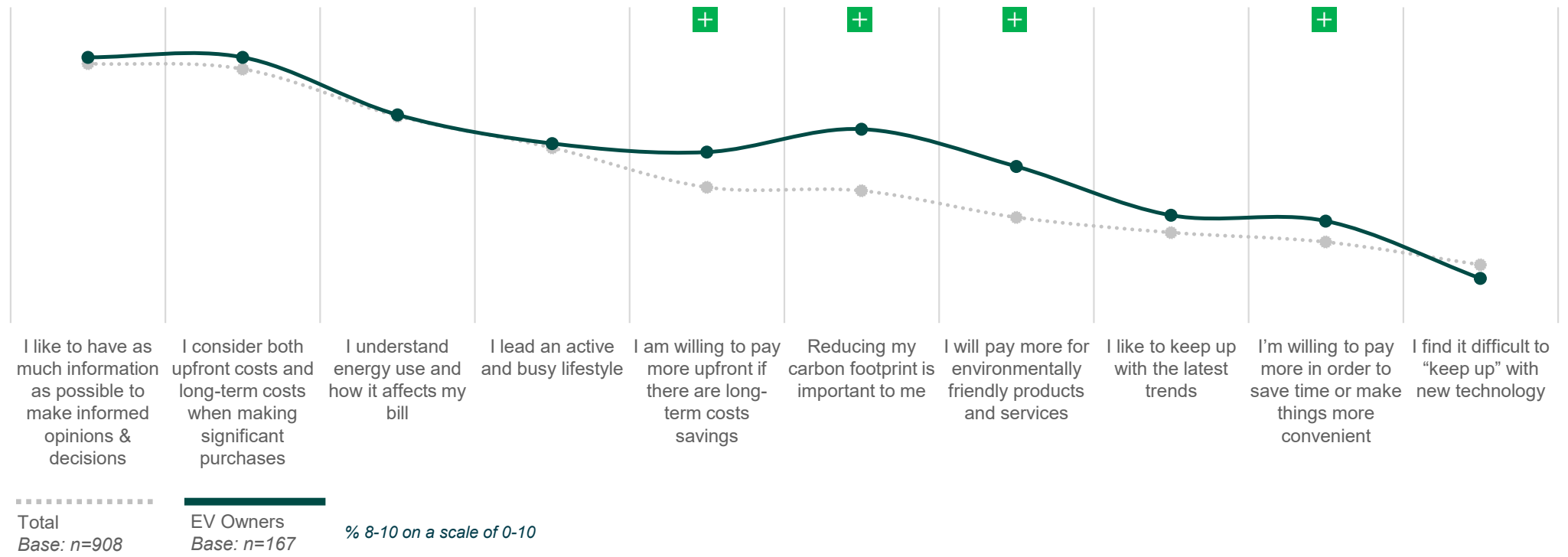
EV Owners Base: n=167



EV OWNERS

PSYCHOGRAPHICS

18%



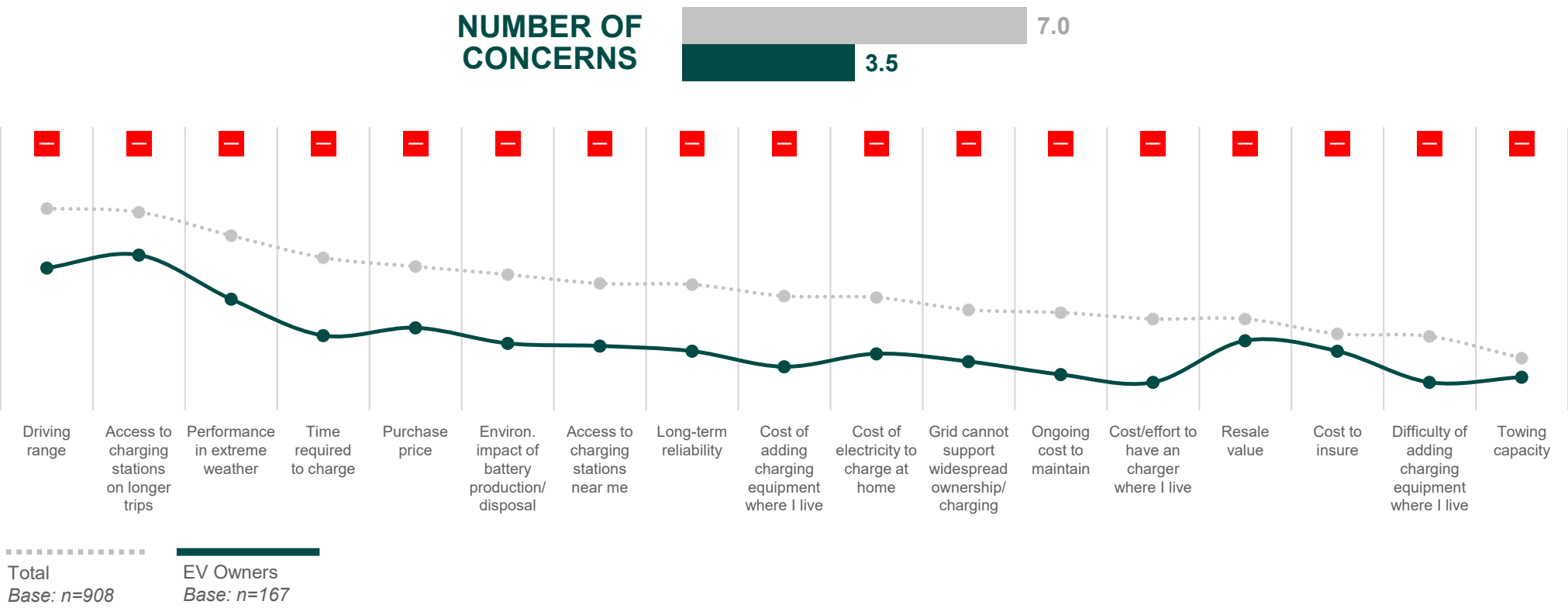
Indicates significantly higher vs. Total at 95% CL
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 Indicates highest segment



EV OWNERS

CONCERNS ABOUT EVS

18%



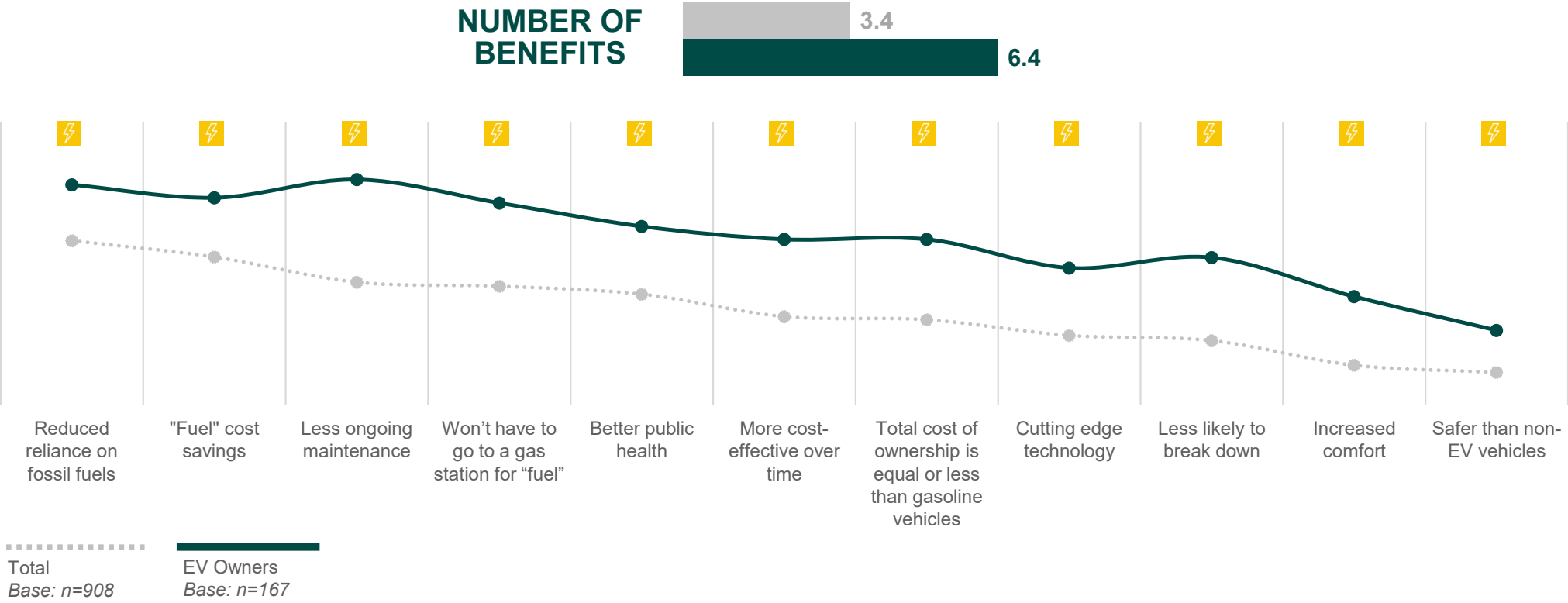
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



EV OWNERS

BENEFITS OF EVS





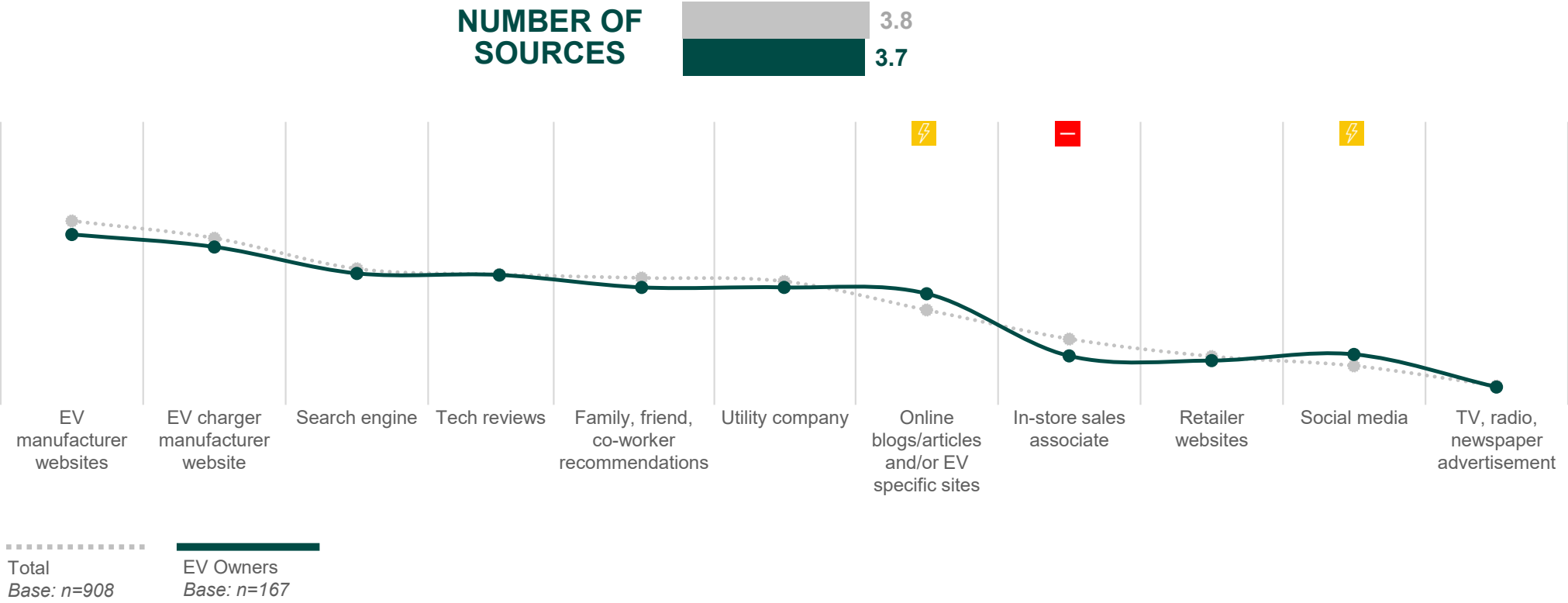
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



EV OWNERS

SOURCES OF INFORMATION ON CHARGING

18%



+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



EV OWNERS

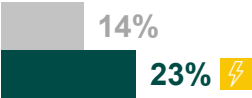
EV INTENTIONS & DRIVING HABITS



EV FAMILIARITY
% 8-10 on a scale of 0-10



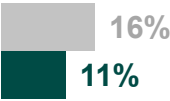
N6M EV PURCHASE LIKELIHOOD
% Not Unlikely



% DRIVE LESS THAN 10 MI PER DAY



% TAKE 6+ LONG ROAD TRIPS PER YEAR



 Indicates significantly higher vs. Total at 95% CL
 Indicates significantly lower vs. Total at 95% CL
 Indicates highest segment

Total
Overall Base: n=908
Have Vehicle Base: n=904

EV Owners
Overall Base: n=167
Have Vehicle Base: n=167



EV OWNERS

CHARGING INTENTIONS



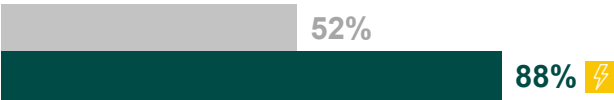
FAMILIARITY WITH HOME ELECTRIC SYSTEM

% 8-10 on a scale of 0-10



% WILLING TO HAVE LEVEL 2 CHARGER INSTALLED

% 9-10 on a scale of 0-10



% UTILITY COMPANY IS A SOURCE OF CHARGING INFORMATION

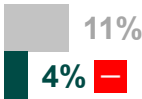


% WOULD WORK WITH UTILITY COMPANY ON CHARGING PLAN

% 9-10 on a scale of 0-10



% WOULD EXPECT UTILITY COMPANY TO INSTALL CHARGER



+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment

Total
Base: n=908

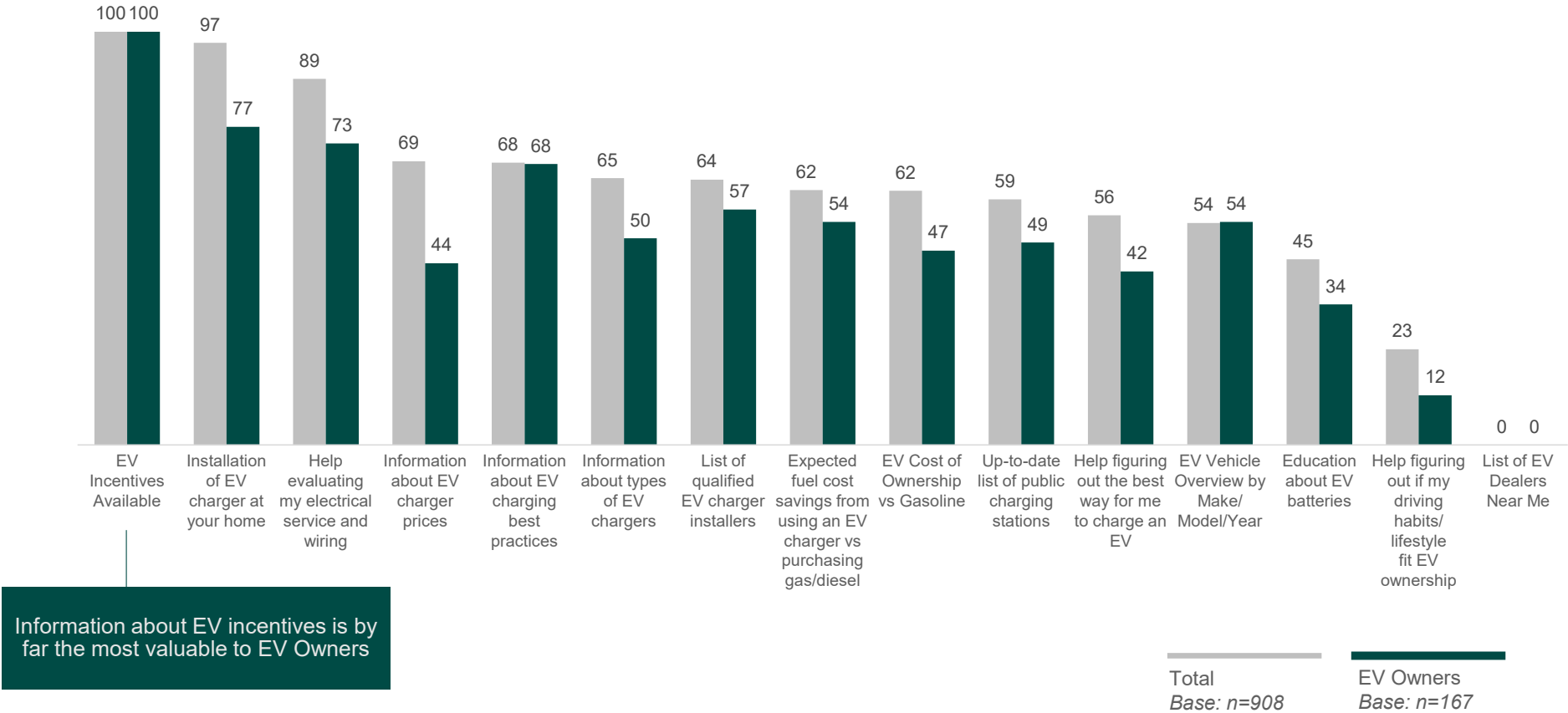
EV Owners
Base: n=167



EV OWNERS

RELATIVE IMPORTANCE OF EV INFORMATION (INDEXED)

18%



PREPARED PRESERVATIONISTS



“Though I know an EV could be beneficial in my life, I’d rather let someone else be the guinea pig before buying one. I think I’ll take the plunge eventually but want to be sure all the kinks are worked out first.”



PREPARED PRESERVATIONISTS

SEGMENT PILLARS



1

WHO ARE THEY?

Although they like to stay on top of new trends, these older and more experienced customers prefer to do their research, observe others, and understand pros and cons before jumping into a commitment.

2

WHERE ARE THEY IN THEIR JOURNEY?

These customers have done research and know how beneficial owning an EV can be – both for the planet and for their wallet. They're waiting to be sure that sufficient infrastructure is in place before joining the ranks of EV owners.

3

HOW CAN WE HELP THEM?

As the most likely to turn to their utility company for help and information, it is crucial to connect with these customers at the outset of their journey to help convince them sooner that the time is right.

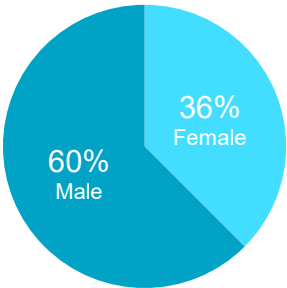


PREPARED PRESERVATIONISTS

DEMOGRAPHICS

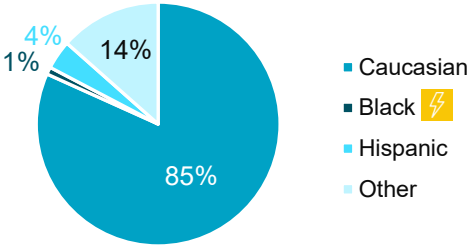


58 ⚡
YEARS OLD (AVG)



\$138k
HH INCOME (AVG)

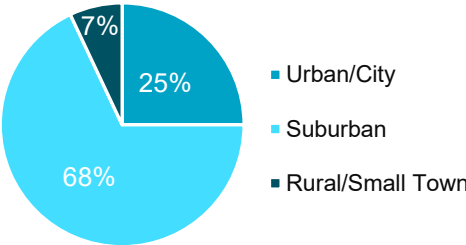
ETHNICITY



■ MARRIED ■ NOT MARRIED ⚡



URBANICITY



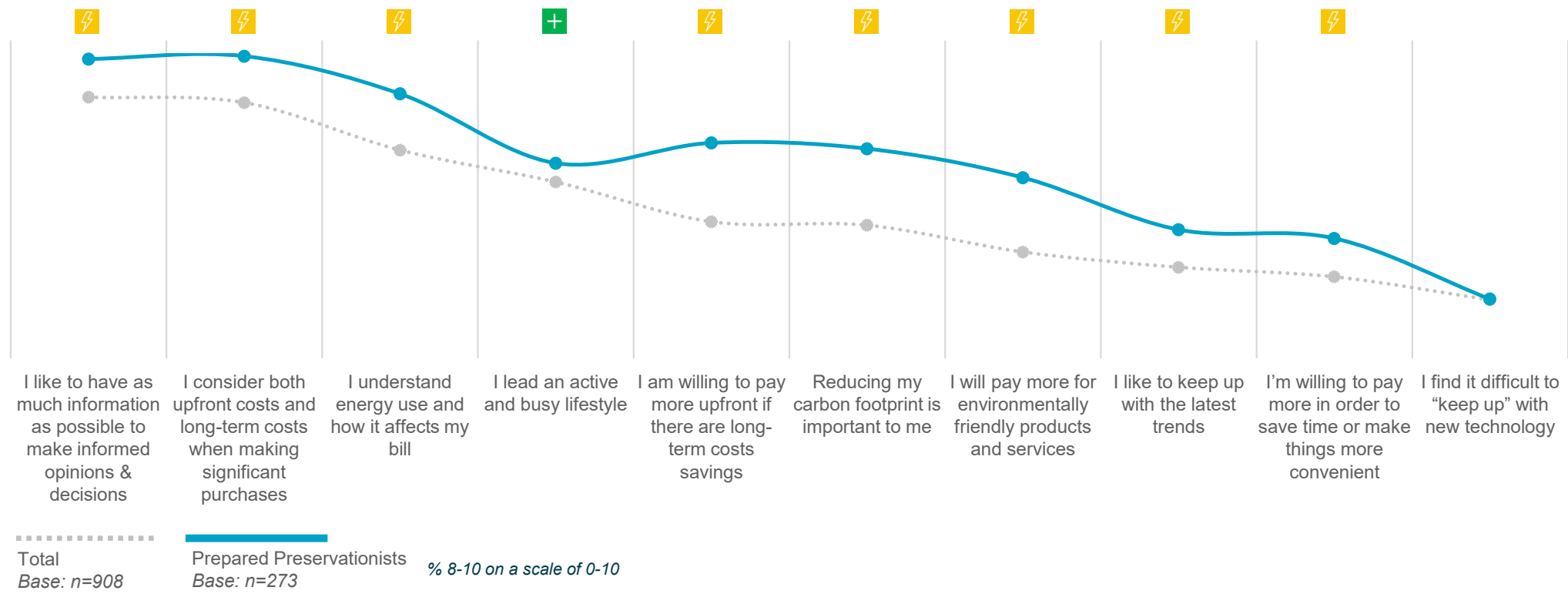
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment

Prepared Preservationists Base: n=273



PREPARED PRESERVATIONISTS

PSYCHOGRAPHICS



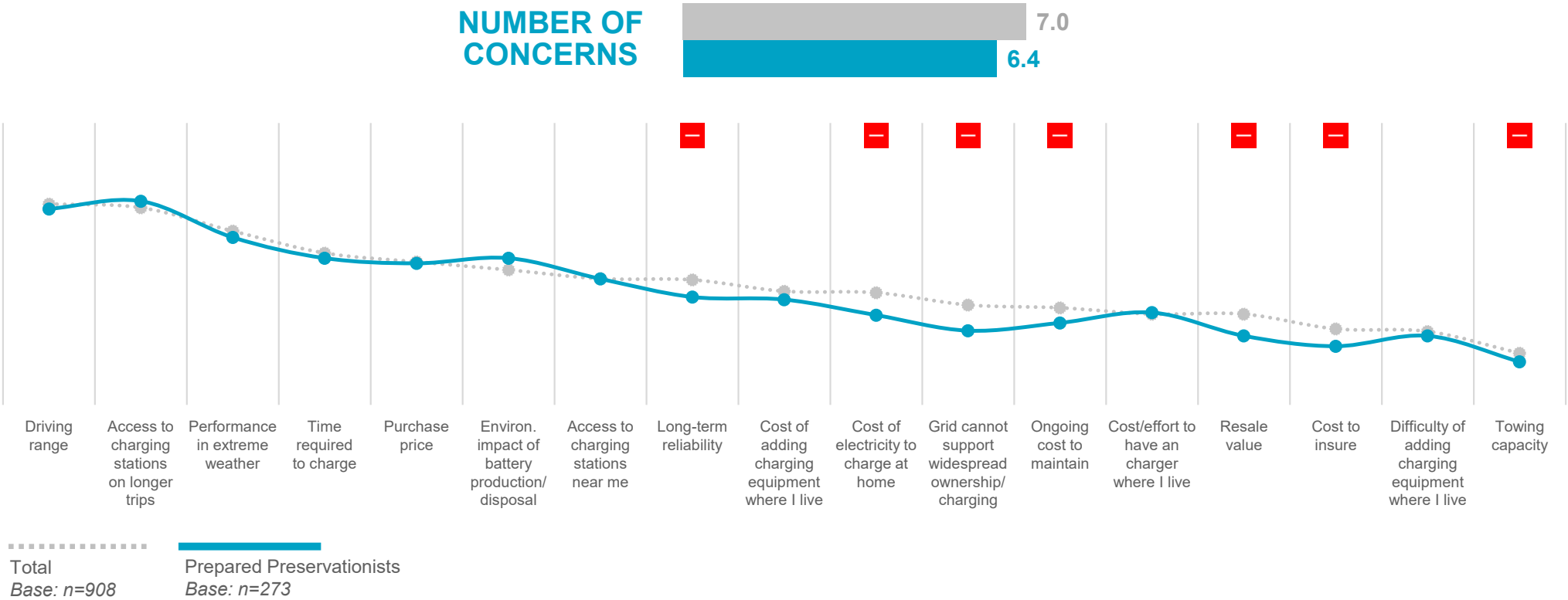
- + Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
- ⚡ Indicates highest segment



PREPARED PRESERVATIONISTS

CONCERNS ABOUT EVS

30%



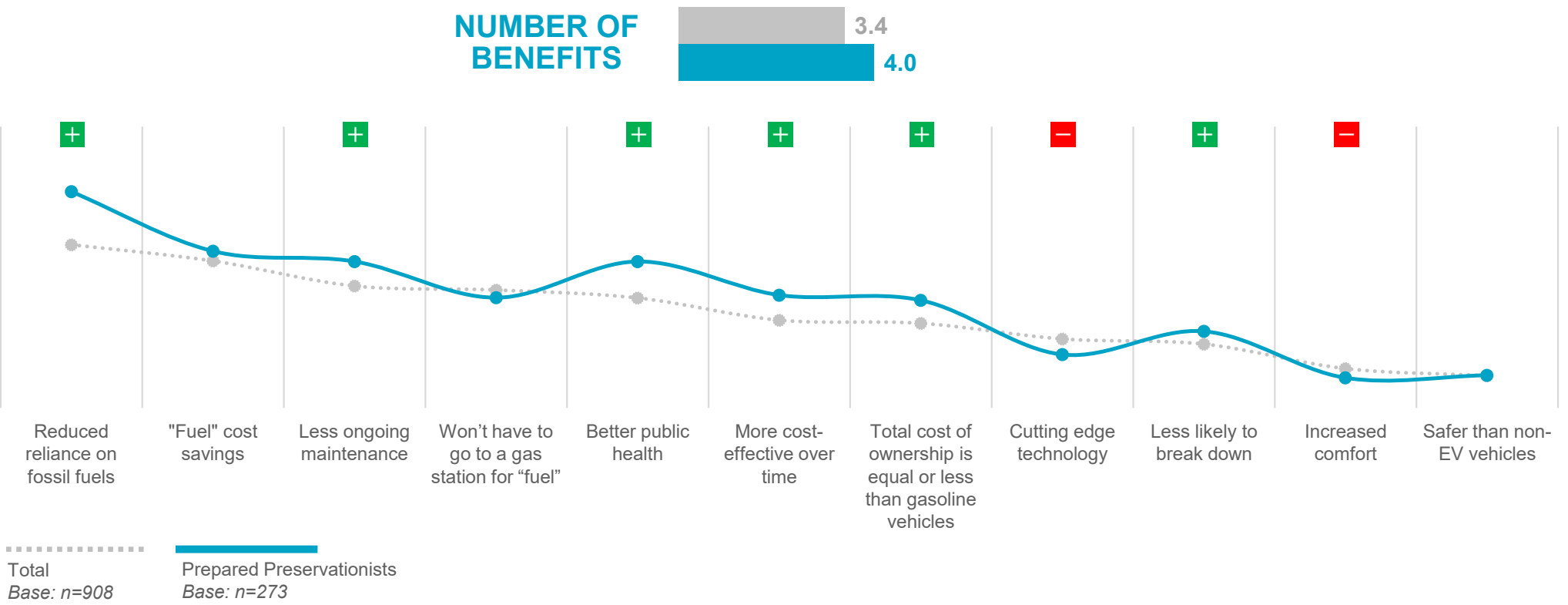
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



PREPARED PRESERVATIONISTS

BENEFITS OF EVS

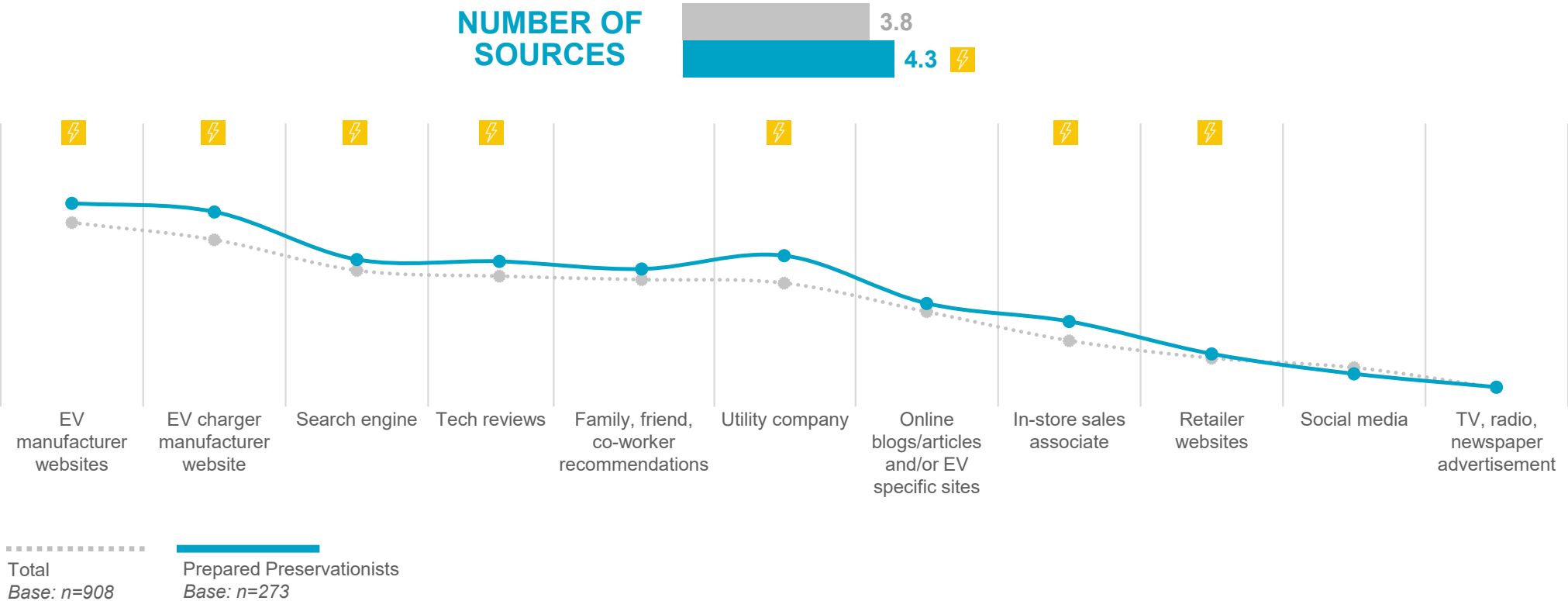
30%



+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



PREPARED PRESERVATIONISTS SOURCES OF INFORMATION ON CHARGING



+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



PREPARED PRESERVATIONISTS

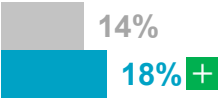
EV INTENTIONS & DRIVING HABITS



EV FAMILIARITY
% 8-10 on a scale of 0-10



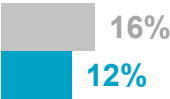
N6M EV PURCHASE LIKELIHOOD
% Not Unlikely



% DRIVE LESS THAN 10 MI PER DAY



% TAKE 6+ LONG ROAD TRIPS PER YEAR



- + Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
- ⚡ Indicates highest segment

Total
Overall Base: n=908
Have Vehicle Base: n=904

Prepared Preservationists
Overall Base: n=273
Have Vehicle Base: n=272



PREPARED PRESERVATIONISTS

CHARGING
INTENTIONS



FAMILIARITY WITH HOME ELECTRIC SYSTEM

% 8-10 on a scale of 0-10



% WILLING TO HAVE LEVEL 2 CHARGER INSTALLED

% 9-10 on a scale of 0-10



% UTILITY COMPANY IS A SOURCE OF CHARGING INFORMATION

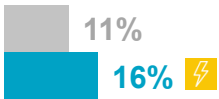


% WOULD WORK WITH UTILITY COMPANY ON CHARGING PLAN

% 9-10 on a scale of 0-10



% WOULD EXPECT UTILITY COMPANY TO INSTALL CHARGER



+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment

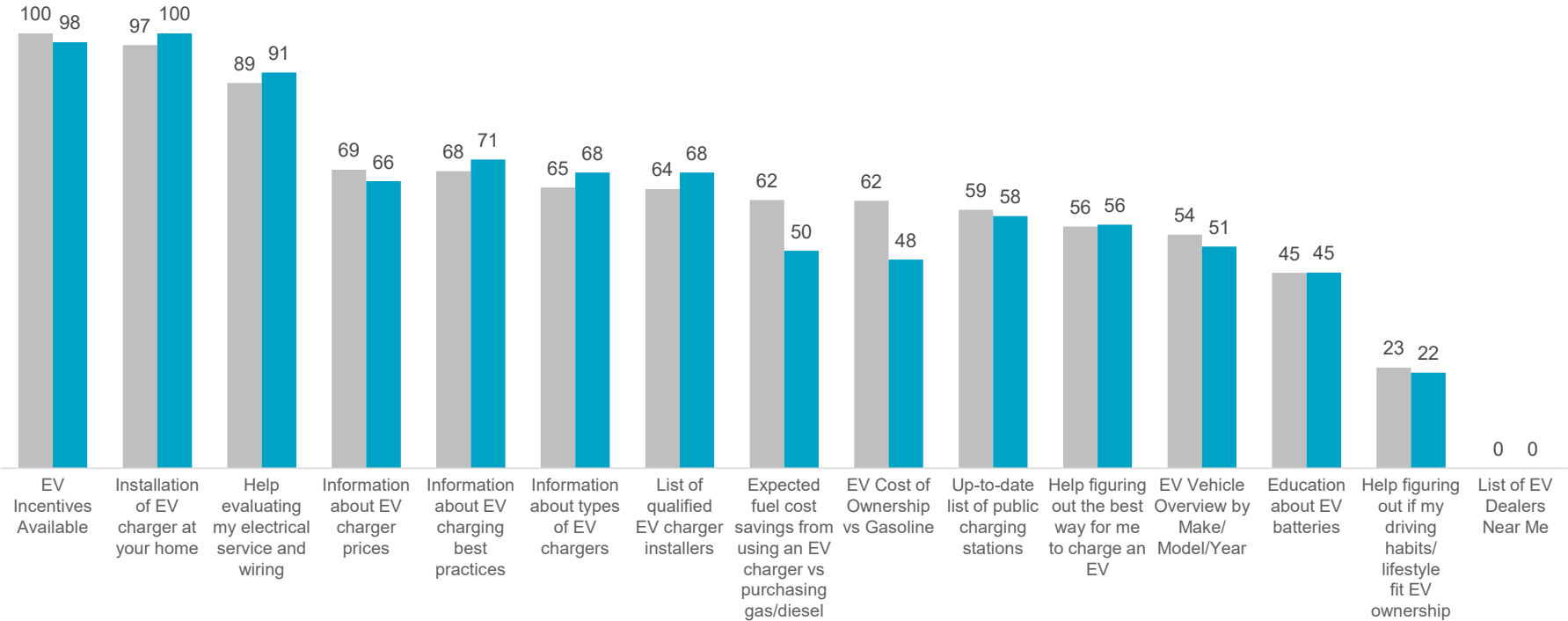
Total
Base: n=908

Prepared Preservationists
Base: n=273



PREPARED PRESERVATIONISTS

RELATIVE IMPORTANCE OF EV INFORMATION (INDEXED)



Total
Base: n=908

Prepared Preservationists
Base: n=273

UNINFORMED, BUT OPEN-MINDED



"I see people driving EVs all the time, but I just don't know much about them. I bet they're probably worth it, but how does it all work? Where could I charge it? It's a big investment for something so new with so many unknowns."



UNINFORMED, BUT OPEN-MINDED

SEGMENT PILLARS



1

WHO ARE THEY?

These customers prefer to live more spontaneously and in the moment, leaving them less tech-savvy and informed on new developments. They drive the least of any customers, with nearly half driving fewer than ten miles per day.

2

WHERE ARE THEY IN THEIR JOURNEY?

While they don't know much about EVs, they have not ruled out the possibility of purchasing one. They are not actively seeking information, but have a degree of curiosity.

3

HOW CAN WE HELP THEM?

Expanding their surface-level knowledge of EVs is a top priority, focusing on how the purchase would benefit them in the short-term. Education about reliability and how at-home charging can benefit their local commutes could pique their interest.

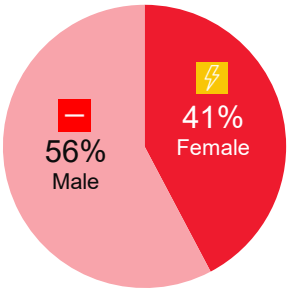


UNINFORMED, BUT OPEN-MINDED

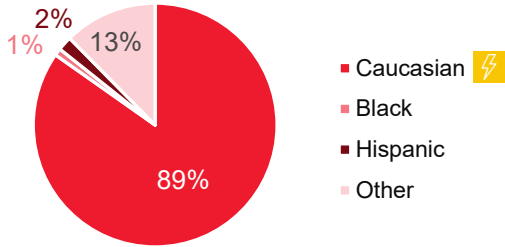
DEMOGRAPHICS



57
YEARS OLD (AVG)



ETHNICITY

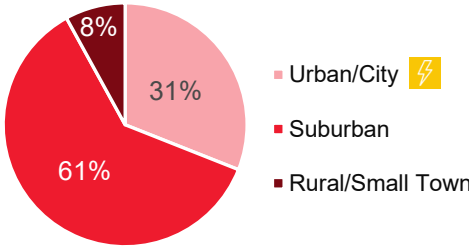


MARRIED **NOT MARRIED**



\$141k
HH INCOME (AVG)

URBANICITY



+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment

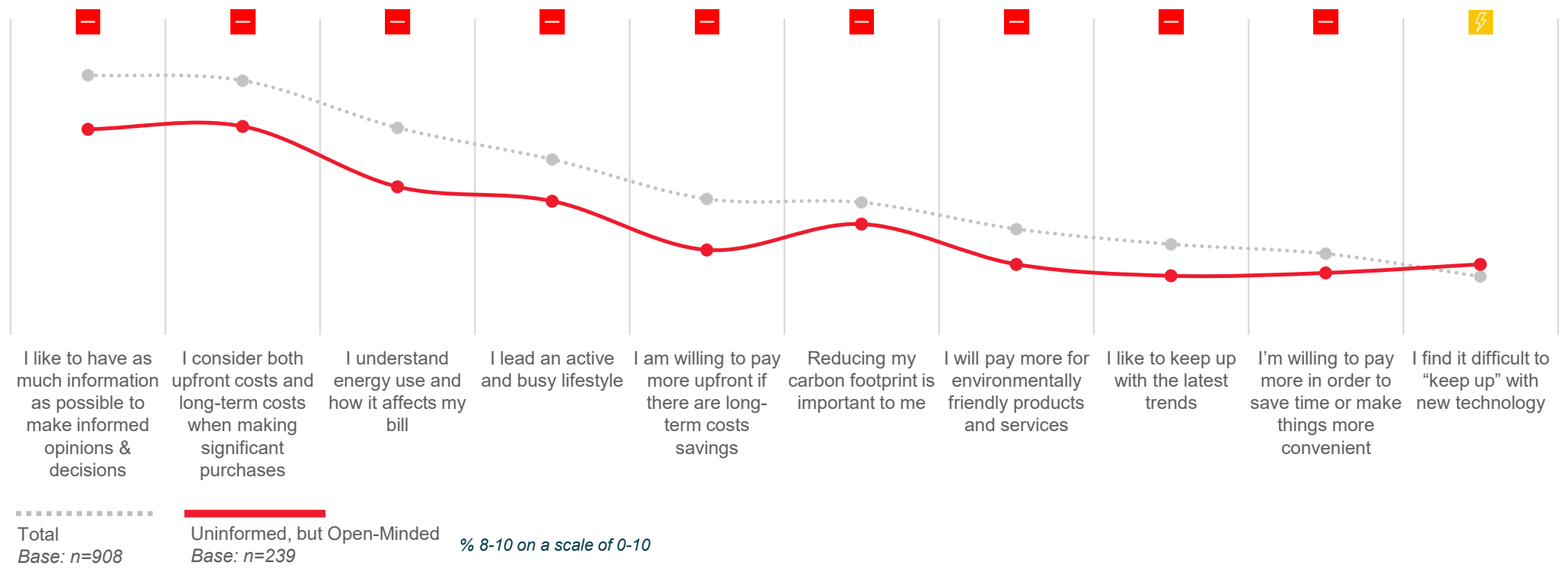
Uninformed, but Open-Minded Base: n=239



UNINFORMED, BUT OPEN-MINDED

PSYCHOGRAPHICS





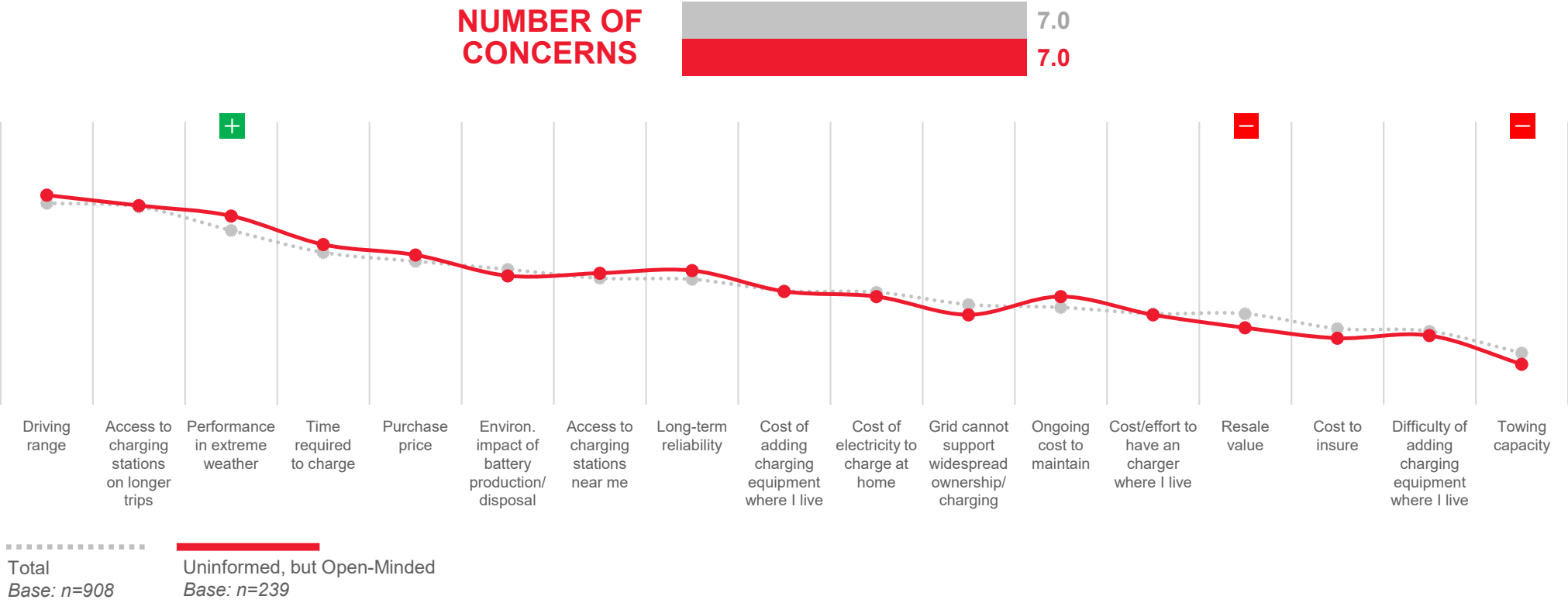
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



UNINFORMED, BUT OPEN-MINDED

CONCERNS ABOUT EVS





 Indicates significantly higher vs. Total at 95% CL

 Indicates significantly lower vs. Total at 95% CL

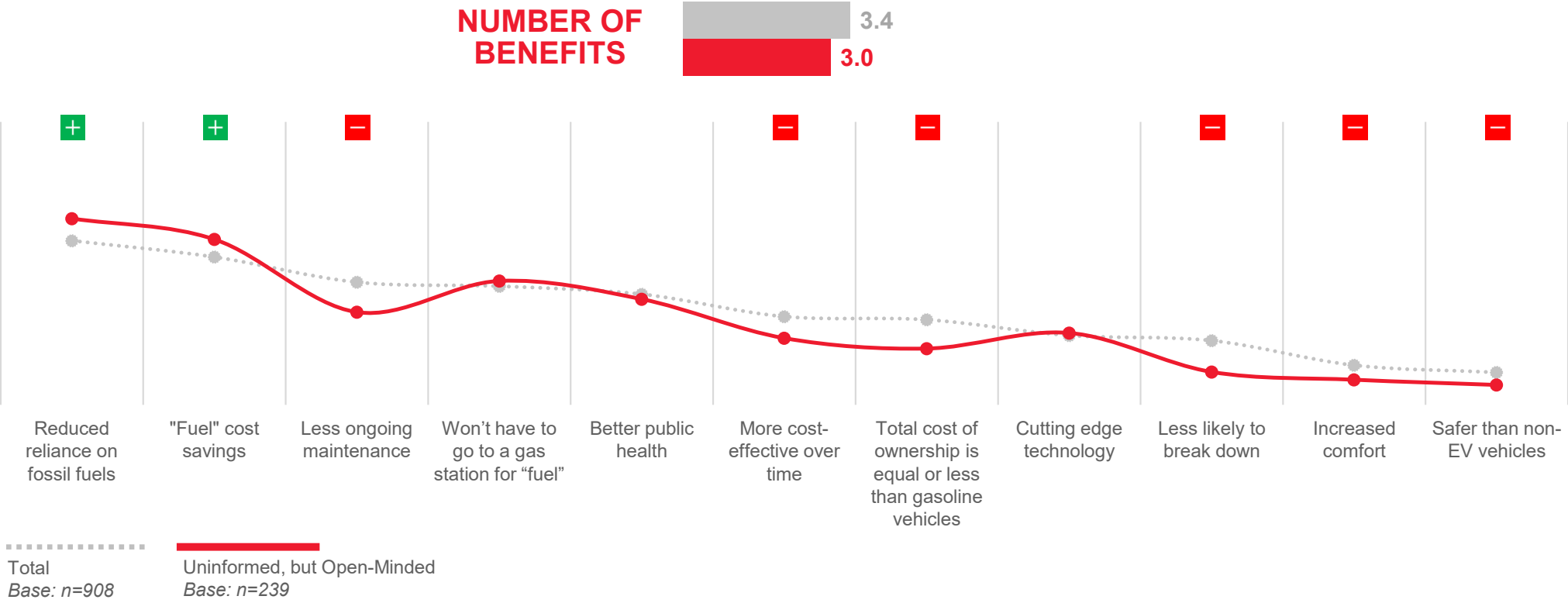
 Indicates highest segment



UNINFORMED, BUT OPEN-MINDED

BENEFITS OF EVS

26%



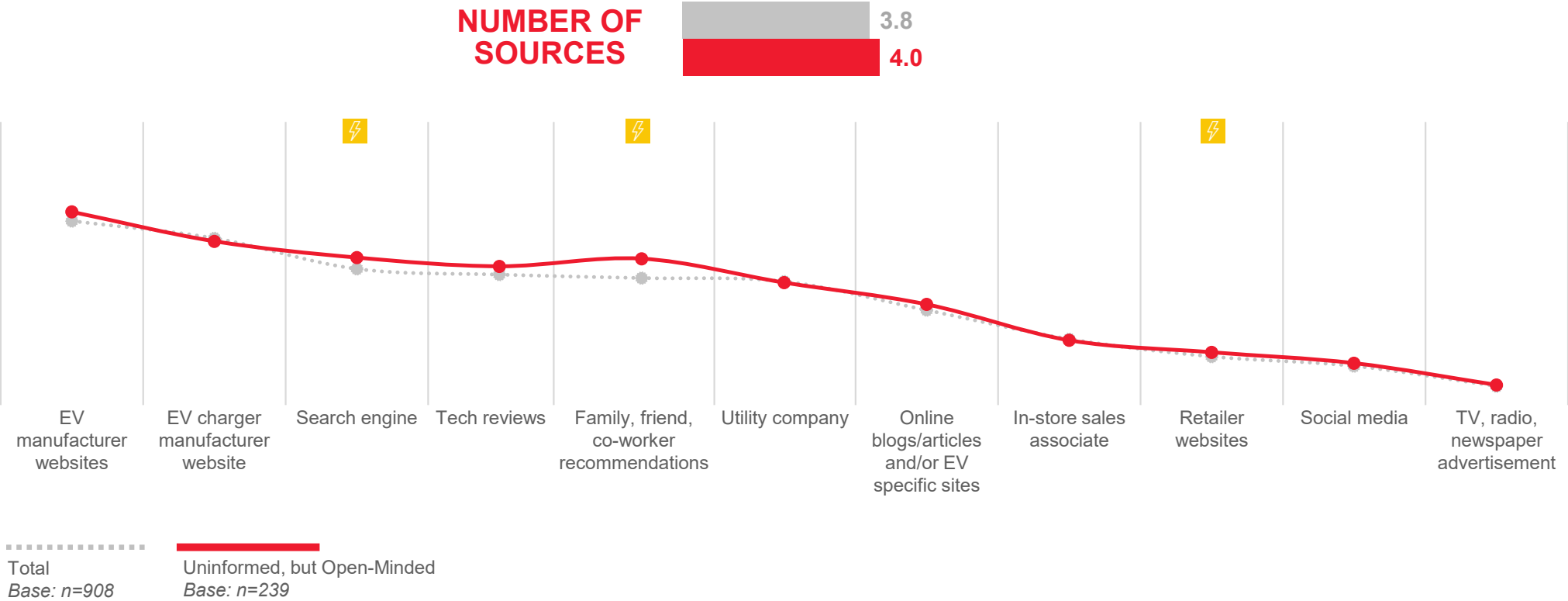
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



UNINFORMED, BUT OPEN-MINDED

SOURCES OF INFORMATION ON CHARGING





+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



UNINFORMED, BUT OPEN-MINDED

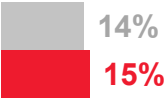
EV INTENTIONS & DRIVING HABITS

26%

EV FAMILIARITY
% 8-10 on a scale of 0-10



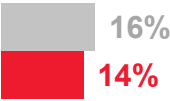
N6M EV PURCHASE
LIKELIHOOD
% Not Unlikely



% DRIVE LESS
THAN 10 MI
PER DAY



% TAKE 6+ LONG
ROAD TRIPS PER
YEAR



 Indicates significantly higher vs. Total at 95% CL
 Indicates significantly lower vs. Total at 95% CL
 Indicates highest segment

Total
Overall Base: n=908
Have Vehicle Base: n=904

Uninformed, but Open-Minded
Overall Base: n=239
Have Vehicle Base: n=237



UNINFORMED, BUT OPEN-MINDED

CHARGING INTENTIONS

26%

FAMILIARITY WITH HOME ELECTRIC SYSTEM

% 8-10 on a scale of 0-10



% WILLING TO HAVE LEVEL 2 CHARGER INSTALLED

% 9-10 on a scale of 0-10



% UTILITY COMPANY IS A SOURCE OF CHARGING INFORMATION

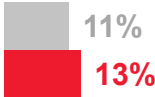


% WOULD WORK WITH UTILITY COMPANY ON CHARGING PLAN

% 9-10 on a scale of 0-10



% WOULD EXPECT UTILITY COMPANY TO INSTALL CHARGER



+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment

Total
Base: n=908

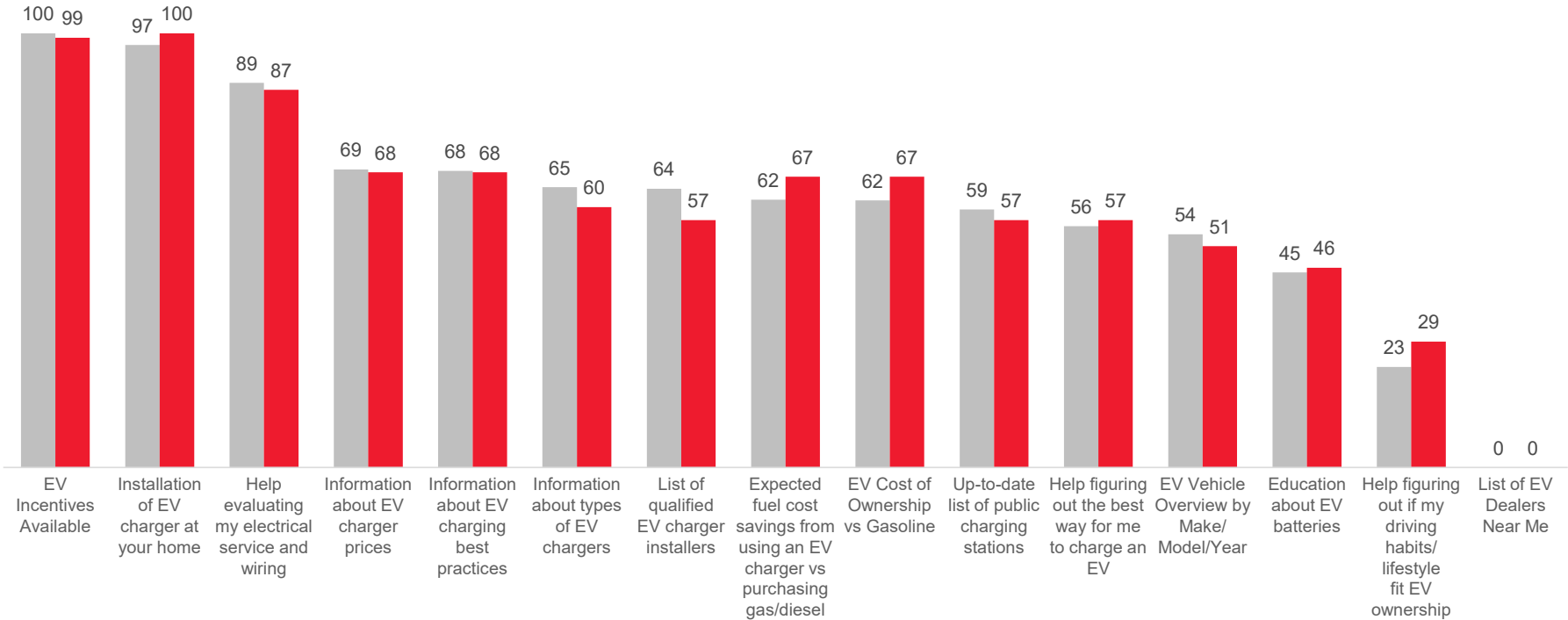
Uninformed, but Open-Minded
Base: n=239



UNINFORMED, BUT OPEN-MINDED

RELATIVE IMPORTANCE OF EV INFORMATION (INDEXED)

26%



Total
Base: n=908

Uninformed, but Open-Minded
Base: n=239

CONFIDENT CYNICS



“What’s wrong with my current car? It runs fine – I don’t need to spend crazy money for an EV when I’ve never had any issues with my good old gas-powered vehicle.”



CONFIDENT CYNICS

SEGMENT PILLARS



1

WHO ARE THEY?

"If it ain't broke, why fix it?" is the mantra for these customers. They feel well-informed on many topics (energy and technology included), which makes them feel secure in the status quo. CCs are also typically more guarded with their personal information.

2

WHERE ARE THEY IN THEIR JOURNEY?

They've done their research and have come to the conclusion an EV is not a meaningful or necessary addition to their life. Eco-benefits don't move the needle for them, either.

3

HOW CAN WE HELP THEM?

These customers are going to be most resistant to outside help, as they approach things more independently. However, information regarding the cost of ownership and charger prices is of relatively more interest to CCs compared to other customers.



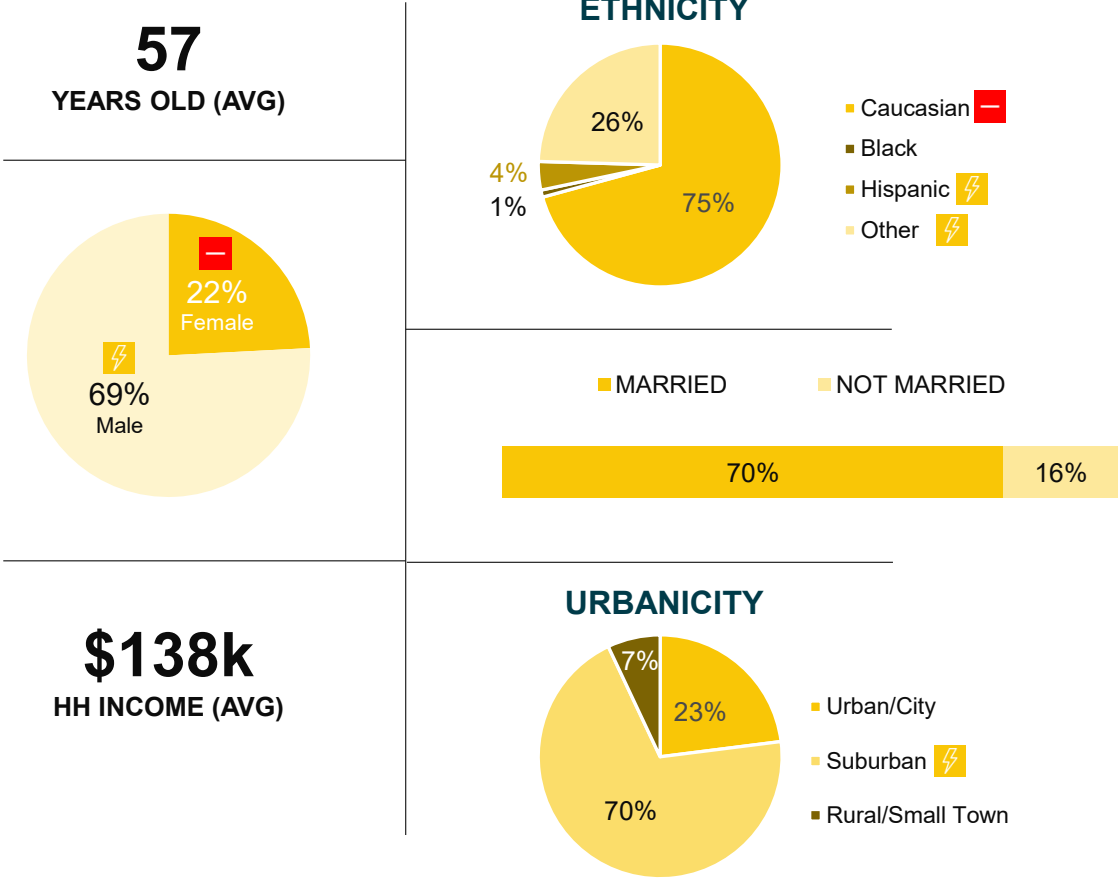
CONFIDENT CYNICS

DEMOGRAPHICS





 Indicates significantly higher vs. Total at 95% CL
 Indicates significantly lower vs. Total at 95% CL
 Indicates highest segment
Confident Cynics Base: n=229



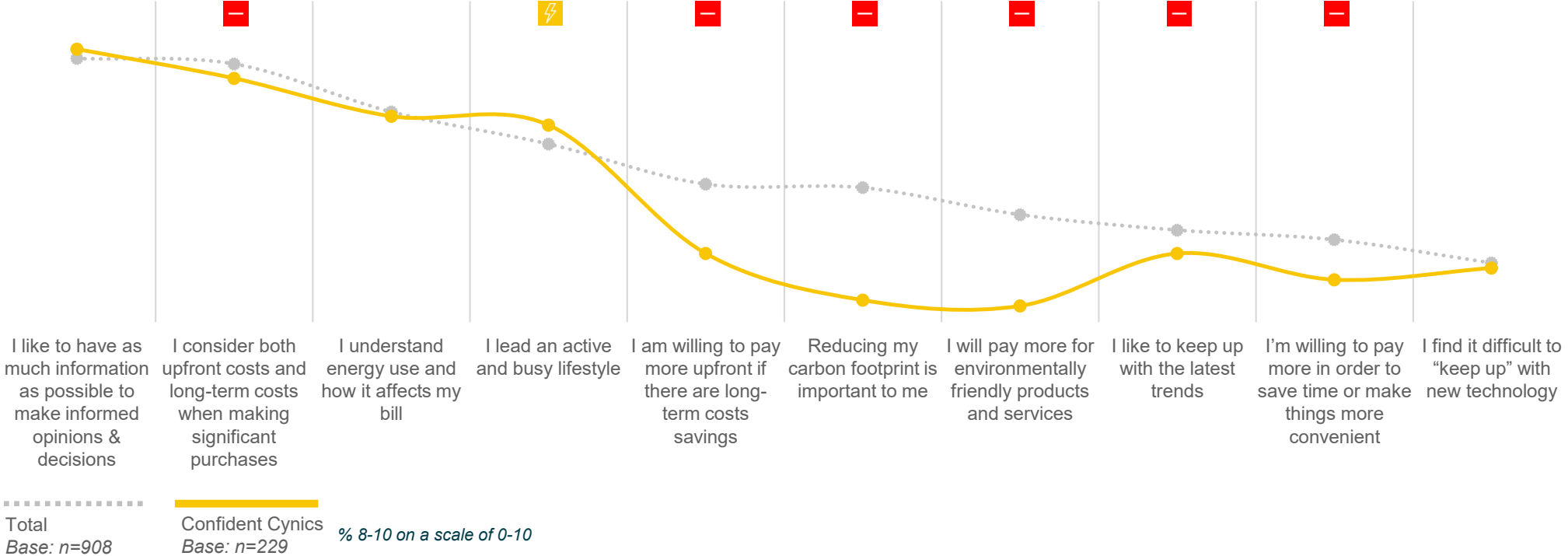
Most likely to prefer not to answer
demographic questions



CONFIDENT CYNICS

PSYCHOGRAPHICS

25%



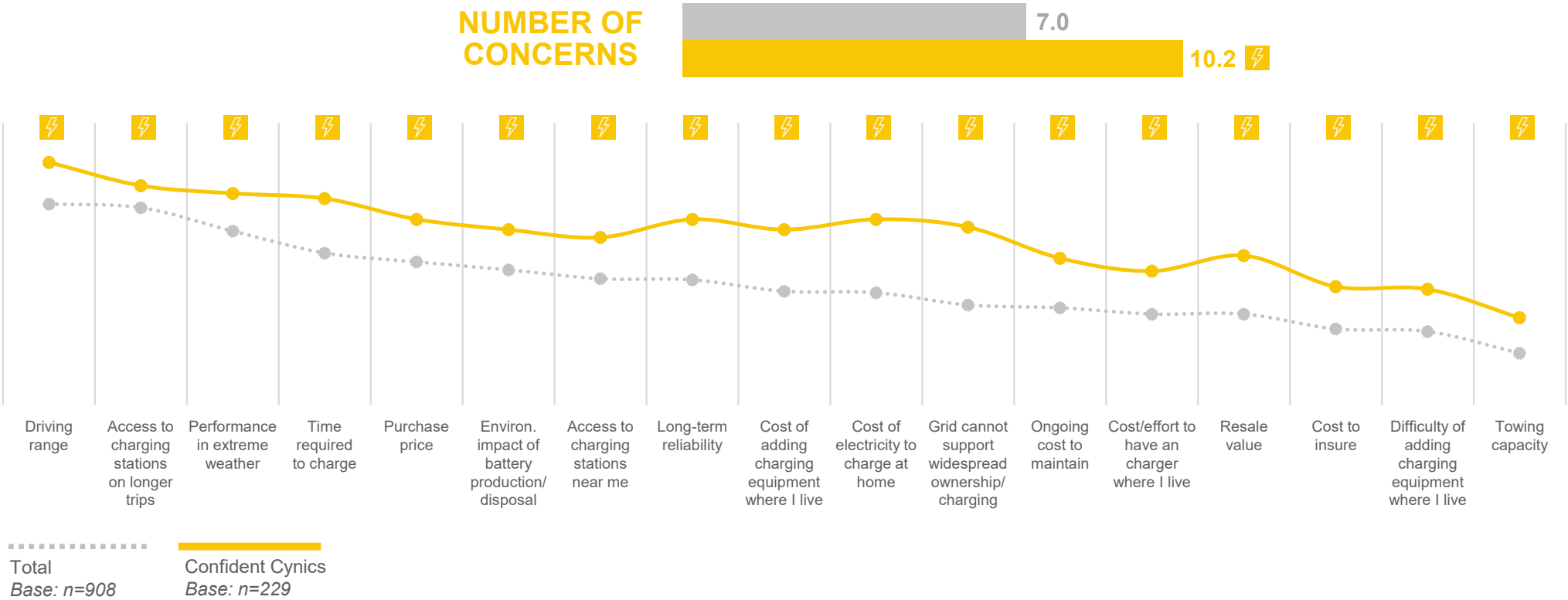
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



CONFIDENT CYNICS

CONCERNS ABOUT EVS

25%



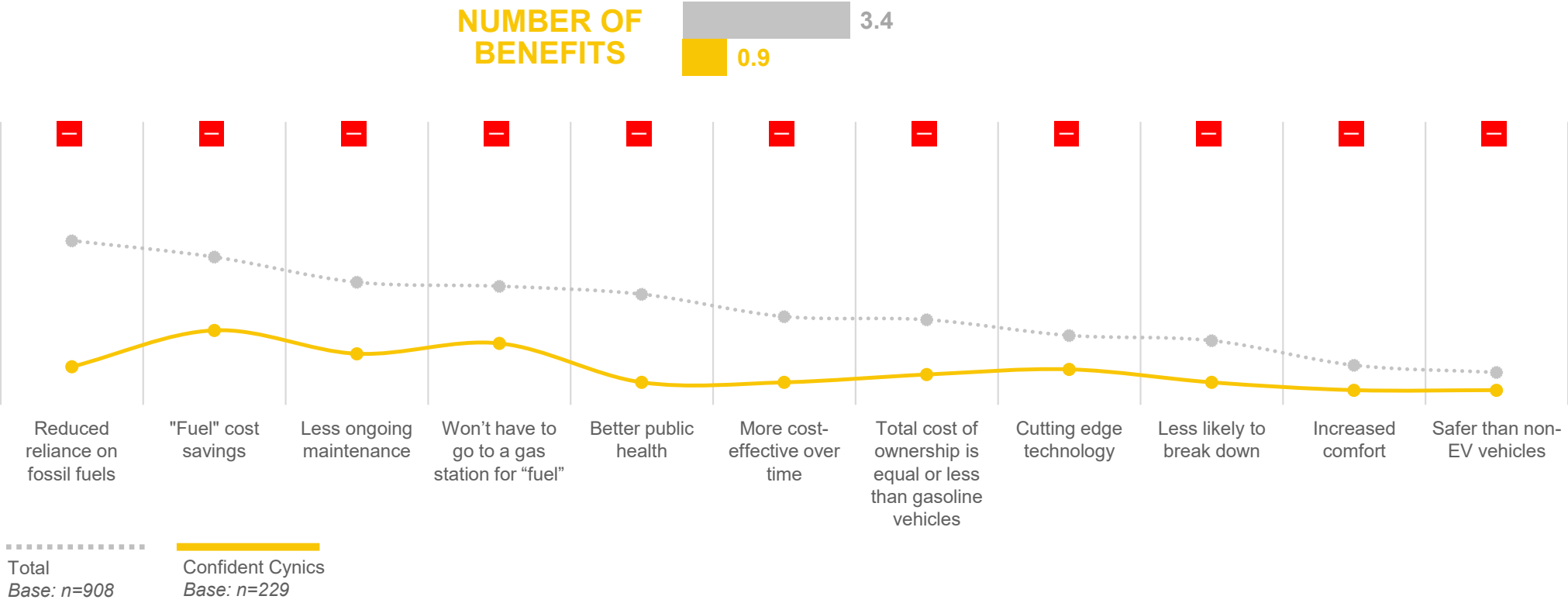
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



CONFIDENT CYNICS

BENEFITS OF EVS

25%



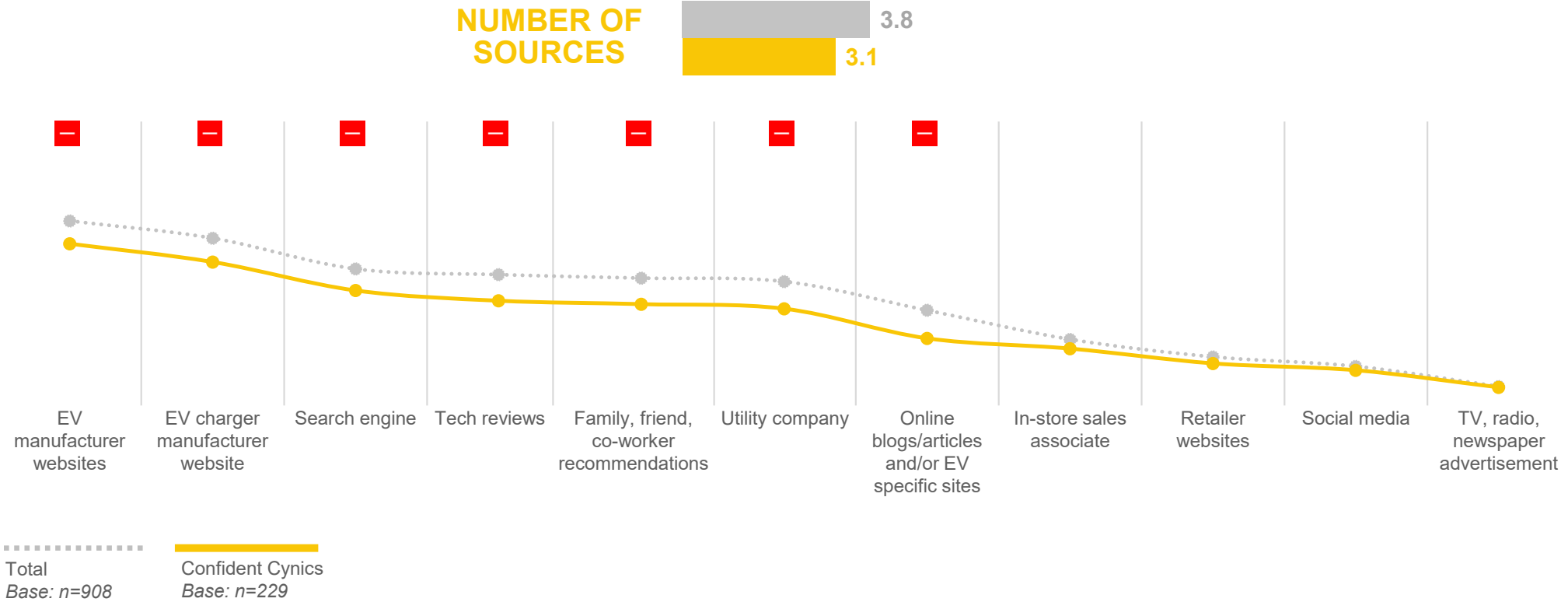
+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



CONFIDENT CYNICS

SOURCES OF INFORMATION ON CHARGING

25%



+ Indicates significantly higher vs. Total at 95% CL
- Indicates significantly lower vs. Total at 95% CL
⚡ Indicates highest segment



CONFIDENT CYNICS

EV INTENTIONS & DRIVING HABITS



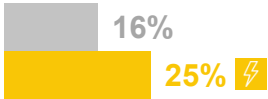
EV FAMILIARITY
% 8-10 on a scale of 0-10



% DRIVE LESS THAN 10 MI PER DAY



% TAKE 6+ LONG ROAD TRIPS PER YEAR



 Indicates significantly higher vs. Total at 95% CL
 Indicates significantly lower vs. Total at 95% CL
 Indicates highest segment

Total
Overall Base: n=908
Have Vehicle Base: n=904

Confident Cynics
Overall Base: n=229
Have Vehicle Base: n=228



CONFIDENT CYNICS

CHARGING INTENTIONS



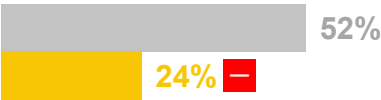
FAMILIARITY WITH HOME ELECTRIC SYSTEM

% 8-10 on a scale of 0-10



% WILLING TO HAVE LEVEL 2 CHARGER INSTALLED

% 9-10 on a scale of 0-10

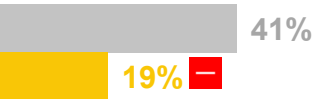


% UTILITY COMPANY IS A SOURCE OF CHARGING INFORMATION

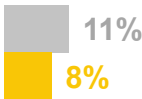


% WOULD WORK WITH UTILITY COMPANY ON CHARGING PLAN

% 9-10 on a scale of 0-10



% WOULD EXPECT UTILITY COMPANY TO INSTALL CHARGER



 Indicates significantly higher vs. Total at 95% CL
 Indicates significantly lower vs. Total at 95% CL
 Indicates highest segment

Total
Base: n=908

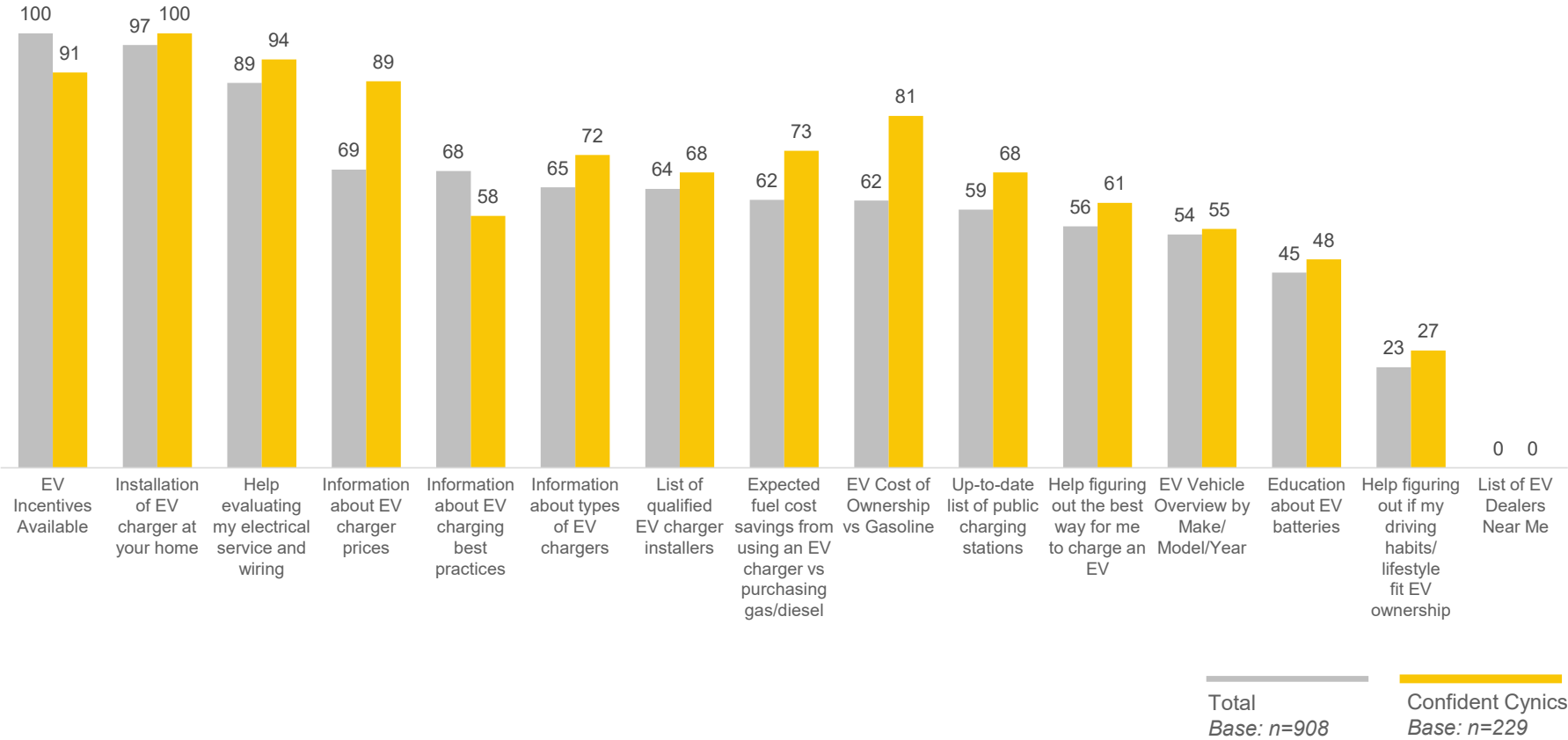
Confident Cynics
Base: n=229



CONFIDENT CYNICS

RELATIVE IMPORTANCE OF EV INFORMATION (INDEXED)

25%





RESEARCH DETAILS

- Survey responses were collected by Burke, Inc. from February 22nd, 2025 through March 14th, 2025 in compliance with the ISO 20252 standard for market, opinion, and social research by Burke, Inc.
- Burke is the first full-service marketing research firm to achieve ISO 27001 certification awarded through CIRQ, a subsidiary of the Insights Association in collaboration with PECB, the provider of audit and certification services. ISO 27001 is the internationally-recognized gold standard for information security.
- Respondents were sourced from client customer sample.
- Specific data collection materials have been provided outside this report and will be re-sent if needed. Full methodological details can also be sent upon request. Through a combination of redundant on-site and off-site electronic file management systems, Burke retains project materials for client research projects for at least four years.
- Planned sample size was n=150 for each EV Intender group (total of n=900). Achieved sample size was in line with planned sample (total of n=908). For the purposes of this research, the sample was sufficiently representative of the target populations of interest.
- Data collection was online. The average length of interview was approximately 15 minutes. Any sampling methodology has its limitations. Obtaining responses via online methods limits the respondent-base to those individuals who have online access.
- ISO compliant procedures were applied to cleaning and maintaining the sample file used in this study. Burke's algorithm for identifying and removing fraudulent, cheating, and duplicate respondents was applied to this online survey.
- Where relevant, statistical testing of percentages and means is done using independent t-tests at a 95% confidence level.

EV INTENDER SEGMENTATION

Qualitative Summary
Prepared by Burke Inc.
July 2025



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This final report has been provided to Xcel Energy by Burke Inc. without editing.

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BACKGROUND & OBJECTIVES

The Xcel Energy team recently completed an EV Intender segmentation analysis with Burke. The team recognizes that for the segmentation to be used to its potential, the segments must be brought to life and communicated in a clear and compelling way. **This phase of the project sought to achieve the following objectives:**

- How can we build deeper understanding of the EV Intender segments?
- What are the emotional drivers for each segment? What language do they use to express those emotions?
- How do consumers view the EV buying journey and how does that differ by segment?
- How can Xcel Energy ensure stakeholder understanding and drive action planning for these segments?



PROJECT DETAILS

Methodology

- n=32 virtual IDIs
- 60-minutes
- Field dates: June 23 – July 9, 2025

Recruitment Criteria*

- Xcel customers
- EV owners or intenders (based on segment)
- Qualified into Xcel EV Segment based on typing tool / attitudinal statements

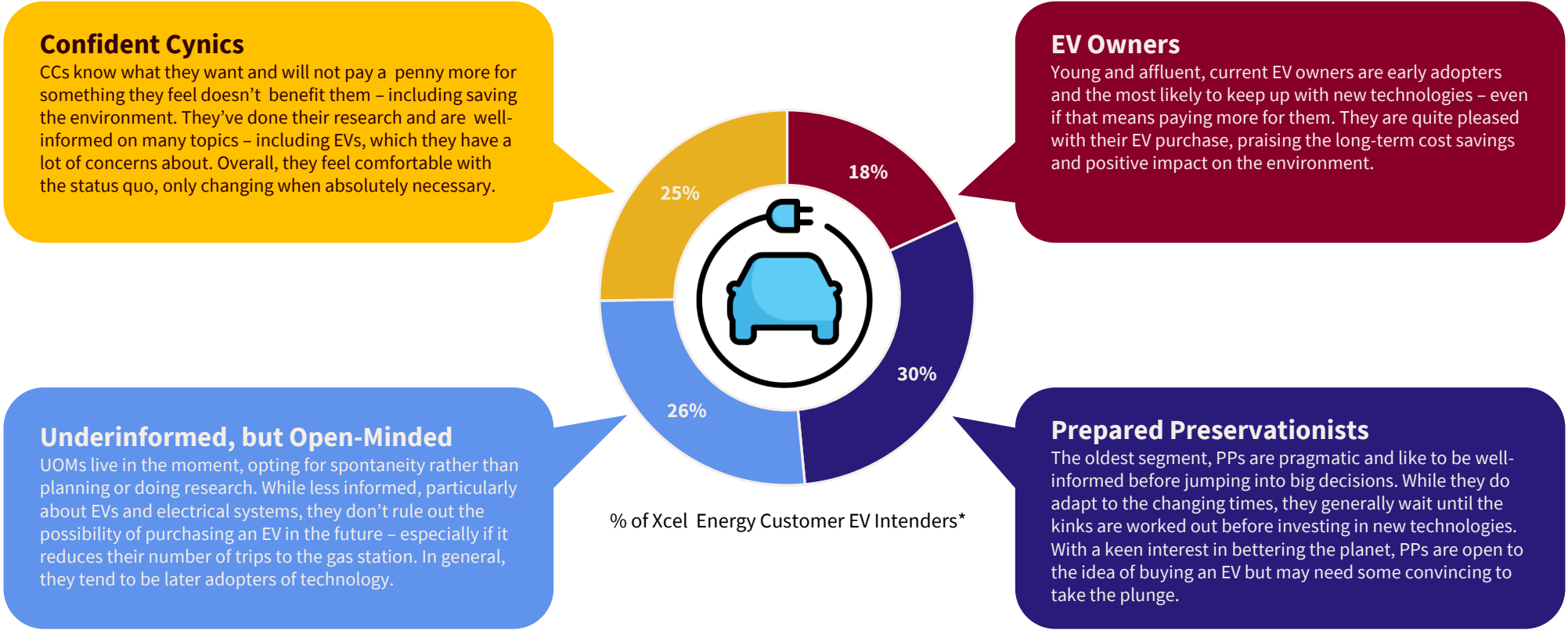
Participation



**Full recruitment criteria provided separately via Screener document*

KEY FINDINGS

INTRODUCTION TO EV INTENDER SEGMENTS



* Xcel Energy Customer EV Intenders defined by Experian EV Intender scoring

HOME CHARGING CAN BE AN AFTERTHOUGHT TO THE EV PURCHASE

The EV product purchase journey dominates

- Intenders are understandably focused on the product: the electric vehicle itself.
- This significant purchase can overshadow the essential aspect of home charging.
- The ability to charge at home can be assumed – it may not be prioritized or fully understood amongst all of the decision-makers of a vehicle purchase.
- EV product details (size, manufacturer, aesthetics, availability, price comparison, technology, features, etc.) can take precedence, and home charging can be placed on the back burner.

Level 2 charging need is not always anticipated

- Home charging is not expected to be an issue (just need electricity and the vehicle, right?).
- For some informed consumers, home charging is planned in advance, (PHEV in home, newer home with Level 2 available, previous solar installation, shared parking upgraded with Level 2 chargers) all create awareness.
- For others, the need is not known and may occur alongside EV ownership, or immediately following ownership of an EV.
- New owners may find Level 1 charging is not sufficient and that public charging is unreliable or unpredictable as a daily solution (e.g., planning ahead, waiting, adapters, variety of charging networks, availability, and costs).
- In addition, the realities of actual range in the real world is not always as expected.



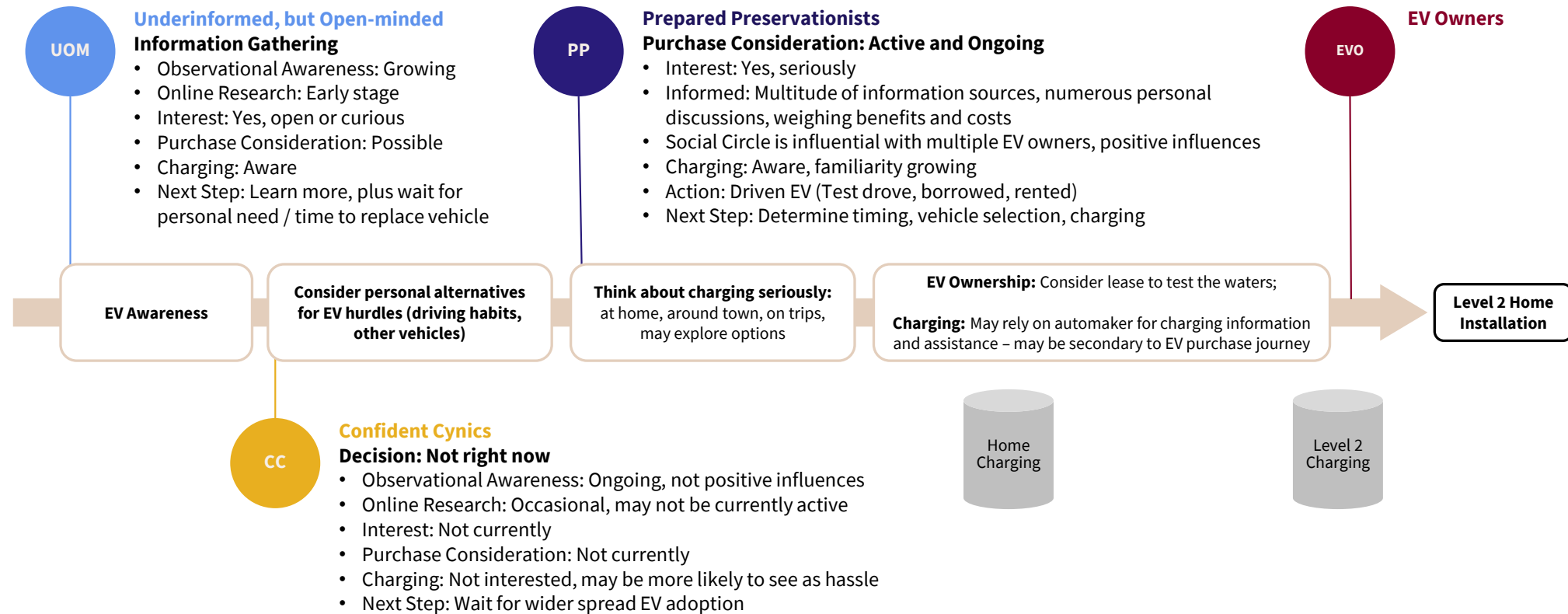
Position Level 2 home charging as an essential part of EV ownership

There may be an opportunity to prioritize Level 2 home charging as a prerequisite to EV ownership, or a parallel part of the EV purchase journey.

For consumers, a charging first mentality may feel like putting the cart before the horse

Anticipate their needs and help them understand the importance of Level 2 home charging: “Thinking about an EV? What to know about charging at home” and provide a FAQ or checklist (e.g., if you have an older home, look out for this; if you have solar, you may need more panels, etc.).

HOME CHARGING CONSIDERATION IS A LATER STEP, EVEN AFTER EV PURCHASE



KEY FINDINGS: EV ADOPTION



EV ownership is often a family decision, but not without trade-offs

A vehicle purchase is often a joint or family decision – one spouse may be leading the EV charge, and their partner may be less interested or less comfortable with EVs – joint buy-in, along with potential compromise may be necessary within a household.



An EV lease can serve as a trial

Currently, an EV lease is seen as an affordable way to try out the EV experience without having to commit long-term while mitigating some of the potential downsides or unknowns of ownership – those owners may be wooed by deals or make a hasty decision.



Hybrids or PHEVs are often considered a more comfortable “next step”

An HEV or PHEV is thought of as a possible next step towards EVs.

Hybrids are considered progress, but a low-risk move (no range anxiety/ reliance on chargers), by those interested in EVs, as well as for some who are hesitant or resistant towards electric vehicles.

There is some disinterest from those concerned about maintenance of two systems or who did not enjoy a previous hybrid driving experience (e.g., rental, past ownership).

Customers can lump HEV and PHEV with EV, or be unfamiliar with PHEVs – PHEVs may serve as primer on home charging or possibly a path to an eventual Level 2 upgrade.



Solar panels may help facilitate EV ownership

Solar panels can be an enabling step toward EV adoption, but it is not a requirement, and is not always the case.

Having solar and an EV as a “closed loop” is appealing to environmental enthusiasts, along with cost savings, especially compared to gas.

There can be a novelty or sense of self-sufficiency: “The sun comes up and powers my car. How cool is that?”

A negative solar experience (e.g., too costly, cumbersome, company goes out of business) may impact their mindset towards home charging.

ROLE OF ENERGY COMPANY SUPPORT

EV Owners

The ins and outs of charging can be complex, and they desire simplified information for new owners, along with current rebates/incentives.

Straightforward information about charging is helpful: kilowatt-hours/miles/cost, cost comparison to gas, options for chargers, adapters, connectors, plus TOU and special plans.

Prepared Preservationists

There is an opportunity to encourage a charging first approach – specific, detailed information about charging would be advantageous: What do they need to know/do before they bring home an EV?

This segment heavily prioritizes information and planning, and is most likely to value resources from Xcel.

Underinformed, but Open-Minded

They have questions, but not the answers: general support, a specialist to answer questions, and basic introduction/FAQ about the advantages of EVs could all be helpful.

Some may just be realizing their energy company plays a role in EV adoption.

Others seek improved infrastructure and assurance that widespread EV adoption could be supported by the electrical grid.

Confident Cynics

This segment needs some time to see that EVs make sense for the long haul and that they are safe, reliable and affordable– any cost savings information or fact-based support for the long-term benefits of EVs might be a step forward.

SEGMENT PROFILES

EV OWNERS



 Indicates highest segment

ANGIE – THE EV OWNER

Operations Manager | Tesla Model Y

Avg Age 55	Avg HH Income \$164k 	Gender 67% Male 29% Female	Partners 85% Married  11% Unmarried	Partners 84% Caucasian 1% Black 20% Other

In her own words...

For me, embracing technology isn't just something I do, it's a fundamental part of who I am. If it's cutting-edge, innovative, and just a bit risky, I'm all in. I've got Ray-Ban Meta glasses, drones, 360-degree cameras...

Basically, if it sounds futuristic, it's probably already in my Amazon cart.

But I don't just buy this stuff to show off (okay, maybe a little). I'm in it for the challenge and, more importantly... the payoff. When it comes to tech, ROI is part of the deal.

My EV is a perfect example. I jumped in early because driving an EV makes me feel like I'm ahead of the curve. Maybe a little... smarter. Especially when I consider fuel costs these days. Does it have quirks? Sure. Have I found myself stranded once or twice, staring at a charging station map, wondering about battery range while heading north for a ski trip? Yep.

Lesson learned: when skiing with the family, the wife's SUV wins (sorry, Tesla!).

But hey, those hurdles are part of the game. Innovation isn't painless. And that's something I try to impress upon my kids. I want my sons to see me as someone who isn't afraid to try new things. Someone who learns from setbacks and thrives on pushing the envelope.



EV INTEREST

Highest, not just why an EV, but why not?

TECHNOLOGY

Leading / high appreciation, expects technology will continue to evolve/improve

FINANCES

Threshold / comfortable

CONCERNS

Overcome (for most)

JOURNEY

Complete

CHARGING

Plugged in to Level 2 home charging (or wish they were), may own multiple EVs

HOW ENERGY COMPANY CAN HELP

Current rebates and incentive information would be valuable, and EV Owners think additional information including easy translation of energy (e.g. kilowatt vs. miles), simple non-biased online video tutorials, and Charging Plans / Time of Use would be helpful

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EV OWNERS ENJOY PROGRESS AND TRUST THAT EVS ARE THE FUTURE

EV is a personal fit

Motivated by a cost-savings approach, EV ownership is often a fit for their lifestyle: a tech-forward mentality, for some a belief that it is the “right thing to do” for the environment, as well as a match for their own driving habits.

Aesthetics, being fun-to-drive, and needing minimal vehicle maintenance are some of the additional perks enjoyed by EV owners.



Join the movement

There is a willingness and enjoyment of the process of EV adoption or being a leader or part of progress – whether that is a belief in improving safety, technology or the environment.

There is also trust that technology will continue to evolve and improve over time (increased range, more acceptable/faster charge, autonomous vehicles).



“I’ve been wanting an electric car because it’s just the right thing to do and it’s pretty cool.” – Carol

“Another positive is I don’t have any maintenance. I don’t have to do oil changes, so I don’t have to go sit at the dealership and wait for someone to change the oil and spend \$150 doing that.” – Jim

“We’re building the infrastructure, we’re debugging things... It’s a long process to have consumers adapt.... But over time, automation of safety stuff, automation of directions, all that will get better...” – Drew



FOR OWNERS, ALTERNATE OPTIONS MEAN NO SACRIFICE NECESSARY

EV Owners maximize their purchase for around-town, day-to-day driving; if winter weather or need for a long trip comes up, no problem – they may give it a try with their EV or just choose a different, more preferable, vehicle.



PROFILE

Michael, husband and dog, three vehicle usage

*“The **Nissan Leaf** because it has the shortest range of only about 200 and some miles, so it's a in-town commuter car, and so that's the run around car...”*

*“The **Subaru Forester**, that is more of the mountain car because it's bigger than the Model Y... fill it with whatever gear that we want to bring and the dog... fantastic four-wheel drive system that is so great on the roads, phenomenal in the snow, so it's the most reliable, dependable, (plus safety)...”*

*“The **Tesla** also goes to the mountains just in the summertime... also my husband's car that he drives all the time... runs to the airport and back and gets left out there for a while...”*

EV OWNERS ENJOY THE PROCESS AND KNOW THEY CAN HANDLE ANY ISSUES THAT ARISE

Owners handle hurdles in stride that may dissuade others

EV Owners are willing to accept or explore shortcomings readily: limited range or still-growing charging infrastructure challenges are tolerated or tested (e.g., they may see how low a battery goes or find no problem planning ahead for charging on longer trips).

A certain financial threshold is met

Similarly, EV Owners can afford to take a 'risk' on an EV, while cost-savings can be motivating.

They are likely to be able to handle any financial setbacks that may occur as a result of EV ownership (not that they are expecting any problems that they can't solve).



"I've pushed that to the limit several times where I've gotten down to zero and had to limp it into someplace. But yeah, there's way more anxiety driving the electric. It's a comfortable ride. It runs well, it's easy, it's just more work." – Mike

"I had mapped out a particular route... but then... took a different route and still it told us what the battery level would be when we got to a particular place that we were going to stop. We stopped in Idaho Springs for dinner, and it said 17%. So, I was okay with that because there's a supercharger in Idaho Springs, so I knew I'd be okay." – Jim

"I was curious about Tesla back in 2013. I was curious about Bitcoin back in 2009 and I wasn't ready to take that big of a risk to jump in it back then because I wasn't financially secure... now I'm much better than I was before (financially). But now I feel like I could make those minor investments just to see what happens... Sometimes you don't know, but it's fun... And that's where purchasing a Tesla forces me to learn those things... sink or swim. You got to jump in and figure it out." – Drew

THEY KNOW LEVEL 2 CHARGING MAXIMIZES EV OWNERSHIP

Level 2 home charging is the gold standard

- Informed owners realize the importance of Level 2 home charging – speed and convenience – and may advance plan.
- They are willing to pay for convenience, and value costs savings over time – plus some are willing to crunch the numbers.
- There can be a time is money mentality – not having to fill up at a gas stations is a bonus.

Ownership experience is needed for some to understand importance of charging, plus advantages of Level 2 home charging

- The ability to charge effectively at home can be assumed or is an afterthought.
- Home charging consideration can occur concurrently with EV shopping and ownership, or shortly after the vehicle comes home.
- Real life hindrances with Level 1 can emerge within a few weeks of ownership, and the need for Level 2 home charging becomes clear.
- Adapters, connectors and public charging stations can all have their own learning curve.



“Well, if I’m going to get this (EV), I’m going to charge this thing at home because I don’t want to have to drive over here... it costs me \$1,700 or something like that. But I feel like I’ve already saved that... I ran some numbers to compare costs at a supercharger versus cost at home, the price was a sixth, maybe a seventh of what it would cost there and then the convenience of doing it at home. So, it made total sense for me to make that investment.” – Drew

“It was probably three or four weeks into ownership. It was like, okay, this is taking too long to charge. I can’t count on it being full the next morning. So that’s when I started looking at putting in a 220 plug so that I could use it that way... I went the route of spending the extra money on the Tesla wall charger (felt safer) and had it permanently wired into my electrical system in the house.” – Jim

Customer Profile

LEVEL 2 CHARGING IS ESSENTIAL

Ease of charging can't be assumed. One customer's daughter is taking a Nissan Leaf to college. The family tested it out temporarily at home first, experiencing challenges with home charging at their older home, and unreliable public charging options.

The electric in their older home would need substantial work (over \$20,000) to handle a Level 2 charger .



"My brother-in-law has a Chevy Volt, so they had talked about, they did have the Level 2 put into their house. So, through them I kind of had a little bit of knowledge of it. I did not take the time to look into what that would take to have put into our house. So, I was not super aware... But since now that we bought (leased) the Leaf, I definitely have looked into it more and it just seems like so much more realistic to have that Level 2 charger at home." – Becka

There was worry and stress about Level 1 charging at home with a cord running from kitchen outside to vehicle in the driveway.



"It made me feel so neurotic because I knew that when I plugged it in at the house, one hour gives me 1.5% of charge. So, I would just constantly be doing that math problem. I would be laying in bed thinking like, 'Oh, okay, it's at 20%. The car's at 20% right now. If I plug it in for 10 hours before I go to work tomorrow, that gets me 15%. 15% gets me...' I haven't done the math problem.' But 15% would get me about 50 miles. How far am I driving?" – Becka

Current local public charging is insufficient, and they do not see EVs as a viable solution at this time in this house.



"So, we really love the idea of the electric, but it just doesn't seem like the infrastructure is set up enough to rely on that outside of charging from our home. And we also have found that even within our neighborhood and stuff, there's a charging station at the library, but the cord was snipped. Somebody went up and cut the cord, so we couldn't use that charging station. And then there's another one at the mall that's kind of down the street, but we spent \$30 on that charger to charge it up. So that's not cheaper than gas. So, we really love the idea of the fully electric, but it just doesn't seem reliable and doable for our lifestyle." – Becka



EV OWNER EXPERIENCE MAY VARY GREATLY BASED ON AUTO-MAKER (TESLA VS. OTHERS), AND OWNER BASE IS EVOLVING



Charging access on the road may be challenging

Tesla charging network may enable an easier and more accessible charging experience, lessening range anxiety.

EV owners from other manufacturers may have a different experience charging outside of the home (access and speed), or more limited range.

Technology can be a driver to Tesla, separate from car type

EV Owners appreciate Tesla innovation – self-driving modes and over-the-air software updates can be a reason for purchase or a point of pride.

Tesla is recognized for leading technology, while other vehicles may offer similar technology features and systems (e.g., dog mode, adaptive cruise control, automatic headlights, convenience features).

Tesla brand can be conflated with all EVs

As a leader, the Tesla experience (range, features, technology, charging network etc.) can be misattributed as synonymous with all EVs.

Consideration: There is a potentially evolving EV owner and intender base, in part influenced by current political climate, attitudes towards electric vehicles and feelings about Elon Musk.

“I think the charging thing is a huge part. I have a few friends that have Rivians ... a couple of Volkswagen ID.4s and just not being able to zap your car in 15 minutes is a challenge.”
– Drew, Tesla owner

“(Rivian) ‘It’s a nice vehicle as far as creature comforts, but the software is just not there. It doesn’t have all the fun stuff, and it definitely doesn’t drive itself.’ Charging was a challenge for him... I just don’t see anybody that’s got the same level of technology that Tesla has.” – Jim, Tesla Owner, in conversation with a current Rivian/former Tesla owner

“She (Tesla owner) could charge her Tesla in like thirty minutes. The Tesla sounds like a way better car and it just sounds like they have a lot more infrastructure tied to it ... you could do a road trip across the country if you had a Tesla because there’s Tesla chargers all over the place. All that being said, I think Elon Musk totally sucks and so I would not buy his car, but I do think it is the better of the options of electric cars.” – Becka, Nissan Leaf owner, in conversation with a Tesla owner

ROLE OF ENERGY COMPANY: EV OWNERS DESIRE SIMPLIFICATION AND SUPPORT AMIDST A COMPLICATED PROCESS

Make it easier – switching to EV can be complicated

- EV Owners have lived it, and there is a desire for simplification of information about EV ownership, charging, charging plans, and energy use.
- As others follow them down the EV path, clear information or videos are helpful: easy-to-understand conversion, costs, information about the multitude of options, adapters, and apps, current rebates/incentives, plus TOU and special plans.

Changes can be hard to handle

- There may be a sense that it is challenging for the system to adapt to evolving and increasing energy usage.
- Changing TOU rates can impact habitual personal routines and is not well-received by one EV owner.

Mixed emotions can emerge amongst personal value systems

- Rebates and enviro-friendly benefits are great at the surface level, yet personal values can bubble up and conflict upon personal reflection (big business/monopoly/rebates).



“It varies in city to city, but understanding off-peak versus on-peak charging for electricity and understanding how the grid works and how you can store energy and just understanding all that was a big part... I could read it, but until I lived it, it didn't really make complete sense.” – Drew, EV Owner

“(TOU hours/rates) Well, I just got used to all that. Now, they're going to change it on me, and so that pisses me off because they don't know when their expensive power is being pulled on their electrical grid apparently... because now, they're having to change it pretty dramatically.” – Michael, EV, Owner

“I guess the rebates are really about all I would expect an electric company to do. And that's kind of a catch-22 in my mind because if they offer a rebate, I'm paying for that. So, it's kind of like, is it really fair to everybody who is not driving electric vehicles to have to pay a rate that's adjusted so that they can pay rebates for those of us who do drive electric vehicles?” – Jim, EV Owner



PREPARED PRESERVATIONISTS

AARON – THE PREPARED PRESERVATIONIST

Engineer | Subaru Crosstrek

Avg Age	Avg HH Income	Gender	Partners	Partners
58 ⚡	\$138k	60% Male 30% Female	73% Married 26% Unmarried ⚡	85% Caucasian 1% Black ⚡ 18% Other

In his own words...

For me, nature isn't just scenery... it's my sanctuary.

Hitting the trails, exploring new cycling routes, rounding up the fam for a camping trip... every adventure reminds me how lucky we are. And that comes with responsibility.

Leaving a trail cleaner than we found it isn't just good manners—it's our way of protecting something sacred. My wife and I even rope the kids into local park clean-ups (nothing builds character quite like pulling trash out of bushes, right?).

Now, I wouldn't say I'm a bleeding-edge techie. But once new technology passes the sniff test, I'm game, especially if it's something that ultimately serves the greater good. Case and point: we're redoing our kitchen – smart fridge, smart dishwasher, etc. It's going to save us money, and possibly a polar bear or two. Definitely a “win, win.”

So... the next big leap? An EV. How serious are we? Well, let's just say we've got a spot picked out for the charging station.

The way I see it, getting an EV isn't just another purchase. It's an expression of the values we share as a family. It's a way to align our daily choices with our commitment to protect the outdoors. Sure, you hear some negatives about EVs. But I've also heard plenty of positives from friends who've already jumped in.

Besides, at the end of day, it's just the right thing to do.



⚡ Indicates highest segment

EV INTEREST

Not YET an EV owner, though ownership in the near future is possible; the direction is undeniable, and someday is inevitable

TECHNOLOGY

Useful is valued over new, though interest and enjoyment are strong

FINANCES

Strong/stable though higher upfront costs than desired are noticed, and other personal projects may compete for priority

CONCERNS

Expanded infrastructure (and vehicle range) is desired; PPs anticipate future improvements and appear realistic vs. resistant to an EV change

JOURNEY

They have researched and considered EV ownership; their close social circle likely includes multiple EV owners, and they have ridden in or driven friends' EVs, or test drove

CHARGING

Familiar and fairly informed, and may have discussed with friends

HOW ENERGY COMPANY CAN HELP

Research-driven PPs love information and data points – specific information on charging, contractor list, and current incentives or subsidies are all helpful

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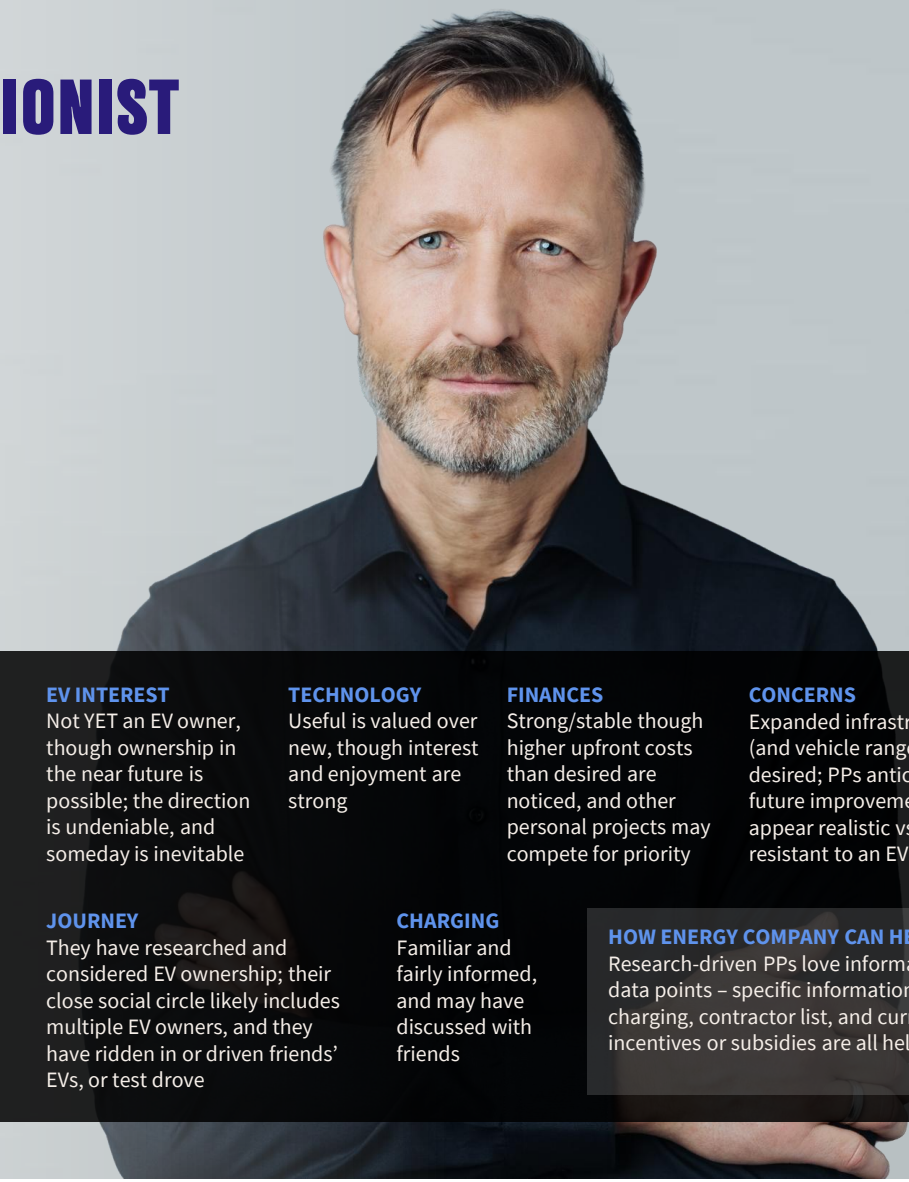
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In his own words...

For me, nature isn’t just scenery... it’s my sanctuary.

Hitting the trails, exploring new cycling routes, rounding up the fam for a camping trip... every adventure reminds me how lucky we are. And that comes with responsibility.

Leaving a trail cleaner than we found it isn’t just good manners—it’s our way of protecting something sacred. My wife and I even rope the kids into local park clean-ups (nothing builds character quite like pulling trash out of bushes, right?).

Now, I wouldn't say I'm a bleeding-edge techie. But once new technology passes the sniff test, I'm game, especially if it's something that ultimately serves the greater good. Case and point: we're redoing our kitchen – smart fridge, smart dishwasher, etc. It's going to save us money, and possibly a polar bear or two. Definitely a “win, win.”

So... the next big leap? An EV. How serious are we? Well, let’s just say we've got a spot picked out for the charging station.

The way I see it, getting an EV isn't just another purchase. It's an expression of the values we share as a family. It's a way to align our daily choices with our commitment to protect the outdoors. Sure, you hear some negatives about EVs. But I've also heard plenty of positives from friends who've already jumped in.

Besides, at the end of day, it’s just the right thing to do.

EV INTEREST

Not YET an EV owner, though ownership in the near future is possible; the direction is undeniable, and someday is inevitable

TECHNOLOGY

Useful is valued over new, though interest and enjoyment are strong

FINANCES

Strong/stable though higher upfront costs than desired are noticed, and other personal projects may compete for priority

CONCERNS

Expanded infrastructure (and vehicle range) is desired; PPs anticipate future improvements and appear realistic vs. resistant to an EV change

JOURNEY

They have researched and considered EV ownership; their close social circle likely includes multiple EV owners, and they have ridden in or driven friends’ EVs, or test drove

CHARGING

Familiar and fairly informed, and may have discussed with friends

HOW ENERGY COMPANY CAN HELP

Research-driven PPs love information and data points – specific information on charging, contractor list, and current incentives or subsidies are all helpful

PREPARED PRESERVATIONISTS SEE AN EVENTUAL EV FUTURE AND WILL PLAN ACCORDINGLY WHEN THE TIME IS RIGHT

They believe in the benefits of EVs

- PPs see EV positives: environmental benefits, less reliance on gasoline, and cost savings over time are key benefits of EVs.
- Being charged up each day, without having to stop for gas at inconvenient times is a bonus, and let's them spend time on more important things.

PPs consider the big picture and readily envision an EV future

- They are aware that EVs are evolving, recognizing influence and implications from government policies and corporations, and anticipate an electric future that they will eventually be part of, at some point.
- Exactly “when” is still TBD – they are balancing and re-evaluating these changing external factors, along with their own personal needs and circumstances.
- Solar energy is often factored into their personal equation and is either used or carefully considered.

Information from multiple sources and planning ensures smart purchases

- Informed decision-making is the most important part of their purchasing behavior – they know they are making the right choice.
- Multiple sources are key in creating their foundational knowledge and fact-checking – customer reviews, various online resources and WOM discussions within their circle – are all data points that influence their well-informed viewpoints.
- This reliance on personal research may coincide with an intentionality or mindfulness to their consumer habits.



“Fuel efficiency and cost efficiency... (EV) cost... should start coming down a little bit as more competitors come out... the big thing is also a renewable source. We're pretty green conscious in our household, so that's the main reason why we would start thinking more about an electric car.” – Daniel

“I just think that hybrid or all electric is the future of cars for 80% of the people in the U.S. To me, it's pretty hard to make the argument against it for when I'm buying a vehicle and thinking about the long term.” – Keith

“... I'll do that additional research online, trying to verify... where the source was and just making sure that it was something that was accurate. There's a lot of misinformation, so really trying to double check...” – Jonathan

PREPARED AND THOUGHTFUL, PPs HAVE A CONSIDERED APPROACH TO TECH

Contingency plans are taking shape for serious EV intenders

- A hybrid or second gas-powered vehicle are viable solutions to concerns about infrastructure and longer road trips .
- Similar to EV owners, they can easily picture alternate solutions in their own world.
- There is some concern about batteries (sourcing, safety, diminishing, longevity, cost, disposal), yet these are not insurmountable barriers.



"I don't know that I would ever want my only car to be an electric car. Because if we were nervous about it, we could always bring the other gas-powered car." – Molly

A thoughtful approach to technology – it is a tool to do more

- Tech at its best is useful, easy to use, and automates dull or boring tasks for PPs.
- They have a POV on technology and enjoy when it simplifies tasks or “makes your life easier” while also finding it fun and enjoyable, even if they are not impressed just by trends.
- There can be a level of caution or being a “double-edged sword” with tech (e.g., computer systems in vehicles, using AI to detriment of human creativity).



"I enjoy using it as a tool to do the things that can be automated and can be handed off to technology. That's the whole point of all the advancement is, ideally, to make things easier, make a task more simple. So, when it's done well, I enjoy it." – Keith

ON A PERSONAL NOTE, PPS SEEM TO BE “DOERS” AND CONSIDER THEMSELVES ACTIVE



They make the most of their time and **pursue an active, more hands-on, fast-paced lifestyle** by choice.

They appear **happily busy, but not overwhelmed – their mix of activities and interests is part of their self-identity** – they seem to maintain a fulfilling, yet balanced lifestyle, whatever their interests (e.g., skiing, golf, camping, bowling league, games/trivia).

They are **self-sufficient** and enjoy working on projects and hobbies.

"I like to have a project at least every week... when I retired, I bought a Cricut, so I do T-shirts and things... I like to sew. I'm working on a quilt for my nephew right now... You name it, I have my hand in it." – Margie

PREPARED PRESERVATIONISTS ARE CHARGING AWARE AND WILL PREPARE



Most have some level of awareness about home charging advantages

- PPs have a sense of the benefits of home charging and likely have done some informal research or have had casual discussions.
- Their awareness of Level 2 charging importance is greater than the average person but may not be widespread or fully understood.
- Depending on how serious of an intender, charging problems are not expected, but actual details and solutions may not be known.

Still prepared and planning ahead

- Their research mindset is no exception here – their thorough planning will likely extend to home charging exploration, at some point when they are taking action toward EV ownership.
- While diligent PPs seem less likely to leave home charging to chance, there is still a learning curve about the specifics of home charging.

There is potential for home charging installation to be a concurrent step for PPs along with EV ownership

- It remains unlikely to be an initial step in EV consideration – specific steps of installation occur later in the EV purchase journey.
- Exceptions include owning a PHEV, or advance knowledge that their home is readily equipped for Level 2 charging.
- Similarly, they may be previously informed about the state of their electrical wiring at home (e.g., due to solar installation, or other issues).

“Yeah, we’d have to run a 220 line to the garage. That’s not a big deal.” – John

“I feel like we might have to have our own charging station, I guess, maybe that would be a concern.” – Jonathan

“Specifically, to the charger, I did some research to determine timing and peak times... (wanted to) have a faster charger that we could program to be actually off-peak times as we need... even though we’re spending, I don’t know, \$500 bucks or whatever it was to have it installed, it would offset later on as we were able to save money.” – Daniel (PHEV owner, after trying Level 1, installed Level 2)

Customer Profile

ELECTRICAL WORK NEEDED FOR LEVEL 2 CHARGING IS PROBLEMATIC

Costly electric work at home can deter or defer EV ownership.

Careful consideration of expected EV concerns exist, including time to recharge on the road, plus range.



"I do have some concerns, not just with the range of an electric vehicle, but how long they take to recharge. I haven't checked on this in a little while, but the last time I checked electric vehicles, they were topping out at around 300, 350 miles prior to charge... the idea also that I would need to stop and charge it for like 30 to 45 minutes is a little too prescriptive about how my road trip is going to work. I can't just spontaneously decide..." – Jim

Environmental benefits are contemplated – not relying on gas is a positive.



"I like the idea of not having to rely on gas, which is of course less polluting, though the pollution is just a little bit offset because it's happening at some power plants somewhere, but I'm sure it is in fact less ultimately." – Jim

Additional cost of electrical work is an extra hurdle to EV adoption and Level 2 charging at home.



"Just the knowledge itself is a barrier. If it was less than a total cost of maybe \$2,000, I might go for it. Then I would just have to mentally factor that into the cost of the (EV)."
– Jim (quoted \$3,000 for subpanel)

ROLE OF ENERGY COMPANY: PPs ARE INTERESTED IN CHARGING AND ENERGY USE INFORMATION

PPs welcome information as they anticipate future EV ownerships

There is an opportunity to **strengthen PPs' existing Xcel relationship** and address charging alongside of, or in advance of EV ownership.

The EV automaker is primarily expected to be a resource for charging – **unbiased information, resources, tips or testimonials** about charging from Xcel would be valuable.

Rebates and incentives strengthen the relationship with the energy company, and **any opportunity to save money** (including TOU) like an 'internet provider promotion' is helpful.

PPs may be aware of Level 2 charging, yet **charging specifics** (equipment, installation process, details of TOU plans) **are not yet familiar**.

Be a renewable energy leader

One PP hopes that widespread EV use will expedite alternative energy and hopes energy companies will help lead way.



"My expectations would be that they would explain and walk me through the process... They (Xcel) send out a lot of good communication... I would definitely expect them to have good communication about it... I like data a lot." – Andrea



"If they had information on how to set my system up for success, just walk through the ins and outs of installing the thing that I need, anything I would need to know beforehand, afterwards. Just some sort of information repository." – Jim



"I mean between the rebates and a lot of the dealers, sometimes it's (charging installation) even put in for no cost at all, so there's no out-of-pocket expense for the buyer. So I mean at this point I think most of those options are out there at least." – Greg



"I feel like if more and more people moved to electric cars, then that would help force the energy companies to find alternative low or zero emission methods of energy." – Molly

**UNDERINFORMED,
BUT OPEN-MINDED**

 Indicates highest segment

DEBBIE – UNDERINFORMED, BUT OPEN-MINDED

Realtor | Honda Accord

Avg Age 57	Avg HH Income \$141k	Gender 56% Male 41% Female 	Partners 73% Married 20% Unmarried	Partners 89% Caucasian  1% Black 15% Other

In her own words...

Okay, I'll be honest: I'm not exactly first in line for the latest tech.

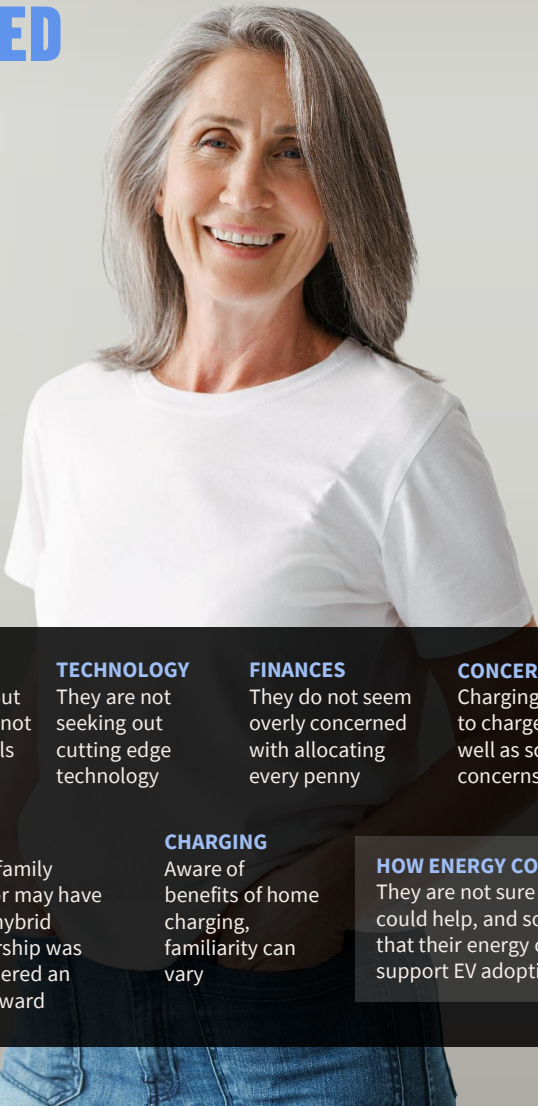
I mean, a smart fridge that texts me my grocery list? Cool... but is it really necessary? I'm all about keeping life simple. Sure, technology can make things easier. But sometimes I think it also makes us lazier.

That said, I genuinely want to do my part and be responsible. I'm active in my community, helping with language and literacy programs, because giving back matters to me. I can't say it's number one priority, these days... but it's definitely something I value, nonetheless.

So, electric vehicles? Honestly, I haven't given it much consideration. But now that I think about it... long road trips aren't really our thing, so maybe an EV would make sense for day-to-day driving. Still, the whole charging thing seems like it could be tricky. Maybe a hybrid is an easier step first.

Bottom line: I'm open-minded. If an EV turns out to work for me and helps me do a little bit of good... I'm all ears.

Until then, I'll keep living simply, in-the-moment and figuring it all out as I go.



EV INTEREST

They see more EVs out on the road, but are not sure about the details and specifics

TECHNOLOGY

They are not seeking out cutting edge technology

FINANCES

They do not seem overly concerned with allocating every penny

CONCERNS

Charging infrastructure and time to charge (along with range), as well as some uncertainty and concerns about batteries

JOURNEY

In general, a friend, family member, or neighbor may have an EV; anecdotally, hybrid experience or ownership was common and considered an appropriate step forward

CHARGING

Aware of benefits of home charging, familiarity can vary

HOW ENERGY COMPANY CAN HELP

They are not sure – general information could help, and some have an expectation that their energy company could generally support EV adoption

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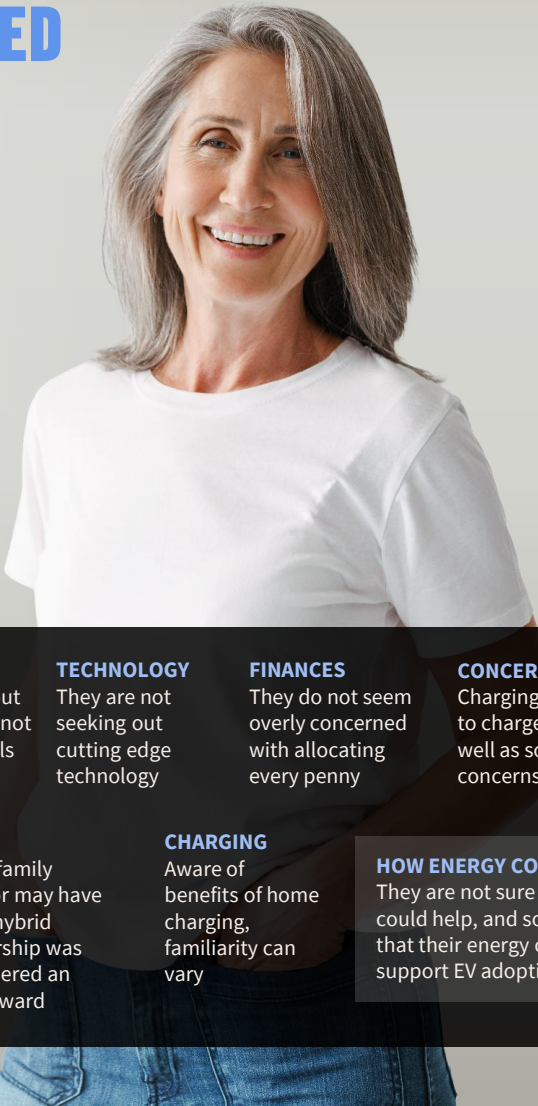
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UOMs COULD BE A GOOD EV FIT, BUT THEY AREN'T THERE YET

Some recognize their typical driving habits are fitting for EVs

- They self-identify that an “errand machine” with benefits of “being a responsible citizen,” plus gas savings could be a personal fit.
- Long road trips are not typical, or they are comfortable renting a car when they occur.



“We don't travel huge distances. Maybe half hour usually at the most away. So, you wouldn't have to go get gas, you could just charge it up, I assume at night, and you'd be ready to go... hopefully in the long run it would save you some money.” – Sandra

Still, they have questions and concerns

- Even so, they share concerns about charging infrastructure outside of their immediate sphere, or what that might look like.
- They are also curious about batteries and how that might work (technology/safety and functionality).
- Some have not thought through the realities of EV ownership and are just beginning to consider what that might look like for them.



I think some other cons are right now everything is still pretty early in terms of an infrastructure to support a lot of electrical vehicles.” – Sean

Their lifestyle and purchase habits can be more spontaneous

- They have a live-in-the-moment approach to life, and while planning and a scan of information still has its place, in general, meticulous research is not their modus operandi.
- They may also rely on their family for influence, or their spouse or partner may be the one to handle certain aspects of joint decision-making.



“We're not great planner-aheaders, so usually if we make a purchase, it's like something breaks so we're forced into it.” – Sandra

EV TECHNOLOGY CAN BE TOO MUCH, AND A HYBRID IS A SAFE SPACE

Technology is not a priority and tech-forward EV can be too much

- New technology is not a priority, or source of pride or enjoyment for this segment – they are more interested in other things.
- “Technology just for technology's sake is kind of a waste of time.”
- There can be a sense that the tech aspects of EVs might be too much or something that needs to be learned.



Hybrid for the win

Hybrids are a comfortable, easy step and do not feel like a compromise – it is a low impact way to feel like they are doing their part for the environment and participating in progress, plus benefitting from fuel cost savings – while not having to deal with any headaches or prep for any big changes that may come with having an EV.



“I don't feel totally comfortable driving it without a lesson because it just looks intimidating with the screen. I had trouble opening the door, even figuring that out or getting out of it.” – Sandra (in daughter's Tesla)

“When I think of the ever-changing environment, I think there's still limitations to full EVs, like charging time, access to a charger, accessibility to a charger, distance. So (hybrid) 'I'm going to contribute my part to having a cleaner environment, fewer carbon emissions...' But I don't necessarily want to completely flip into an EV.” – Laurent (HEV owner)

UOMs ARE AWARE OF, BUT NOT CONCERNED ABOUT HOME CHARGING

Home charging awareness may be high, taking into account their uncertainties about EVs

- While public charging infrastructure is a concern or unknown, home charging is not perceived as a big issue.
- There was some consideration that Level 2 charging at home might be an investment in their property.

Level 1 charging suffices for a PHEV owner for now...

... though they recognize the advantages of Level 2 for a fully electric vehicle someday.



“Do I have space for that kind of a breaker in my box and do I have enough service and all that? I think I do, but you never know. I think it's one of those things that, it's an improvement of the value of your home.” – Chris

“We did look at putting a Level 2 charger in the garage when (wife) got the plugin car. But, even with the incentives from the local energy company, it still costs more money than I thought we needed... if someday we have a full plugin, that would be different. But, the regular outlet charges our car overnight.” – Adam, (PHEV Owner)

Customer Profile

MUSINGS ON WHAT CHARGING MIGHT LOOK LIKE

Current living situation does not support home charging; other options are weighed.



“Access to something reliable for my own regular use. Now, whether that's a charging station at the parking garage where we work, if that's a thing, or somewhere where I know I could reliably charge the car on a semi-regular basis that I would need to without having to search around, ‘Oh, does this gas station or does this King Supers or whatever, have a charging station?’ Obviously again, since living in a condo, not a single family home, it's not anything we would be able to install here. And so, that probably brings more concern just in terms of access and availability.” –Sean

The expectation is that charging at home would be pricey and complicated in their building, and therefore unlikely.



“We live in an older building and so we have shared water lines, and so we all pay through the water through the HOA. And so, anytime there's a water repair in the building, they have to shut off the entire building for the water. That feeds into the perception for me that if we were to do some kind of conversion, it would be pricey, it would be complicated, and it would be at a premium as well. Parking spots are already at a premium in the garage because not everyone has one.” – Sean

There are numerous questions about unknown charging details.



“How often does it need to be charged, for what duration? Is that something where there are available public spots? Does such a thing exist where it's just a big old private parking lot or garage just full of electric vehicle spots that you have to reserve? Is that a thing? Is that close, is that convenient?” – Sean



ROLE OF ENERGY COMPANY: UOM KNOWLEDGE BASE VARIES AND COULD BENEFIT FROM GENERAL INFORMATION AND INFRASTRUCTURE ASSURANCE

Early stage UOMs may not yet have made the connection

- Some “have no clue” how the energy company might support them owning an EV, and don’t think about a correlation.
- UOMs know that they do not have all the answers and seek support.
- They want free consultation, general information on the topic of EVs to understand what’s out there, plus information about “putting up a charging station,” or energy audit.

A more overt “stepping up” is desired

- Others seek improved infrastructure and assurance that widespread EV adoption can be supported.
- Those closer to personal EV adoption may more easily recognize the energy provider has something to gain and financial interest in EV adoption – and want rebates and incentives in return.



“What do you mean by charging plan?” – Sandra

“I think probably improving infrastructure and letting people know how they've done it or how they're planning to be able to support that. If everybody has an electric vehicle, what does that look like?” – Chris

“Don't know what more you would really expect an electric company to do than just support those new technologies and try to get people to pursue them. And they did that... They're not like the evil electric company.” – Adam, (almost installed Level 2 for PHEV)

“Stepping up and providing some sort of incentives or rationales as to why they want more consumers to have electric powered vehicles. Obviously, it's going to make them more money, so they better be bringing something to the table.” – Laurent

CONFIDENT CYNICS

SETH – THE CONFIDENT CYNIC

Lab Technician | Ram 1500

Avg Age	Avg HH Income	Gender	Partners	Partners
57	\$138k	69% Male 22% Female	70% Married 16% Unmarried	75% Caucasian 1% Black 30% Other ⚡

In his own words...

I've seen enough in life to know what works for me. And what doesn't.

I've navigated a divorce, recently said goodbye to my mom, and frankly, I'm not looking to add any more complexity to my life. Family, kids, cousins, community... that's my world. Weekends are church gatherings and neighborhood cookouts. I want to focus on the important things that really matter. And fancy tech just isn't one of them.

Now, I have dabbled in the world of "smart" home gadgets, like lamps, plugs, etc. And I do like our Nest thermostat. But that stuff isn't exactly new anymore. And most "new" tech just feels like it's more trouble than it's worth.

And that brings me to EVs. I'll pass, for now.

I know enough to know they're expensive. Especially when you've got to replace batteries. Moreover, my friend's experience with his EV confirmed my suspicions: the charging infrastructure just isn't there. And I'm not going to plan my trips around charging stations. Honestly, at this point, driving an EV feels more like you're trying to make a statement than solve a problem.

So, until EVs prove they can make my life simpler, not harder, I'm good.



⚡ Indicates highest segment

EV INTEREST

Low

TECHNOLOGY
Accepted, may be more likely to "wait-and-see"

FINANCES
May be a barrier – concerns about longevity of EV and battery have financial implications

CONCERNS
Upfront cost, lack of interest, lack of charging infrastructure, worries about not being able to use an EV in every driving situation

JOURNEY
Not currently in active consideration, though have researched or been in an EV, along with some WOM

CHARGING
Disinterested or non-starter, public charging is inconvenient, home charging is more likely to be viewed as expensive to install or a hassle

HOW ENERGY COMPANY CAN HELP
Cost comparison or pricing information could be a starting point

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CONFIDENT CYNICS LACK A REASON TO COMPROMISE OR CHOOSE EVs RIGHT NOW

Confident Cynics may not see a reason to make a change, or compromise in order to own an EV

- They do not currently see a compelling reason or benefit to doing things differently or making life changes to own an EV – right now an EV is not a seamless switch or practical fit in their life.
- Gas is reliable, predictable and ‘just works’ for CCs: planning around charging, range anxiety and cold weather concerns are seen as not necessary, or worth it.
- For those who are more open, vehicle availability may still come into play – a manufacturer preference, vehicle size, capability or price point may be more important than going electric.



Life is busy and EV ownership is not a priority

- They are busy with other priorities and aspects of life that are in the forefront.
- Personal hardships (including family loss, or divorce) may be a contributing factor to lack of current EV interest/consideration.
- Transitions, such as being a student or anticipating a future move makes investing in an EV (or home charging) right now unlikely, even if interested.



“I don't want to be limited, right? If I want to go to the mountains, or my wife needs a vehicle, and we both need to have vehicles out. I don't want one vehicle to be one that I can use for this, and one I can use for that. I want essentially both vehicles that I can use for whatever I need.” – Zach

“I was looking at homes and I think, let's say I went with a condo... I wouldn't go... with an electric vehicle because I wouldn't have a dedicated space to have the installation of the outlet for it.” – Felicia

ADDITIONALLY, THEY EXPRESS SKEPTICISM ABOUT EV BENEFITS



For some CCs it feels "early," and they may be inclined to calmly **opt out until wider spread adoption occurs** and EVs are more established (options, infrastructure, maintenance, affordability, etc.).



Others are more apprehensive or highly **concerned about a multitude of barriers** (including range, charging availability, longevity of battery, safety, ease/availability of maintenance).



There may be **resistance to government policies** promoting EVs.



"I don't want to be the first one with them because there's always the issues of, especially going to a new technology on something as mechanical as a car. You run into a lot of issues early on, so you'd have to see how they work. I'd say part of it is the travel range." – Bill

TECH APPROACH ALONG WITH COST CONCERNS FURTHER HINDER EV INTEREST

Technology is a part of their lives, but chasing new trends is not a driving force

Confident Cynics are comfortable using technology and note its importance and advantages – yet technology is not a focal point. They are not actively seeking out the newest gadgets and devices and may prioritize simplicity or established solutions.



"I had a Google Nest thermostat, and it kept screwing up. It kept making my house colder than I wanted it to be. It kept cutting off the heat saying it was saving energy and money... it was just essentially an added nuisance, so I kind of eradicated it, and keep a lot of that stuff more simplistic." – Wayne, (IT professional)

Cost of EV ownership may be a deterrent and lack of alternate vehicles (for long trips) may further limit EV interest

- Confident Cynics may be deterred by the upfront costs of EVs or unwilling/unable to allocate additional financial resources.
- Their personal vehicle mix may not easily allow for alternate options for longer road trips or extreme cold weather.

"My wife has thought about electric vehicles and, so far, we haven't really found them to be as practical. Our trips to Wisconsin, even that would require a long charging session in the middle of the trip right now for most electrics. But she likes the idea." – Bill

EV influences may not be positive

- They may not have heard of great EV experiences firsthand.
- Their circle is not actively adopting EVs, and CCs may have heard negative personal accounts or news stories reinforcing their current EV doubts – *it matters what a car-loving Dad or mechanic brother thinks.*
- On a personal note, some share they identify with conservative or traditional values.

"I just had a couple of people that had (EVs) and they experienced it where basically once the battery went bad, it was done. The car was done because it became totaled because it was so expensive to replace the battery... I've had probably three to four people run into that situation." – Zach

CHARGING MAY BE INCONVENIENT AT BEST

Change is hard, plus real challenges

- CCs may be more apt to see the change from pumping gas to plugging in and charging as a challenge or obstacle.
- They are more likely to see home charging as an additional expense or hassle, and not an investment – especially for an expensive electric job.



"It kind of feels like, 'Oh, that's one extra thing I have to do'... yeah, it feels a little more burdensome." – Krystal

"Because I think it was \$1,000 bucks to get a circuit installed... so from my perspective it would take a long time for the gas to catch up just to install the price of the circuit. And if/when I move, you just have to leave the circuit, it's not like you can rip that thing out of your junction box and your electrical box and take it with you. It just stays with the house." – Wayne

"My panel is so maxed and so close to being completely full that you can't use a regular outlet and I don't have the panel room to put what I would need to put in to charge a vehicle. So, basically, I'm looking at redoing my entire panel, a \$50,000 job to redo that, to buy a \$50,000 to \$100,000 dollars car to charge it... you claim I'm being more environmental with this electrical vehicle, but what's running the power plants?" – Christine

Customer Profile

WAITING FOR WIDESPREAD EV ADOPTION BEFORE FURTHER CONSIDERATION

It feels too early to choose an EV, and that the ownership experience today is still unproven.



"To me it would be choice because I don't want it to be one make and model of truck. I would say, 'Hey, if we're going to get to this point, there needs to be Chevrolet, Dodge, Ford, all of those main competitors to have multiple versions versus just one.' Because right now it seems like a testing the market phase, like a preliminary entering the market phase as opposed to, 'Hey, these type of trucks are going to be here forever. We're going to have mechanics that can support it. It's going to be easy for you to get work done. There's going to be ready, a lot more electric vehicle charging stations around to make it more feasible and realistic.' So, to me, I just feel like it's early." – Zach

CCs have a similar wait-and-see mindset towards evaluating solar panels at home.



"I do not have it. Some people around my house have it. The benefits are if you do it, you can roll the loan into the house for when someone else buys the house... I don't have enough information to make a truly definitive opinion. However, what I do know is that for the benefits that are out there that come with solar, reduced costs, I don't see a lot of people doing it. So, I don't know if it's a lack of education or lack of knowledge or if it really is not as all the hype that is around it is actually true. But I don't see near enough people doing it for the communicated benefits that it has. So, from that aspect I've just kind of been leery of it and haven't really messed with it." – Zach

ROLE OF ENERGY COMPANY: CCs MAY MAINTAIN A TRANSACTIONAL RELATIONSHIP, AND POTENTIALLY SOME CONCERN OR DISTRUST

Confident Cynics may not be actively considering their energy company

- Some CCs may not be giving a lot of thought to what is currently a de facto, non-emotional and transactional relationship.
- Fact-based cost-savings information may be effective – one suggests the benefit of a group buy-in, similar to solar for a neighborhood.
- There can also be some distrust/fear of entities mandating or forcing change upon them (one respondent).



“Other than supplying me with bills, I never thought that the energy company would have much to do with (this)... if there was a section on the app about the different things they offered.” – Felicia

“They're going to do things and the government's going to tell them to do things. They're going to tell government we need to do these things. There's going to be a place where I have no voice or I have a limited voice, and they're going to basically tell me that I have to do some of these things, or I have to do it this way.” – Christine

APPENDIX

RESEARCH DETAILS

- This research was performed by Burke, Inc., an ISO 20252 and 27001 certified company, in compliance with the established standard for market, opinion, and social research. The IDIs were conducted by a trained moderator from the Burke moderator network. A portion of the interviews were observed to by the Research Team.
- Data collection materials, including screeners and discussion guides, have been provided outside this reporting document and may be resent upon request. Through a combination of redundant on-site and off-site electronic file management systems, Burke retains primary records for 12 months and final project documents for 24 months.
- Qualified individuals were recruited over the phone via client supplied sample by a trusted recruitment partner. Xcel was identified. Responses to questions were evaluated by the moderator to ensure responses were logical for the recruited individuals. Participants were provided an appropriate monetary compensation for participation.
- Additional details regarding project methodology can be provided upon request.
- As a reminder, this research phase is qualitative in nature. Qualitative research is a rich source of material, valuable for clarifying existing theories and generating new information and ideas for further research. Although participants were drawn from the population from whom we seek answers and want to understand, they were not chosen to represent the population statistically. Therefore, no statistical inferences should be drawn or projected from the findings in this report without further research.



State	Filing Name	Docket No.	Included Pilots and Programs	Status	Link to Filing
Colorado (PSCo)	TEP 2021-2023	20A-0204E	Home Charging Service	In Market	https://www.xcelenergy.com/company/rates_and_regulations/filings/transportation_electrification_plan
			Standard Home Wiring Rebate		
			Income-qualified rebate		
			Shared Parking – Site Hose Provided Equipment		
			Shared Parking-Full Service		
			Assigned Parking – Full Service		
			New Construction Rebate		
			MPH Income-Qualified Rebate		
			Fleet & Workplace		
			Fleet & Workplace – Optional Charger Service		
			Fleet & Workplace – Income-Qualified		
			Community Charging Hubs		
			Community Charging Hub – Income-Qualified		
			Public DCFC		
			Public Services DCFC		
			Small Commercial Rebate		
			Residential and MDH Advisory Services		
			Fleets Advisory Services		
			Community Advisory Services		
			New EV Rebate (income-qualified customers only)		
			Used EV Rebate (Income-qualified only)		
	S-EV Rate 2	21AL-0409E	Schedule S-EV Rate	In Market	https://www.dora.state.co.us/pls/efi/EFI_Search_ULsearch Search "21AL-0409E" under Proceeding Number
			Schedule S-EV-CPP Rate		
			Company Owned DCFC Public Charging Station Rate		
	TEP 2024-2026	23A-0242E	Performance Incentive Mechanism (PIM) for 2021-2023 TEP	In Market	Xcel Energy - Transportation Electrification Plan
			Residential Advisory Services		
			Commercial Advisory Service		
			Community Advisory Services		
			Residential EV Rebate Program		
			Public Charging Acceleration Network		
			EV Accelerate at Home (EVAAH)		
			EV Charger and Wiring Rebate		
			Managed Charging Program		
			Commercial EVSI		
			Primary General and Transmission General Wiring Rebate		
			Commercial New Construction Wiring Rebate		
			Commercial Equity L2 Charger Rebate		
			V2X Demonstrations		
			School Bus Electrification		
			Open Innovation		
Wisconsin (NSP-W)	EV Service Programs	4220-TE-104	Residential EV Service Programs Tariff	In Market	https://apps.psc.wi.gov/pages/viewdoc.htm?docid=379775
			EVAAH (Standard and Voluntary)		
			Commercial EV Service Program Pilot (Infrastructure and Optional charger services)		
			Commercial EV Service Program Tariff		
	EV Advisory Services	4220-UR-125	Residential Advisory Services	In Market	https://apps.psc.wi.gov/ERF/ERFsearch/content/searchResult.aspx?UTIL=4220&CASE=UR&SEQ=125&START=none&END=none&TYPE=none&SERVICE=none&KEY=none&NON=N
			Commercial Advisory Services		
			Fleet Electrification Advisory Program		
	August 2022 EV Filing	4220-TE-113	Multi-Family Housing Program	Approved	https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=444518
			EVAAH (Bring Your Own Charger)		
New Mexico (SPS)	TEP Filing	24-00120-UT	Public Fast Charging Hubs	In Market	https://www.xcelenergy.com/company/rates_and_regulations/filings/new_mexico_transportation_electrification_plan
			Advisory Services Expansion		
			EV Charger and Wiring Rebate		
			IQ Charging and Wiring Rebate		
			EV Optimization		
			Commercial EVSI Service		
			Commercial EVSI Rebates		
			Public DCFC Station Rebates		
			Advisory Services (Residential, Commercial, Communities)		

Northern States Power Company
Cost-Benefit Analysis for Optimize Your Charge Pilot

Docket No. E002/M-25-142
2025 Transportation Electrification Plan
Attachment D - Page 1 of 1

Optimize Your Charge				2025		
2025 Net Present Cost Benefit Summary Analysis For All Participants Benefits (Positive Values) Costs (Negative Values)						
	Participant Test	Utility Test	Electric Rate Impact Test	Gas Rate Impact Test	Societal Test	Minnesota Test
	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)	(\$Total)
Electric System Impacts						
Generation Capacity	N/A	38,669.32	38,669.32	N/A	38,669.32	38,669.32
Transmission and Distribution Capacity	N/A	0.00	0.00	N/A	0.00	0.00
Energy Generation	N/A	16,432.44	16,432.44	N/A	16,432.44	16,432.44
Market Effects and Ancillary Services	N/A	1,102.04	1,102.04	N/A	1,102.04	1,102.04
Subtotal	N/A	56,203.80	56,203.80	N/A	56,203.80	56,203.80
Gas System Impacts						
Commodity Cost	N/A	0.00	N/A	0.00	0.00	0.00
Variable O&M	N/A	0.00	N/A	0.00	0.00	0.00
Demand	N/A	0.00	N/A	0.00	0.00	0.00
Environmental Compliance	N/A	0.00	N/A	0.00	0.00	0.00
Subtotal	N/A	0.00	N/A	0.00	0.00	0.00
Environmental Externalities and Non-Energy Impacts						
Electric Environmental Externalities	N/A	N/A	N/A	N/A	(198.87)	(198.87)
Gas Environmental Externalities	N/A	N/A	N/A	N/A	0.00	0.00
Other Fuels Environmental Externalities	N/A	N/A	N/A	N/A	0.00	0.00
Electric Non-Energy Benefits	0.00	N/A	N/A	N/A	0.00	0.00
Gas Non-Energy Benefits	0.00	N/A	N/A	N/A	0.00	0.00
Other Fuels Benefits	0.00	N/A	N/A	N/A	0.00	0.00
Utility Performance Incentives	N/A	0.00	0.00	0.00	0.00	0.00
Utility Non-Energy Benefits	N/A	0.00	0.00	0.00	0.00	0.00
Subtotal	0.00	0.00	0.00	0.00	(198.87)	(198.87)
Participant Impacts						
Electric Bill	204,760.71	N/A	(204,760.71)	N/A	N/A	N/A
Gas Bill	0.00	N/A	N/A	0.00	N/A	N/A
Participant Rebates and Incentives	0.00	N/A	N/A	N/A	0.00	N/A
Incremental Capital	0.00	N/A	N/A	N/A	0.00	N/A
Incremental O&M	0.00	N/A	N/A	N/A	0.00	N/A
Subtotal	204,760.71	N/A	(204,760.71)	0.00	0.00	N/A
Utility Impacts						
Utility Project Costs						
Customer Services	N/A	0.00	0.00	0.00	0.00	0.00
Utility Administration	N/A	(304,050.00)	(304,050.00)	0.00	(304,050.00)	(304,050.00)
Advertising & Promotion	N/A	0.00	0.00	0.00	0.00	0.00
Measurement & Verification	N/A	0.00	0.00	0.00	0.00	0.00
Rebates	N/A	0.00	0.00	0.00	0.00	0.00
Other	N/A	0.00	0.00	0.00	0.00	0.00
Subtotal	N/A	(304,050.00)	(304,050.00)	0.00	(304,050.00)	(304,050.00)
Benefits	204,760.71	56,203.80	56,203.80	0.00	56,203.80	56,203.80
Costs	0.00	(304,050.00)	(508,810.71)	0.00	(304,248.87)	(304,248.87)
Net Benefit (Cost)	204,760.71	(247,846.20)	(452,606.91)	0.00	(248,045.08)	(248,045.08)
Benefit/Cost Ratio	INF	0.18	0.11	INF	0.18	0.18

Energy Efficiency Impacts	
Lifetime (Weighted on Generator kWh)	1.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	7.40%
T & D Loss Factor (Demand)	8.80%
System Coincident kW Saved at Generator	365 kW
Annual kWh Saved at Customer	-0kWh
Annual kWh Saved at Generator	-0kWh
Annual Dth Saved	0.0 Dth
Electric Participants	1,271
Gas Participants	0

Beneficial Electrification Impacts	
Lifetime (Weighted on Generator kWh)	0.0 years
Lifetime (Weighted on Dth)	0.0 years
T & D Loss Factor (Energy)	0.00%
T & D Loss Factor (Demand)	0.00%
System Coincident kW Saved at Generator	0.000 kW
Annual kWh Saved at Customer	0 kWh
Annual kWh Saved at Generator	0 kWh
Annual Dth Saved	0.0 Dth
Electric Participants	0
Gas Participants	0

First year Carbon Emissions Reductions	
Electric Energy Efficiency	0 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electcification	0 tons CO2
TOTAL	0 tons CO2

Lifetime Carbon Emissions Reductions	
Electric Energy Efficiency	-4 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electcification	0 tons CO2
TOTAL	-4 tons CO2

Note: Dollar values represent present value of impacts accumulated over the lifetime of the measures.

Energy Efficiency Impacts	
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Annual Dth Saved	0.0 Dth
Electric Participants	0
Gas Participants	0

First year Carbon Emissions Reductions	
Electric Energy Efficiency	0 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	0 tons CO2

Lifetime Carbon Emissions Reductions	
Electric Energy Efficiency	-4 tons CO2
Gas Energy Efficiency	0 tons CO2
Electric Electrification	0 tons CO2
Gas Electrification	0 tons CO2
Other Fuel Electrification	0 tons CO2
TOTAL	-4 tons CO2

EV DRIVER SURVEY

JUNE 2025



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EXECUTIVE SUMMARY

2025 marks Plug In America's fifth collection of its annual EV driver survey. The survey taps into the organization's network of electric vehicle (EV) drivers, leveraging Plug In America's longstanding reputation as a trusted source for EV adopters. This particular survey includes responses from over 5,300 EV driver respondents. Of those, about 4,500 respondents completed the survey in full, while about 800 partially answered the survey. The survey also contained responses from just under 800 respondents who do not drive an EV, with about 400 of those respondents completing the survey in full.

The survey was fielded from January 2025 through March 2025. The intent of the survey was to get a full picture of the current EV experience in the United States, in particular:

- Purchasing considerations when buying an EV
- The likelihood of EV drivers' next vehicle being an EV
- The biggest concerns respondents had when buying or leasing an EV, and their biggest concerns now
- The charging experience
- The purchasing or leasing journey for an EV
- EV driver profiles

Overall, we see that EV drivers are very satisfied with their electric vehicles. Almost 92% of EV drivers surveyed said that it is likely or very likely their next vehicle will be an EV. This is an increase from last year's figure of 89%. The finding is consistent with years past: nine out of 10 EV drivers want to continue driving electric.

Just under 40% of EV drivers said that "clean air/environmental protection" is their most important purchase consideration. The 39.7% of EV drivers who said that this year is largely consistent with the 40.7% of EV drivers who said the same last year. Clean air has been the most important consideration for EV drivers every year we have conducted the survey. However, we see that the gap between clean air and "cost savings" (21.4%) as a consideration is shrinking as time goes on.

One of the key takeaways from last year's survey was that respondents concerns with EVs decreased after experience with an EV. This was consistent this year, as we saw very similar drops in concern after experience with an EV. However, we find that the initial concern respondents reported was lower than last year's as well. This speaks to the continued education, awareness, and satisfaction surrounding EVs. If respondents are less concerned about EVs to begin with and become even less concerned about EVs after experience with an EV, the EV market will continue on the right track.

Overall, concerns around public charging still exist but it appears that the public charging experience has seen an improvement since last year. Respondents were less likely to say they are concerned about public charging in this year's survey, although about 35% of respondents said they are currently concerned about public charging availability and reliability. For comparison, just over 40% of respondents indicated concern around public charging availability and reliability in last year's survey.

Once again, we find that the dealership experience can be improved although there have been improvements in the last year. However, EV drivers typically go to the dealership knowing exactly what they want. This emphasizes the importance of the pre-purchase experience. Respondents are likely to turn to EV-specific sources as opposed to general automobile sources to do research. YouTube is one example of a growing source for EV research where respondents are able to understand the experiences of other EV drivers.

STATE OF THE EV MARKET

Both globally and domestically, 2024 was a year of continued growth in the EV market. Over 1.56 million plug-in electric vehicles were sold in the U.S. in 2024, marking the first time yearly sales have hit the 1.5 million mark.¹ Almost 300,000 new electric vehicles were sold in the first quarter of 2025, marking an 11.4% year-over-year increase.²

EVs are also making waves around the world. The most recent sales reports indicate that just under one in four vehicles sold globally in 2025 will be an EV.³ The Tesla Model Y was once again the best-selling car worldwide in 2024.

Recent growth in U.S. EV sales has been supported by a complementary suite of policies, including federal incentives, pollution regulations, and programs to build out a national EV charging network. With the change in presidential administration and Congress in 2025, these policies are largely being considered for rescission, which may impact the rate of EV adoption. While these trends are not yet evident, future surveys may show the impact of these changes, should they be made.

¹ The International Council on Clean Transportation, "U.S. Passenger Electric Vehicle Sales and Model Availability Through 2024", <https://theicct.org/publication/us-passenger-ev-sales-and-model-availability-through-2024-apr25/>, accessed May 12th, 2025.

² Cox Automotive Inc., "U.S. Electric Vehicle Sales Increase More Than 10% Year Over Year in Q1: GM Drives EV Growth While Tesla Declines", <https://www.coxautoinc.com/market-insights/q1-2025-ev-sales/>, accessed May 12th, 2025.

³ Clean Technica, "EVs Now 21% of World Auto Sales in 2025", <https://cleantechnica.com/2025/05/06/global-ev-sales-evs-now-21-of-world-auto-sales-in-2025/>, accessed May 12th, 2025.

Electric vehicle information

17% of the respondents first got an EV in 2024, while an additional 4.4% first got an EV in 2025 (the survey was fielded in the first quarter of 2025). About 56% of the respondents in our survey have first gotten an EV since 2020. EVs are continuing to grow.

In what year did you first have an EV in your household?

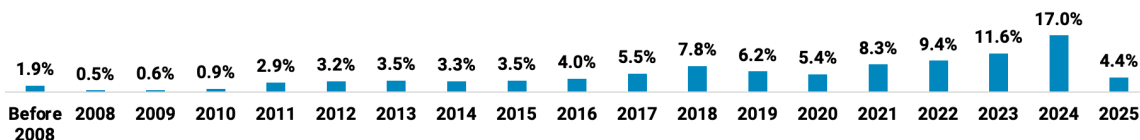
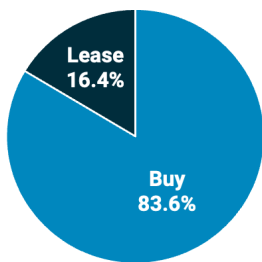


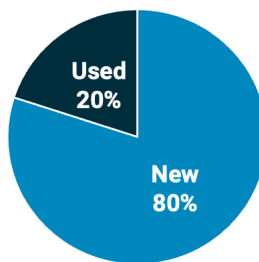
Figure 1: In what year did you first have an EV in your household? (n = 5,181)

About 80% of respondents in this year's survey said they got their primary EV new, while about 20% said they got their primary EV used. This is a minimal change from last year, as 81% of respondents said they got their primary EV new in 2024. Furthermore, about 84% said they bought their primary EV, while about 16% of respondents leased their primary EV.

Did you buy or lease your primary EV?



Did you acquire your primary EV new or used?



Figures 2 & 3: Did you buy or lease your primary EV? Did you acquire your primary EV new or used? (Figure 1: n = 5,000, Figure 2: n = 5,002)

The Chevrolet Bolt was the most popular EV amongst our respondents this year, with 12.6% of our respondents saying that this is their primary EV. The Tesla Model 3 (10.7%) and Tesla Model Y (10.4%) are the next most popular EVs in our survey. The Ford Mustang Mach-E (8.2%) and Hyundai Ioniq 5 (5.9%) round out the top five. These figures are not designed to be representative of sales numbers, but rather just measure what vehicles are most popular among the respondents of our survey.

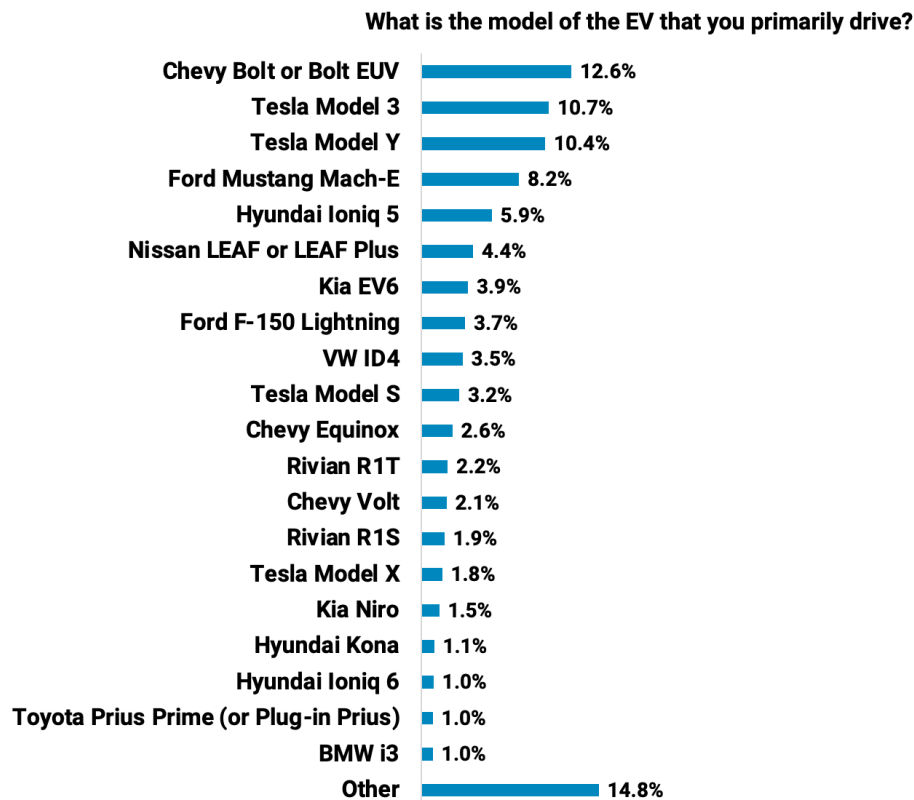


Figure 4: What is the model of the EV that you primarily drive? (n = 5,145)

We also asked respondents about their feelings and attitudes towards their primary EVs. First, we asked respondents if they would consider getting an EV from a manufacturer different than their primary EV. In last year's survey, about 29% of Tesla drivers said they would not, while less than 15% of other respondents said they wouldn't. This showcased a level of loyalty that Tesla drivers have to their EVs that other manufacturers hadn't been able to gain yet.

Percentage of respondents who said they would not consider an EV from a manufacturer different than their primary EV

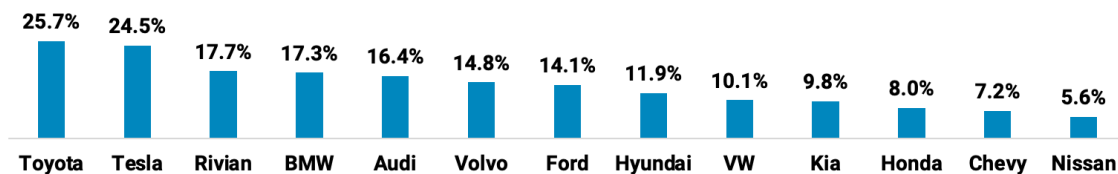


Figure 5: Percentage of respondents who said they wouldn't consider an EV from a manufacturer different than their primary EV sorted by manufacturer of primary EV

In this year's survey, Toyota drivers were most likely to indicate this same level of loyalty. After only 9% of Toyota driver respondents said they wouldn't consider an EV from a different manufacturer last year, 26% of Toyota driver respondents said they wouldn't consider an EV from a different manufacturer this year.

There was a slight decrease among Tesla drivers this year, while drivers of EVs from Rivian and BMW were more likely to indicate loyalty to their manufacturer this year. Largely, we see that most EV drivers are willing to switch manufacturers.

We also asked respondents to rate their primary EV in a number of different categories and give their primary EV an overall rating. Respondents were asked to rate their EV as unsatisfactory, satisfactory, or exceptional in 12 different categories. The results are shown in the table below for vehicles that had at least 50 respondents. The percentages shown are the percentage of people with that vehicle as their primary EV who rated it as exceptional in that category. In doing this, we sought consumer attitudes towards these aspects of their primary EV. These data points are not designed to be a true rating of each car but rather a measurement of consumer satisfaction with the vehicles.

Top Cars in Each Category (50+ respondents)	1st	2nd	3rd
Range	Hyundai Ioniq 6 (47.1%)	Tesla Model S (39.3%)	Rivian R1S (37.5%)
Charging Speed	Hyundai Ioniq 6 (72%)	Kia EV6 (68%)	Hyundai Ioniq 5 (64.6%)
Performance	Rivian R1T (98%)	Rivian R1S (94.3%)	Ford F-150 Lightning (93.8%)
Safety Features	Rivian R1T (89%)	Rivian R1S (86.4%)	Tesla Model S (81.9%)

Comfort	Ford F-150 Lightning (89.7%)	Rivian R1T (84%)	Rivian R1S (81.8%)
Styling and Appearance	Rivian R1T (93%)	Hyundai Ioniq 6 (92.2%)	Ford Mustang Mach-E (87.3%)
Navigation System	Tesla Model X (86.6%)	Tesla Model S (83.3%)	Tesla Model 3 (77.1%)
Ease of Charging	Tesla Model X (95.3%)	Tesla Model S (91.3%)	Tesla Model Y (88.7%)
Cargo Space	Rivian R1T (96%)	Rivian R1S (94.3%)	Ford F-150 Lightning (92%)
Reliability	Tesla Model Y (73.4%)	Tesla Model X (73.2%)	Rivian R1S (70.5%)
Value for the Price	Chevy Bolt or Bolt EUV (70.4%)	Chevy Equinox (64.4%)	Hyundai Kona (53.1%)
Overall	Rivian R1T (80.8%)	Rivian R1S (80.7%)	Tesla Model S (77.9%)

Figure 6: The top 3 cars in 12 different categories (parentheses indicate what percentage of drivers of vehicle said that their EV is exceptional in each category)

Overall, the top vehicles overall remained the same: The Rivian R1T was rated as the best vehicle overall among qualifying vehicles, the Rivian R1S was second, and the Tesla Model S was third.

The Rivian R1T was the top vehicle in performance, safety features, styling and appearance, and cargo space. Tesla vehicles took the top spot in navigation system, ease of charging, and reliability. The Hyundai Ioniq 6 took the top spot in range and charging speed.

Throughout the rest of the list, we see high ratings for the Ford F-150 Lightning in comfort and performance, while the Chevrolet Bolt and Equinox received high ratings in value for the price.

We separated vehicles with 50+ respondents to ensure that we are not weighing more popular vehicles against emerging vehicles. However, we also have ratings for vehicles that received between 20-49 respondents in our survey. Those figures can be found in the table below.

Top Cars in Each Category (20-49 respondents)	1st	2nd	3rd
Range	Lucid Air (84.2%)	Tesla Cybertruck (38.5%)	Kia EV9 (30.6%)
Charging Speed	Kia EV9 (66.7%)	Lucid Air (65%)	Tesla Cybertruck (43.6%)
Performance	Tesla Cybertruck (97.4%)	Polestar 2 (97.1%)	BMW i4 (91.7%)
Safety Features	Tesla Cybertruck (100%)	BMW i4 (95.8%)	Polestar 2 (94.4%)

Comfort	Tesla Cybertruck (97.4%)	BMW i4 (95.8%)	Kia EV9 (91.7%)
Styling and Appearance	BMW i4 (100%)	Lucid Air (90%)	Tesla Cybertruck (84.6%)
Navigation System	Tesla Cybertruck (92.3%)	Polestar 2 (80.6%)	BMW i4 (70.6%)
Ease of Charging	Tesla Cybertruck (89.7%)	Kia EV9 (69.4%)	Polestar 2 (66.7%)
Cargo Space	Tesla Cybertruck (97.4%)	Kia EV9 (75%)	Audi e-tron (62.8%)
Reliability	Tesla Cybertruck (87.2%)	Polestar 2 (75%)	BMW i3 (74.5%)
Value for the Price	MINI Cooper (61.9%)	BMW i3 (57.4%)	Subaru Solterra (42.3%)
Overall	Tesla Cybertruck (92.3%)	BMW i4 (79.2%)	BMW i3 (74.5%)

Figure 7: The top 3 cars in 12 different categories, among vehicles which received between 20-49 respondents who said it is their primary EV (parentheses indicate what percentage of drivers said their vehicle is exceptional in each category)

In looking at the ratings of the emerging vehicles, the Tesla Cybertruck is far and away the highest rated. It earned the best ratings overall, along with the highest rating in seven of the other 11 categories. As years go on and more Cybertrucks enter the market, we will keep an eye on the vehicle to see if these high ratings continue.

Other noteworthy emerging vehicles are the Kia EV9 with high ratings in five of 12 categories, and the BMW i4 and i3 with the second and third highest overall ratings, respectively. And 84% of Lucid Air drivers said their vehicle was exceptional when it comes to range. The next highest was the Hyundai Ioniq 6, with 47% of respondents saying it is exceptional in that regard.

WHAT HAS INFLUENCED EV PURCHASES?

Purchase considerations

As it has for each year of the survey, “clean air/environmental protection” is most likely to be considered the most important purchase consideration for EV drivers. 39.7% of respondents in this year’s survey answered that “clean air/environmental protection” is their most important purchase consideration, right in line with the 40.7% of EV drivers who said the same last year.

21.4% of EV drivers said “cost savings” are their most important consideration, while 14.4% of respondents said the same about “performance/fun to drive.” Both of these represent slight increases over prior years. Last year, 19.2% of respondents said “cost savings” is their most

important purchase consideration and 13.3% of respondents said “performance/fun to drive” is their most important purchase consideration.

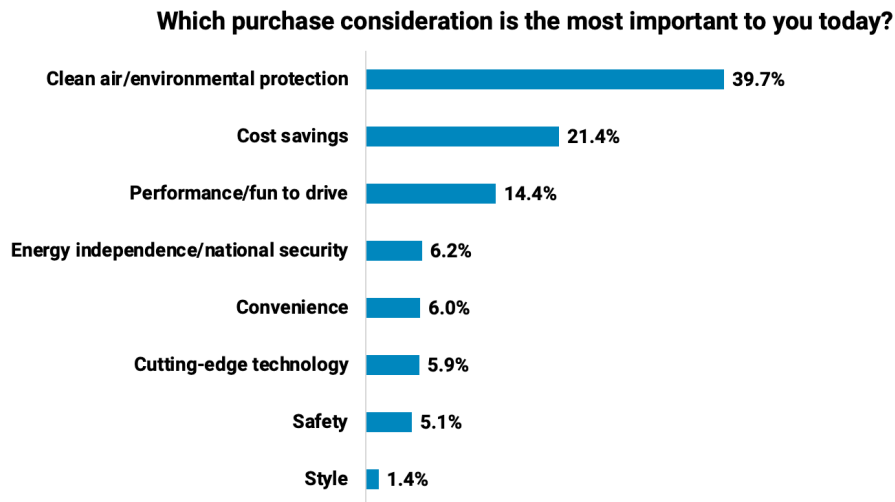


Figure 8: Which purchase consideration is most important to you today? (n = 4,605)

Once again, the popularity of “clean air/environmental protection” is driven by certain segments of the EV driver population. Older drivers are especially more likely to cite it as their most important purchase consideration. 47% of EV drivers aged 65-74 said clean air, while 45% of drivers 75 and older said it as well. It follows that early adopters are also more likely to cite “clean air/environmental protection” as their most important consideration. Over half of EV drivers who first got an EV in 2010 or earlier said this, while over 40% of EV drivers who first got an EV before 2020 said the same. Around 35% of EV driver respondents who first got an EV in 2020 or later said that “clean air/environmental protection” is their most important purchase consideration.

There is very little difference across different income brackets when it comes to the main purchase consideration. While respondents with over \$100,000 in annual household income were more likely to be interested in performance, and respondents with less than \$100,000 in annual household income were more likely to be interested in cost savings, the difference between the income brackets is minimal.

“Clean air/environmental protection” was most likely to be cited as the most important purchase consideration for female EV drivers, with 52.2% answering this. This is consistent with last year, where over half of female EV drivers indicated the same.

In looking at purchase consideration based on primary EV, it's clear which EVs are delivering the most when it comes to performance. If a respondent is most interested in performance, it follows that they would want an EV with high-performance capabilities.

32.6% of respondents who said their primary EV is a Rivian said that performance is the most important consideration to them. This was the highest out of all of the major brands. Ford (22%) and Tesla (17%) were the next highest in this regard.

Beyond the car one drives, "cost savings" is more likely to be cited as the most important consideration among non-white EV drivers. Black or African American respondents (36.7% selected cost savings as their most important purchase consideration) and Hispanic/Latino respondents (34.9%) were more likely to select "cost savings" as their most important consideration than environmental protection. Asian/Asian American or Pacific Islander respondents (32.3%) and Native American or Alaska Native respondents (32.1%) were as likely to select savings as environmental protection for their most important purchase consideration.

When respondents were asked to rate each purchase consideration in isolation from each other, "safety" and "clean air/environmental protection" are most likely to be cited as crucial considerations. Much like in 2024, these are considered the must-have elements for an EV. Older respondents, female respondents, and early adopters of EVs drive the results of clean air/environmental protection are largely driven by older respondents, female respondents, and early adopters of EVs.

Furthermore, over half of respondents said that performance (54.1%) is a crucial element for them, up from 47.9% of respondents who said the same last year. This is largely driven by newer adopters, who are more likely to say performance is crucial to them. As time goes on, we'd expect this to continue to increase as newer adopters take up a larger share of the EV driver population.

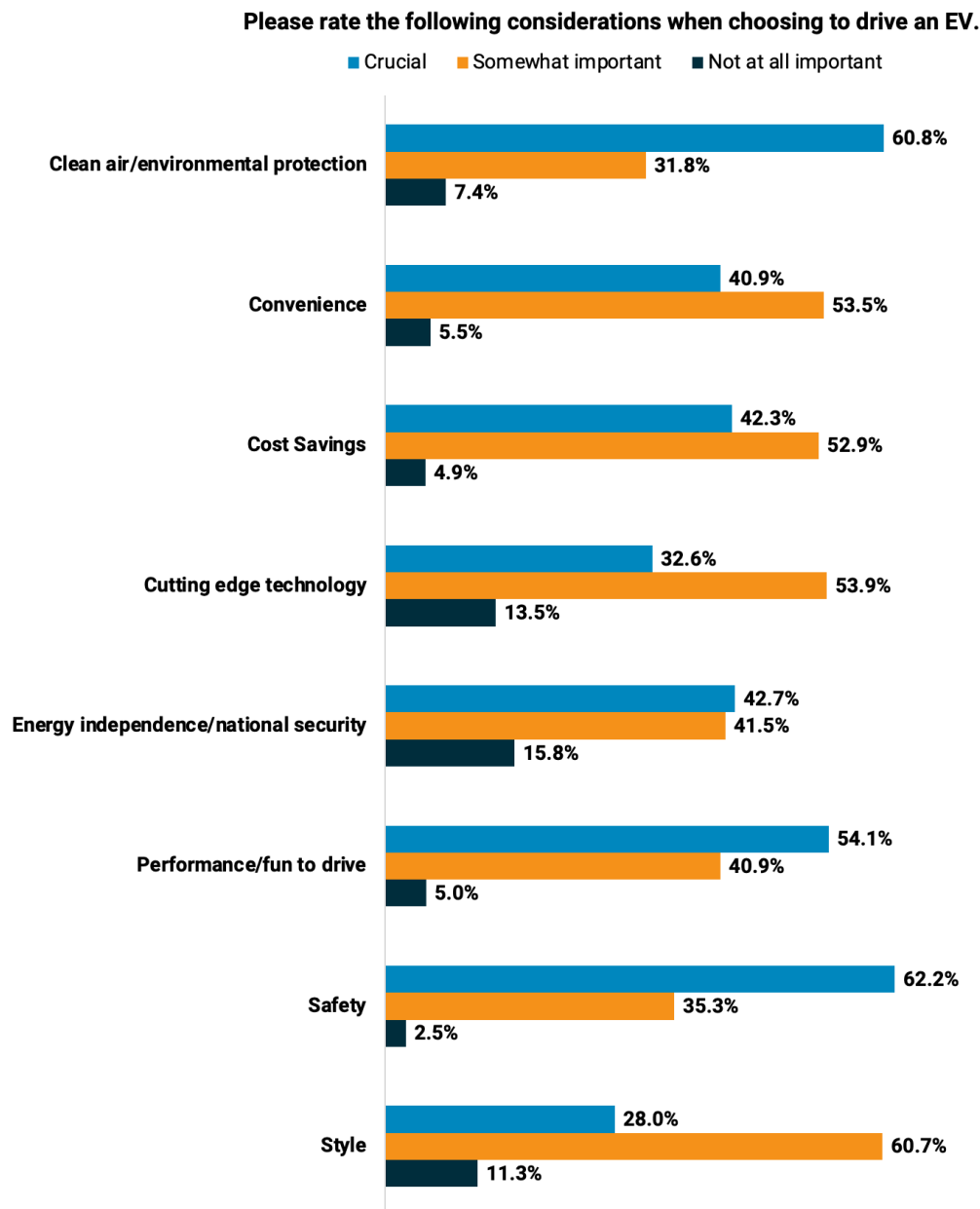


Figure 9: Please rate the following purchase considerations when choosing to drive an EV. (n = 4,605)

Concerns around EVs

One of the big findings from our 2024 EV Driver Survey is that concerns about EVs have decreased from the time that consumers first get to an EV to now. In almost every category, the 2024 results showed that initial concerns consumers have about driving an EV diminish once a

consumer has real-world experience driving one. The only exceptions were in public charging reliability and the impact of weather.

In 2025, this trend continues. Consumer concern drops after an EV experience in every category—with the exception of public charging reliability. This includes notable drops in categories such as access to home charging, battery range, price, and vehicle availability.

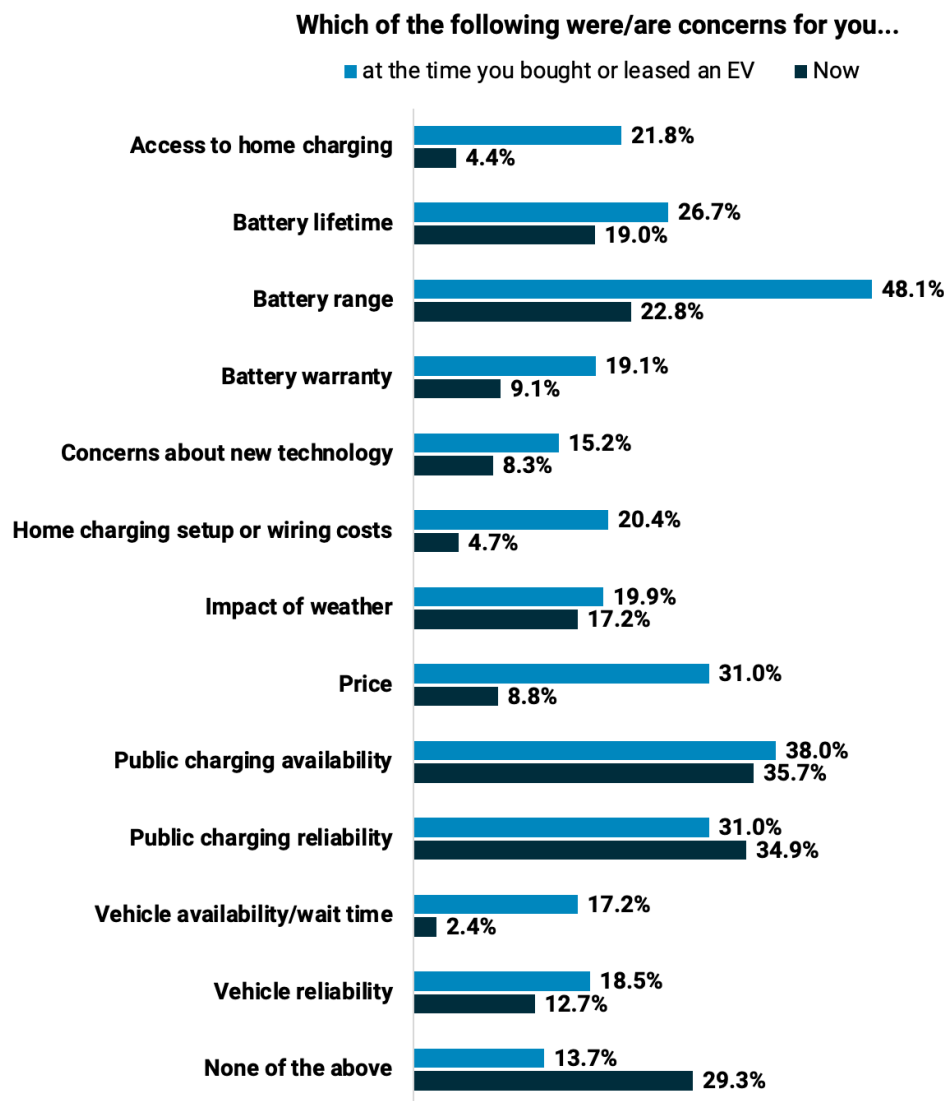


Figure 10: “Which of the following were concerns for you at the time you bought or leased an EV” compared to “Which of the following are concerns for you now?” (n = 4,744)

However, one of the major developments is that consumers' initial concerns about driving an EV have decreased since last year's survey. In the below graph, you can see the comparison in concern for EV drivers at the time they bought or leased their first EV in last year's survey versus this year's survey. Some categories - such as battery range, battery warranty, public charging availability, and vehicle reliability - have seen some massive drops year over year.

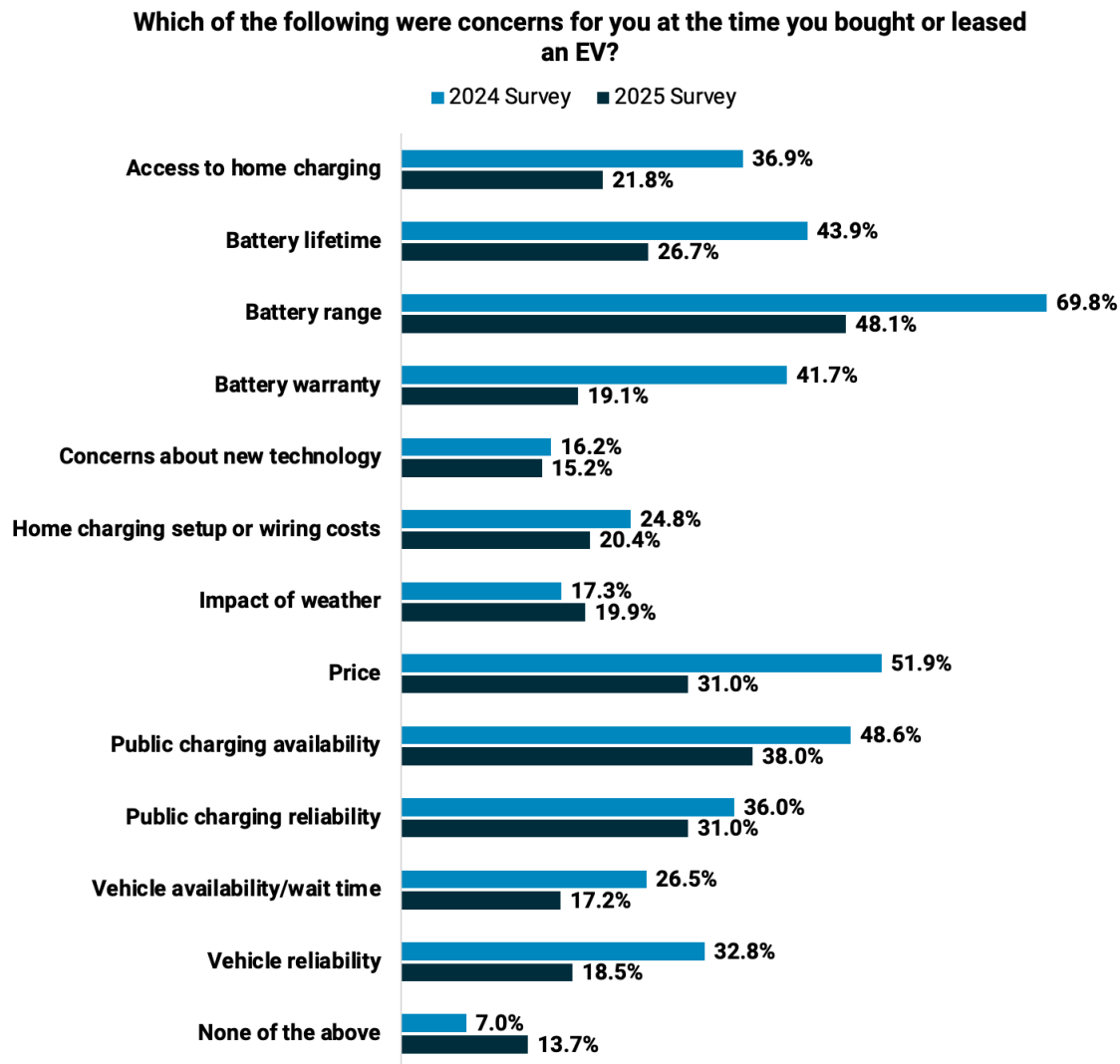


Figure 11: Which of the following were concerns for you at the time you bought or leased an EV? (Comparing results between the 2024 EV Driver survey and the 2025 EV Driver survey)

Despite the lower starting points of concern, respondents still report significantly less concern after experiencing an EV. The below graph shows current concern levels of EV drivers in each category, and current levels of concern have also dropped year over year. Concerns over the

battery have dropped significantly since last year's survey, while concerns over public charging saw a slight decrease. This is something we theorized would happen in last year's report, as investments were made to improve the public charging experience and the Tesla network became available to more vehicles. And notably, nearly 30% of EV driver respondents said they do not have concerns in any of the categories at this point.

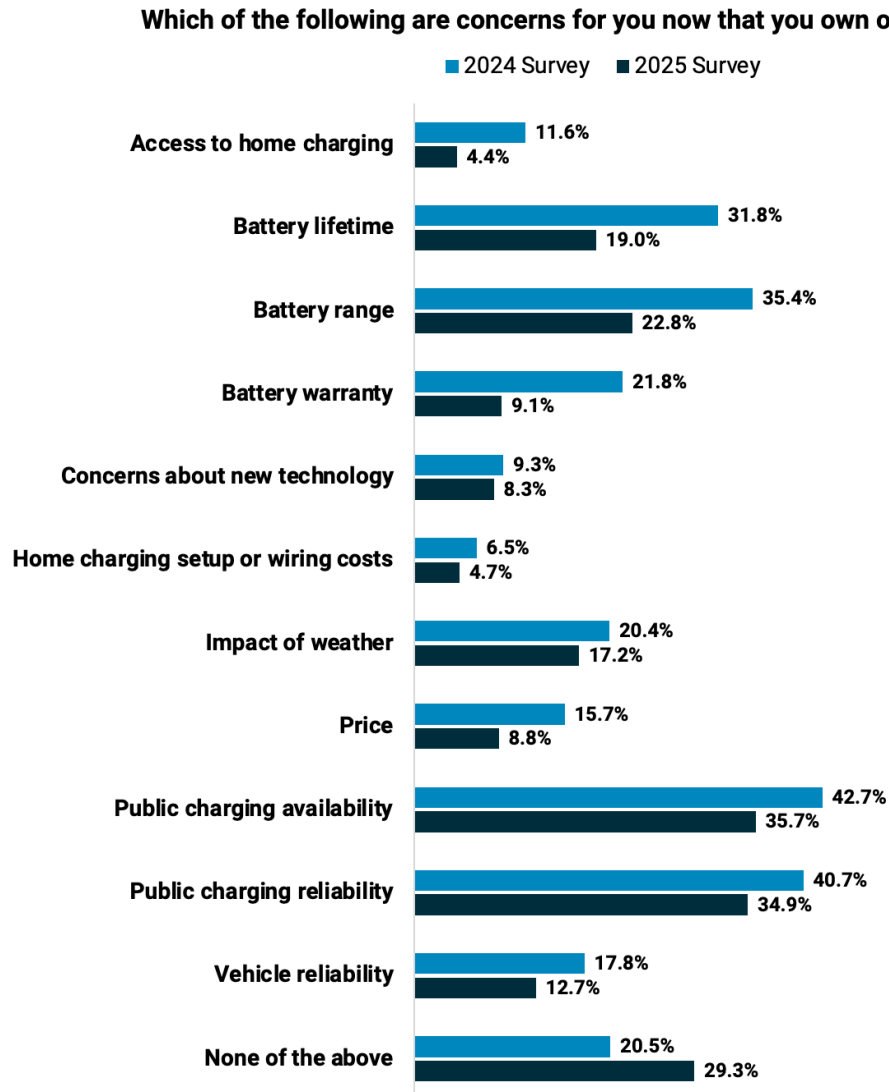


Figure 12: Which of the following are concerns for you now that you own or lease an EV? (Comparing results between the 2024 EV Driver survey and the 2025 EV Driver survey)

Will their next vehicle be an EV?

Given the drops in concern since last year, it is unsurprising that the likelihood of our respondents saying their next vehicle will be an EV has increased as well. In 2024, just under 90% (89.4%) of our EV driver respondents said it is likely or very likely that their next vehicle will be an EV. This year, 91.8% of our respondents said it is likely or very likely that their next vehicle will be an EV. Furthermore, 76.1% of respondents said it is very likely their next vehicle will be an EV. 74.7% of respondents said it was very likely their next vehicle will be an EV in last year's survey.

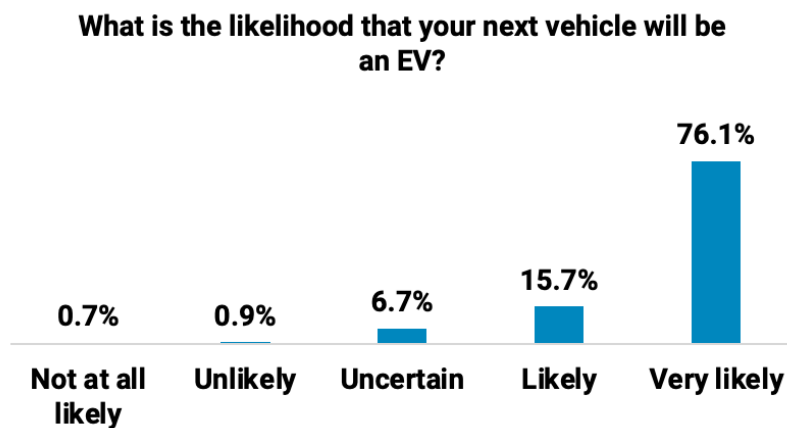


Figure 13: What is the likelihood that your next vehicle will be an EV? (n = 4,610)

While it is likely that all of the consumer groups within our respondent base will make their next vehicle an EV, there are areas for improvement that signal greater need for improvements. For example, 92.4% of white EV driver respondents said it is likely or very likely their next vehicle will be an EV. However, this number was lower for Asian/Asian American and Pacific Islander respondents (87.8%), Black or African American respondents (85%), and Native American or Alaska Native respondents (84.9%). While lower than the general population, these numbers have also increased from the past year.

Secondly, we see that 83.8% of respondents without home charging access said that it is likely or very likely their next vehicle will be an EV, compared to 92.2% of those with home charging access. This speaks to the difference in the EV experience with and without home charging access, although the overall figure is still quite high.

While over 95% of respondents who rated clean air as a crucial factor said it is likely or very likely their next vehicle will be an EV, only 77.8% of the 238 respondents who rated clean air as not important said the same. The difference shows further research is needed to identify why this gap exists.

Furthermore, it is slightly less likely for recent adopters of EVs to indicate their next vehicle will be an EV. While over 90% of respondents who first got an EV in 2020 or before said it is likely or very likely their next vehicle will be an EV, that number has dipped below 90% for respondents who have gotten an EV since. About 86% of respondents who first got an EV in 2024 said this. Recent adopters fall into the early majority category in regards to technology adoption and may have expectations more similar to gas-powered vehicles. Tracking this trend over time tells the story that the longer EV drivers have their vehicle, the more likely they are to make their next one electric. For example, 88% of 2020 adopters in last year's survey said it's likely their next vehicle will be an EV, while 92% of 2020 adopters said the same this year.

Some EV manufacturers are convincing drivers to stick with an EV. 95.4% of Tesla driver respondents said it is likely or very likely their next vehicle will be an EV, which was the highest among the major manufacturers. 94.2% of Rivian drivers and 91.1% of Kia drivers said the same.

Incentives

Lastly, we asked about what incentives EV drivers have used. Much like last year, inexpensive home charging and the federal EV tax credit stood apart as the most commonly used incentives. Free charging at select locations and state or local incentives once again followed the top two, with under half of respondents reporting use of those.

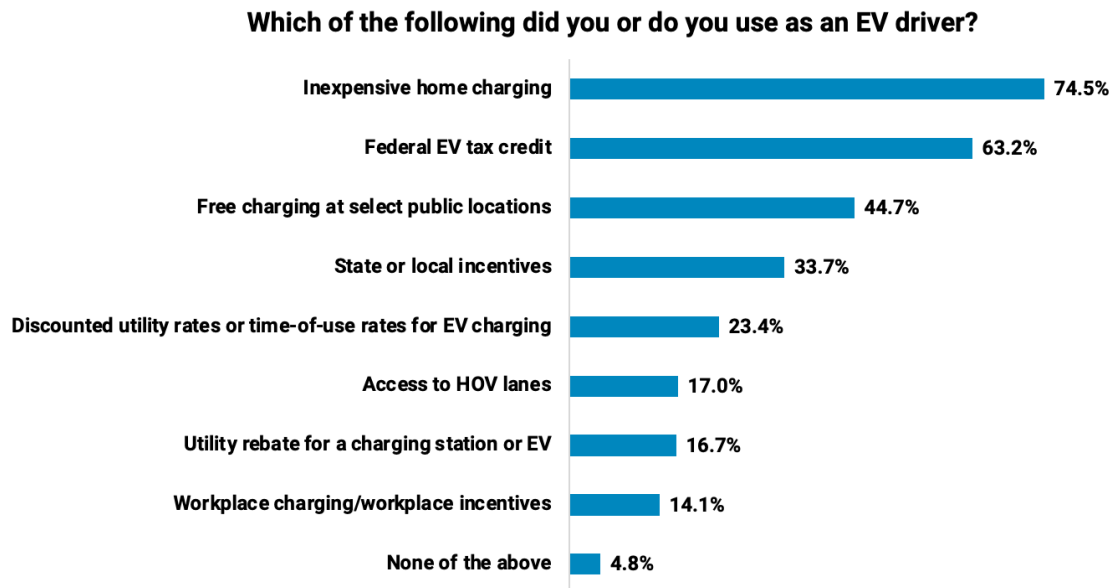


Figure 14: Which of the following did you or do you use as an EV driver? (n = 4,670)

There were a few trends within each of these incentives that stood out as well. With inexpensive home charging, younger EV drivers and people of color were less likely to report having used

this incentive. While over half of these drivers still used it, the gap highlights an access problem that needs to be addressed for EVs to continue to grow and to keep current EV drivers satisfied. Interestingly enough, annual household income does not have a significant impact on the likelihood of using this incentive.

On a similar note, only 23% of respondents reported using discounted utility rates or time-of-use rates for EV charging.

Lastly, this was the first year respondents answered questions about workplace charging/workplace incentives, with 14.1% of respondents saying they use or have used these. Younger drivers were especially likely to use these, with over 20% of those under the age of 55 reporting use of these.

CHARGING

Home charging

94.2% of the respondents in our survey said they have access to EV charging at home. 85.2% of those respondents said they have access to Level 2 charging, while 27.8% of respondents said they have access to Level 1 charging. The percentages, adding up to over 100%, reveal that some drivers have access to both Level 1 and Level 2 charging at home.

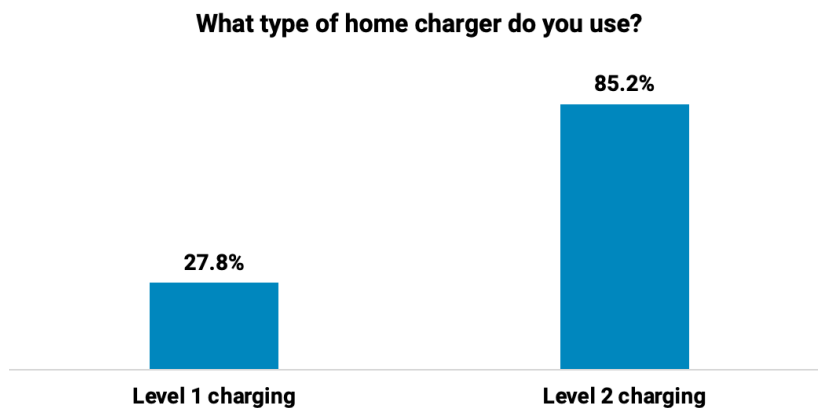


Figure 15: What type of home charger do you use? (n = 4,466)

Of the almost 4,500 respondents who do have access to EV charging at home, almost 95% charge at home at least weekly, 50.1% charge at home daily, and 44.5% charge at home weekly.

How often do you charge at home?

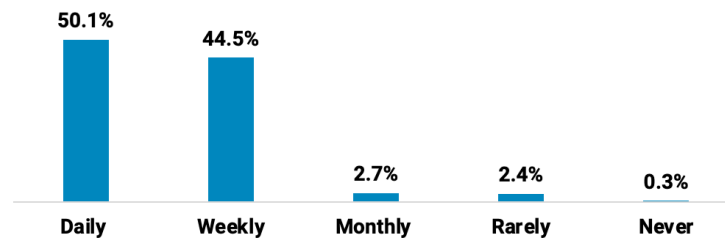


Figure 12: How often do you charge at home (n = 4,468)

Almost 60% of respondents with access to home charging charge overnight (10 PM to 6 AM), while an additional 13.5% charge in the evening (5 PM to 10 PM). Just under half of respondents said they use a schedule charging feature to control the time of day at which they charge, with 28% saying they do so all of the time. These schedule charging features both help consumers save money by charging at off-peak times and can help electric utilities balance loads.

About 80% of respondents said they would be willing to change the hours when they charge at home to receive discounted utility rates. Only 3.5% said they would not be willing to do so, about 16% of respondents indicated they might be willing to do so, while 1% said they didn't know.

About 39% of respondents said that their local electric utility offers special rates for home EV charging, while only 23.5% of respondents said that they use the special rates offered by their local electric utility. 41.4% of respondents said that their local utility does not offer special rates for home EV charging, and 19.5% said they don't know.

Of the respondents who said that their local electric utility does not offer special rates for home EV charging, 93% said that they wish their local electric utility did. This strongly suggests that utilities have an opportunity to improve the EV experience by creating and offering rates for home charging.

Charging away from home

We also asked respondents how often they charge at different types of charging locations, on average. Generally, we see that public chargers and work chargers play a role for our respondents but on a less frequent basis. It's important to note that our respondents were likely to have access to home charging. Over half of respondents said they use Level 2 public chargers on a rare basis, while just under half of respondents said they use a DC fast charger or Supercharger on a rare basis.

About one-quarter of our respondents said that they use work chargers in general, while less than 15% of respondents use them at least monthly. About 82% of respondents said they use DC fast chargers, while 73% of respondents said they use Level 2 public chargers.

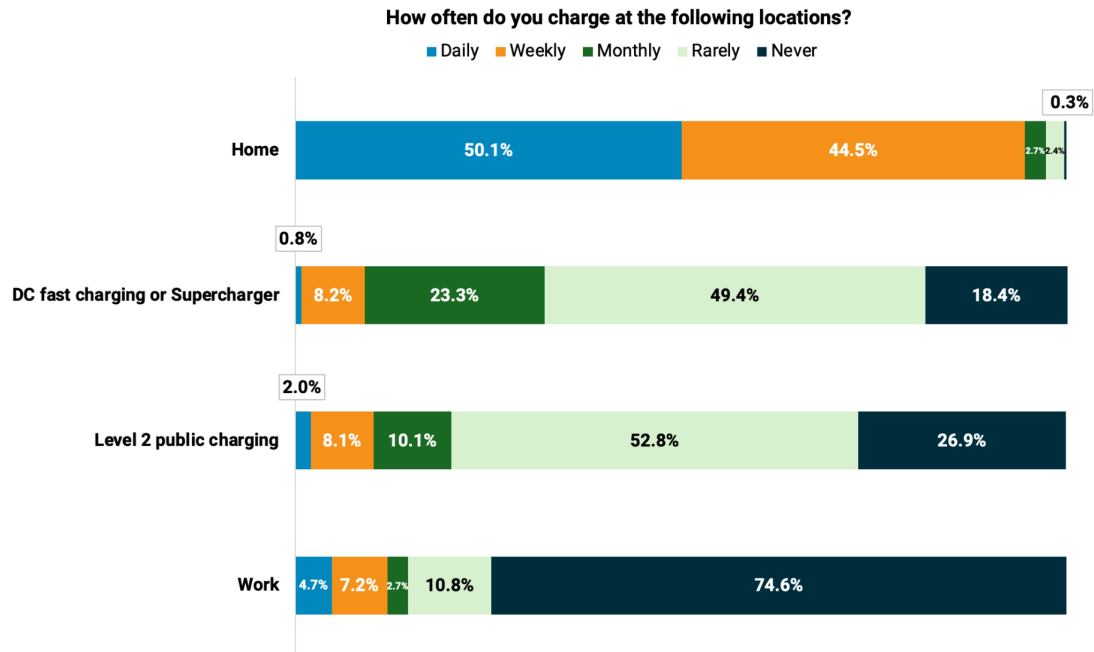


Figure 16: How often do you charge at the following locations (n = 4,678)

267 respondents do not have access to EV charging at home, and answered how often they use each type of charger, on average. When we look at these respondents, we get a truer picture of the charging landscape away from home.

Among these respondents, just under half use DC fast chargers/Superchargers at least weekly, while about 40% use work chargers at least weekly. 88% of those without access to home chargers report using a DC fast charger/Supercharger, while 83% say the same about Level 2 public chargers. About 48% of those without home charging report using a work charger.

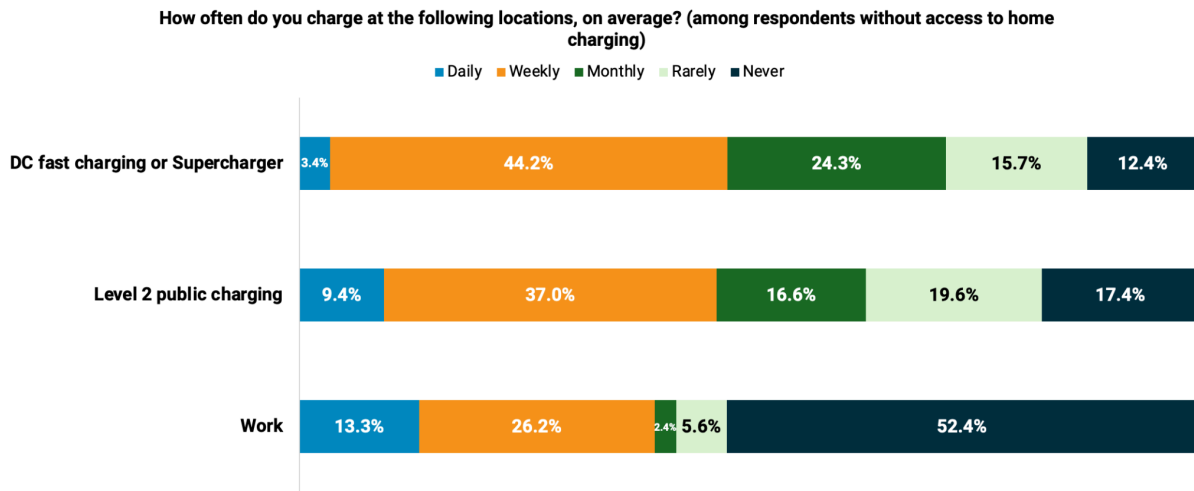


Figure 17: How often do you charge at the following locations (among respondents without access to home charging) (n = 267)

While only a minor difference, we see that DC fast chargers are more commonly used, and this may come down to availability. 65% of total respondents said that there is a public and compatible fast charger that is within five miles of their home residence. This is an increase from last year's survey, where 57% of respondents said the same. As investments have been made to increase public charging, this is a number expected to continue to rise. This is a trend we will track over the coming years.

27% said that there are no fast chargers within 5 miles of their home, while 3% said there are fast chargers within 5 miles that are incompatible with their vehicle.

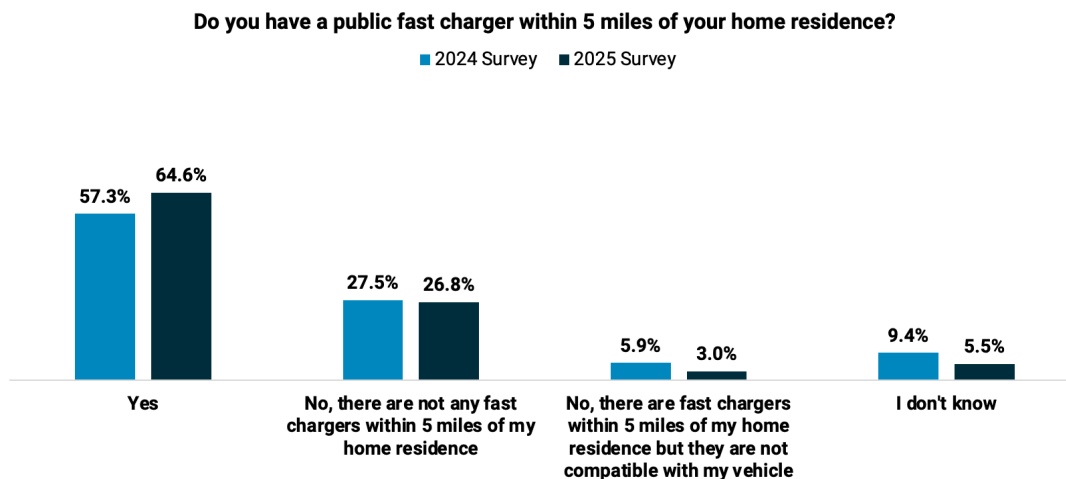


Figure 18: Do you have a public fast charger within 5 miles of your home residence (comparing results between the 2024 EV Driver Survey and the 2025 EV Driver Survey) (2025: n = 3,781)

On the other hand, only 24% of respondents said that there is a public Level 2 charger within walking distance from their home residence, compared to 67% who said there isn't. While we measured each of these with a different distance, this is because of their different use cases.

Do you have a public Level 2 charger within walking distance from your home residence?

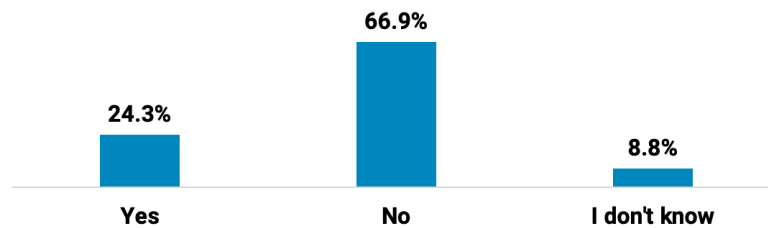


Figure 19: Do you have a public Level 2 charger within walking distance from your home residence? (n = 3,792)

Level 2 chargers should ideally be within walking distance from one's home to allow for the longer charge duration to take place.

Which single DC fast charging network do you most often use?

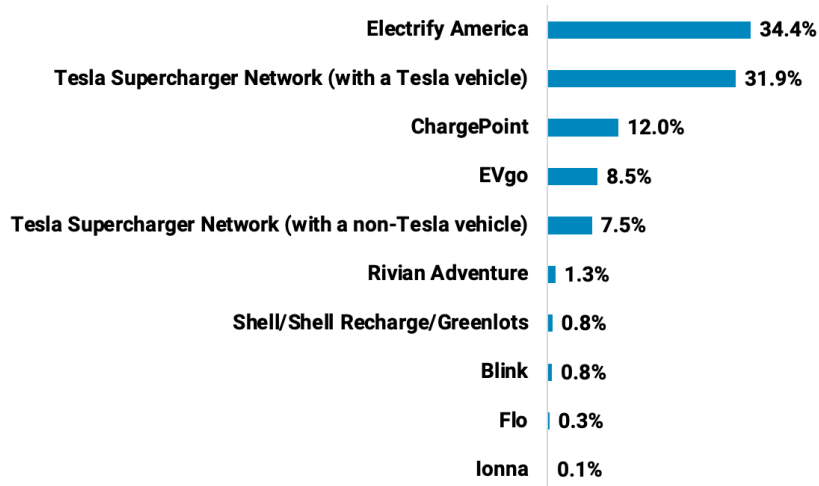


Figure 20: Which single DC fast charging network do you most often use? (n = 3,759)

When we asked respondents to rate what problems they have consistently experienced at their most-used DC fast charging network, a few concerns stood out. Respondents were most likely to say they've consistently experienced nonfunctional or broken chargers, a lack of amenities available at charging stations, and not having enough chargers at each location. While those who use the Tesla Supercharger Network were much less likely to report broken chargers or not

having enough chargers at each location, they were more likely to report a lack of amenities available at their charging stations. Tesla chargers did stand out overall among the charging networks with fewer associated problems, as seen below.

EVgo users were the happiest when it comes to the amenities at their station - only 29% of EVgo user respondents said they have consistently experienced a lack of amenities in the past year. Further down, we see that at least 35% of drivers believe that charging costs are too high at public charging stations. This finding is consistent across charging providers, but EVgo and Shell were least likely to have this cited as a concern.

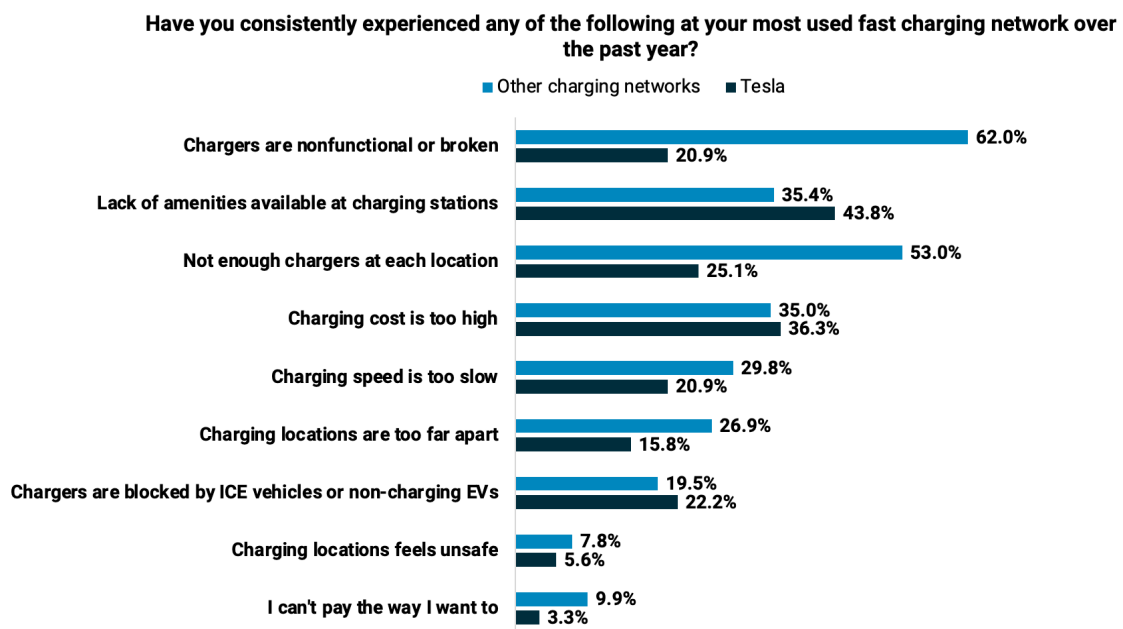


Figure 21: Have you consistently experienced any of the following at your most used fast charging network over the past year? (Comparing results from those who selected the Tesla Supercharger Network as their most-used charging network to all other respondents) (Other charging networks: n = 1,917, Tesla: n = 843)

Concerns with public charging have dropped slightly from last year's survey, presumably as a result of investments into public charging infrastructure and more vehicles being able to use the Tesla Supercharger Network. We will continue to track this trend as time goes on.

BUYING OR LEASING AN EV

The point of purchase/lease

72.1% of our respondents got their primary EV at a dealership, compared to 25.2% of respondents who got their primary EV directly from a manufacturer. Another 2.6% got their

primary EV from a private seller. This represents a shift from last year's survey, where 59.4% of respondents got their primary EV from a dealership.

When we compare the buying or leasing experience for those who got their primary EV from a dealership to those who got it directly from the manufacturer, the experience is slightly better for those who got their EV directly from the manufacturer. Across the board at dealerships and direct from the manufacturer, satisfaction with each step of the process is high, which is a great sign for both. However, we see some notable differences in finding the information needed to buy or lease an EV and in post-delivery support. This was true in last year's survey as well, and we see that satisfaction has actually seen a slight increase across the board from last year's survey.

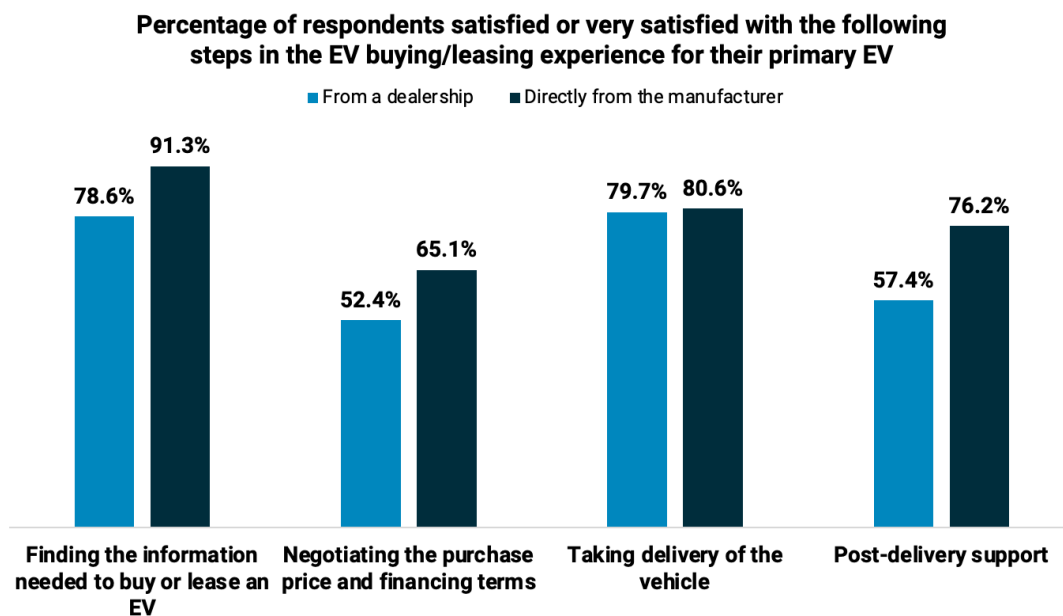


Figure 22: Percentage of respondents who answered that they were either satisfied or very satisfied with each of the above steps in the buying/leasing experience for their primary EV (Comparing results between respondents who got their primary EV from a dealership to respondents who got their primary EV directly from the manufacturer) (From a dealership: n = 3,240, directly from the manufacturer: n = 1,335)

Even with the increase in respondents who got their EVs from a dealership, the same story from last year's survey emerges when we look into the dealership experience. About 29% of respondents said their salesperson had low knowledge of EVs, compared to about 23% who said that their salesperson had high knowledge of EVs. There was actually a decrease in dealers with high knowledge since last year's survey, going from 26.4% to 22.7%.

Much like last year, however, dealers often don't have a significant amount of influence on what drivers decide to buy or lease. 72% of respondents said their dealer had "no influence" on their

purchase or lease decision, while only 4% said they had “a lot of influence.” Furthermore, 85% of respondents said that they know exactly what they want to buy or lease when they go to a dealership for a car.

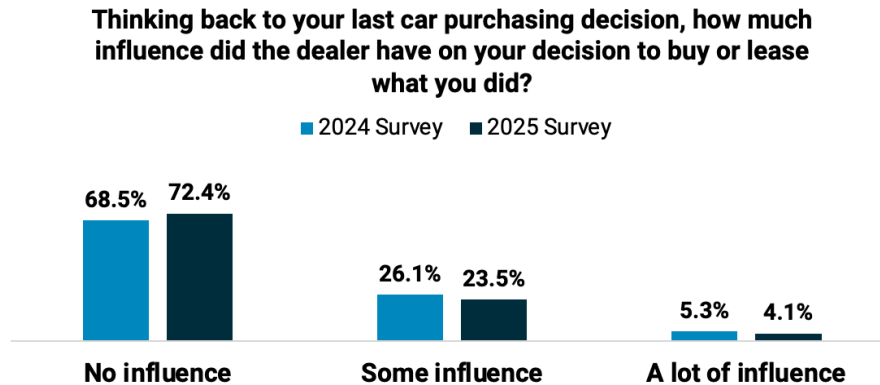


Figure 23: Thinking back to your last car purchasing decision, how much influence did the dealer have on your decision to buy or lease what you did? (Comparing results between the 2024 EV Driver Survey and the 2025 EV Driver Survey) (2025: n = 3,225)

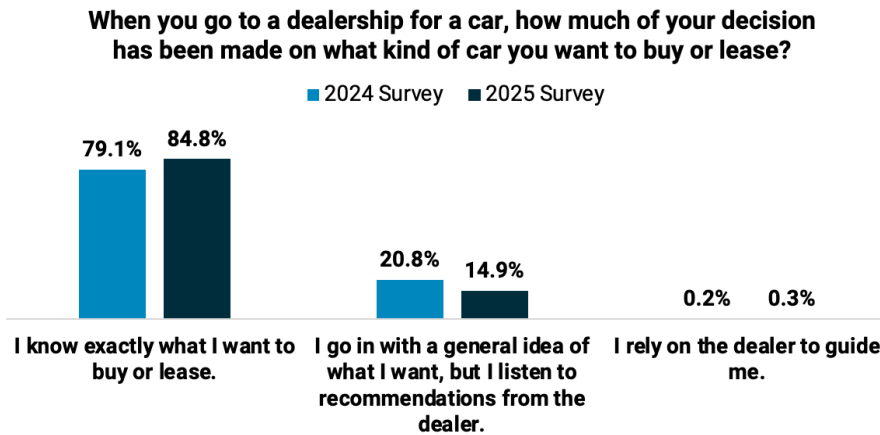


Figure 24: When you go to a dealership for a car, how much of your decision has been made on what kind of car you want to buy or lease? (Comparing results between the 2024 EV Driver Survey and the 2025 EV Driver Survey) (2025: n = 3,227)

Pre-purchase/lease research

If respondents generally go into the dealership knowing what they want, it becomes even more important to find out where they are doing their research ahead of time. What online resources are they using? What resources do they find to be the most trustworthy?

We once again found that automaker websites and EV-specific websites were the most commonly used online services to research EVs. 73% of respondents answered that they have

used automaker websites to research EVs, up from 69.8% who said the same last year. 62.9% of respondents said they use EV-specific websites or forums to research EVs.

One of the noticeable differences from last year is the increase in usage of YouTube. 50.8% of respondents said that they use YouTube in researching EVs, up from 45.2 % of respondents who said the same last year. Resources like YouTube and Reddit are more popular among younger respondents in our survey. Because of this, we'd expect their respective percentages to increase in the coming years of this survey. Reddit, in particular, saw a noticeable increase. However, we believe this was at least partly influenced by increased promotion of the survey on Reddit to collect survey responses.

While Facebook is a resource for 16.6% of respondents, social media is otherwise not used much to help in researching EVs. Less than 5% of respondents used Twitter, Instagram, and other social media platforms to research EVs.

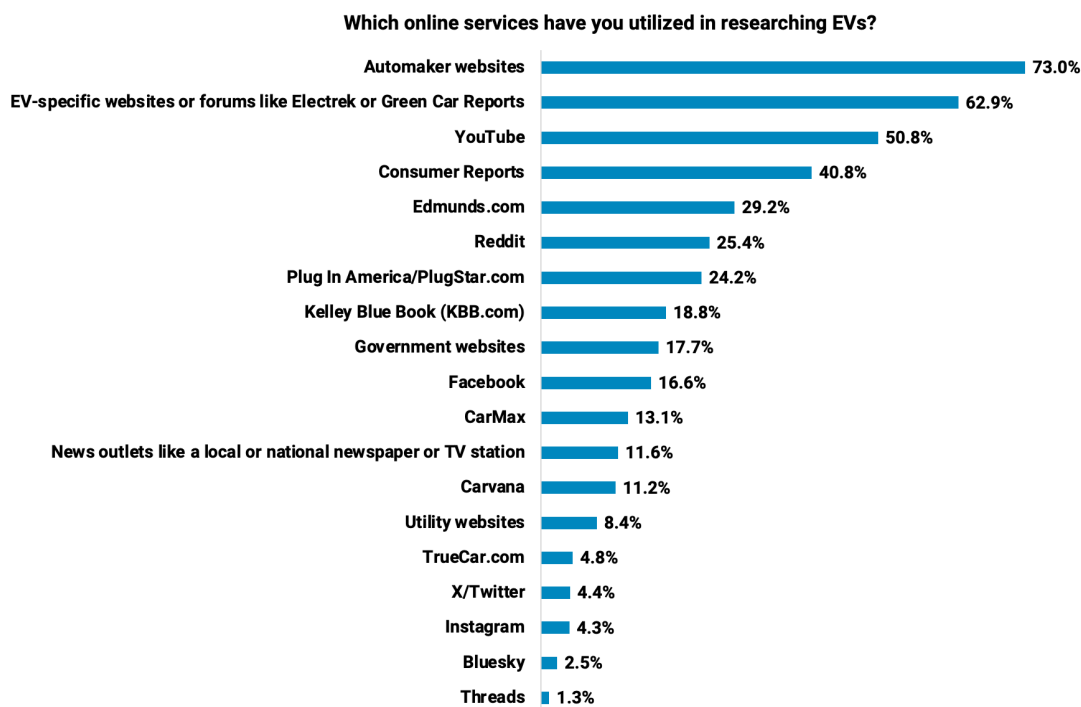


Figure 25: Which online services have you utilized in researching EVs? (n = 4,544)

We also asked respondents to identify the top three information sources that they find useful. EV-specific websites and forums stood apart as the most useful resource. Consistent with our findings from last year, 79% of respondents said they find these to be one of the most useful resources. This was largely true across different demographic groups, showing the power of this resource for drivers interested in EVs.

Video reviewers were identified as the second most useful source, with 46% of respondents citing it to be one of their most useful sources. This was an increase from 41% of respondents who said the same last year. Once again, this was especially true among younger drivers. We expect this number to increase over the coming years, and those involved in the industry should take note of YouTube as a growing and powerful resource for EV information in the current media landscape.

One of the notable differences in useful resources is the reliance on automaker websites as a valued tool. This year, 38.1% of respondents found automaker websites most useful to research EVs, up from 27.6% last year.

Last year, 17.4% of respondents found government websites to be one of the most useful resources for EV information. This year, only 4.6% used government websites to research EVs. This who said that this year. Notably, the survey was fielded in the week before a new presidential administration and throughout most of the first two months of said administration.

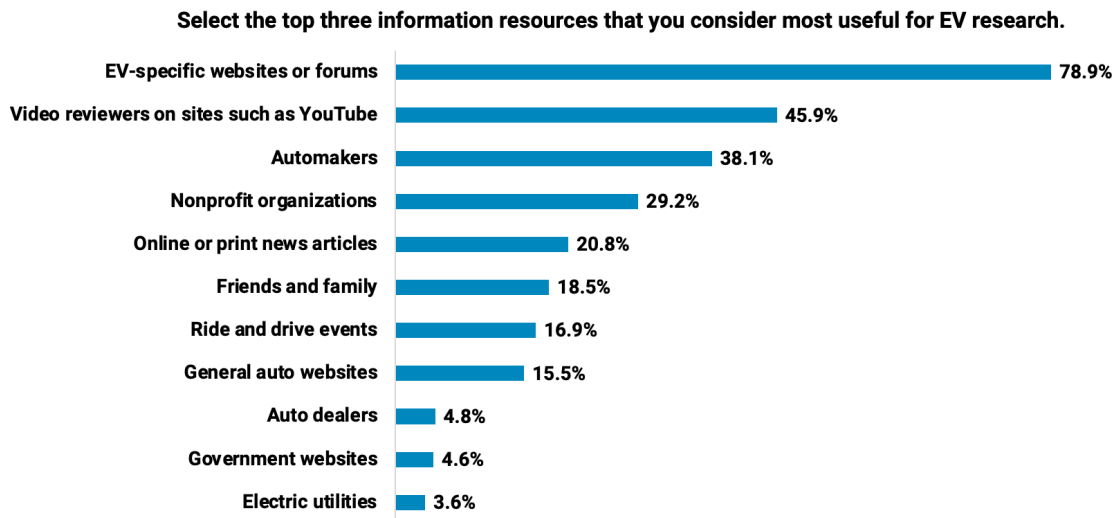


Figure 26: Select the top three information resources that you consider most useful for EV research. (n = 4,312)

EV DRIVER PROFILES

In our survey and within the EV-driving population, demographics are heavily skewed toward older drivers, male drivers, and white drivers. This means that these survey results are skewed toward the beliefs and tendencies of people who fall into those groups.

This section is designed to identify some of the lesser-represented groups of EV drivers and highlight their experiences and preferences. By identifying the experiences and preferences of diverse groups of people, we can accelerate EV adoption by reaching a broader market.

Younger drivers (EV drivers between the ages of 18 and 44)

In total, we had 982 EV driver respondents who indicated that they are between the ages of 18 and 44. 640 of these respondents are between the ages of 35 and 44, while 298 are between the ages of 25-34. Respondents between the ages of 18 and 44 make up a total of 19.8% of the survey respondents, with some key differences that separate them from their older counterparts.

In total, we found that 90.8% of respondents between the ages of 18 and 44 said it is likely or very likely their next vehicle will be an EV. While age was a minor predictor of how likely one would be to make their next vehicle an EV in last year's survey (older drivers were slightly more likely to say so), there does not appear to be a major difference between younger drivers and older drivers this year.

33.5% of younger EV drivers said that "clean air/environmental protection" was their most important purchase consideration, while 28.3% identified cost savings as their most important consideration.

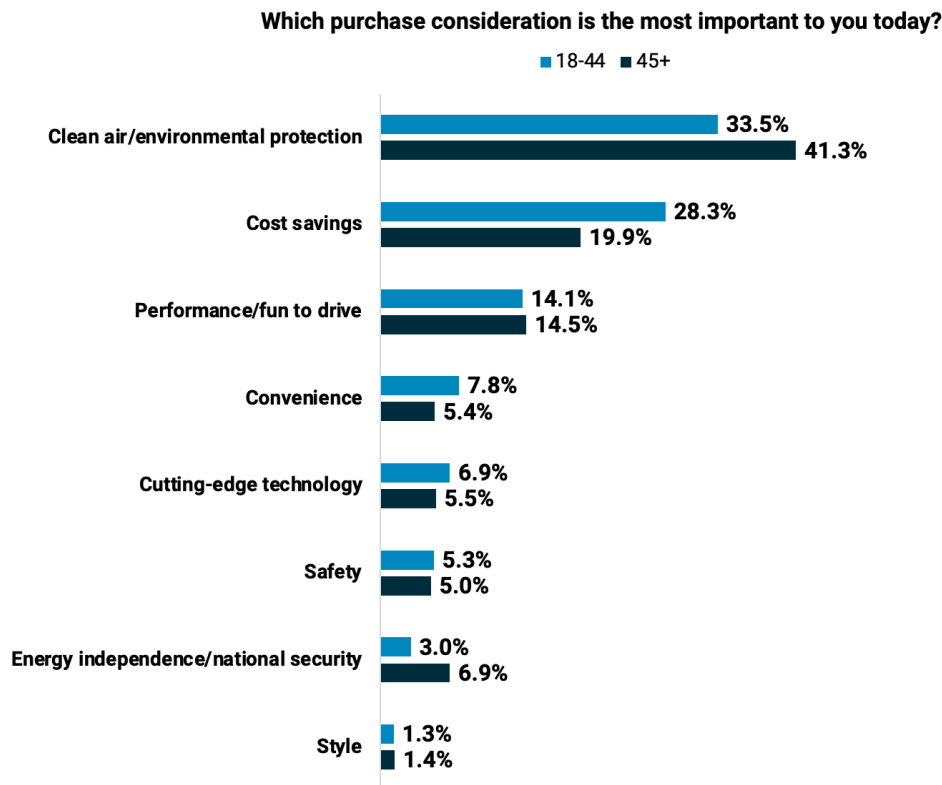


Figure 27: Which purchase consideration is the most important to you today? (18YO-44YO: n = 875, 45+YO: n = 3,610)

As seen in the above graph, clean air is still most likely to be cited as the most important purchase consideration among 18- to 44-year-old EV drivers. However, other considerations are increasingly prevalent as the population gets younger - 33% of EV drivers between the ages of 18-24 said cost savings is their most important consideration, while 32% of 25-34 year olds and 27% of 35-44 year olds said the same. As time goes on, we can reasonably expect that cost savings will continue to become a greater consideration for EV drivers.

Furthermore, younger drivers were more likely to cite convenience and cost savings as crucial factors than older drivers. This signifies that younger drivers may be most swayed by messages around these two factors, while older drivers may have the luxury of looking more towards environmental reasons.

When it comes to the concerns of younger drivers, they are largely in line with the general population. One notable difference is the higher concern when it comes to home charging access. 31.4% of EV drivers between the ages of 18-44 said they initially had concern about access to home charging, a number that then dropped to 10.3% after experience with an EV.

However, this higher initial concern signals a need for greater education on charging options for younger drivers.

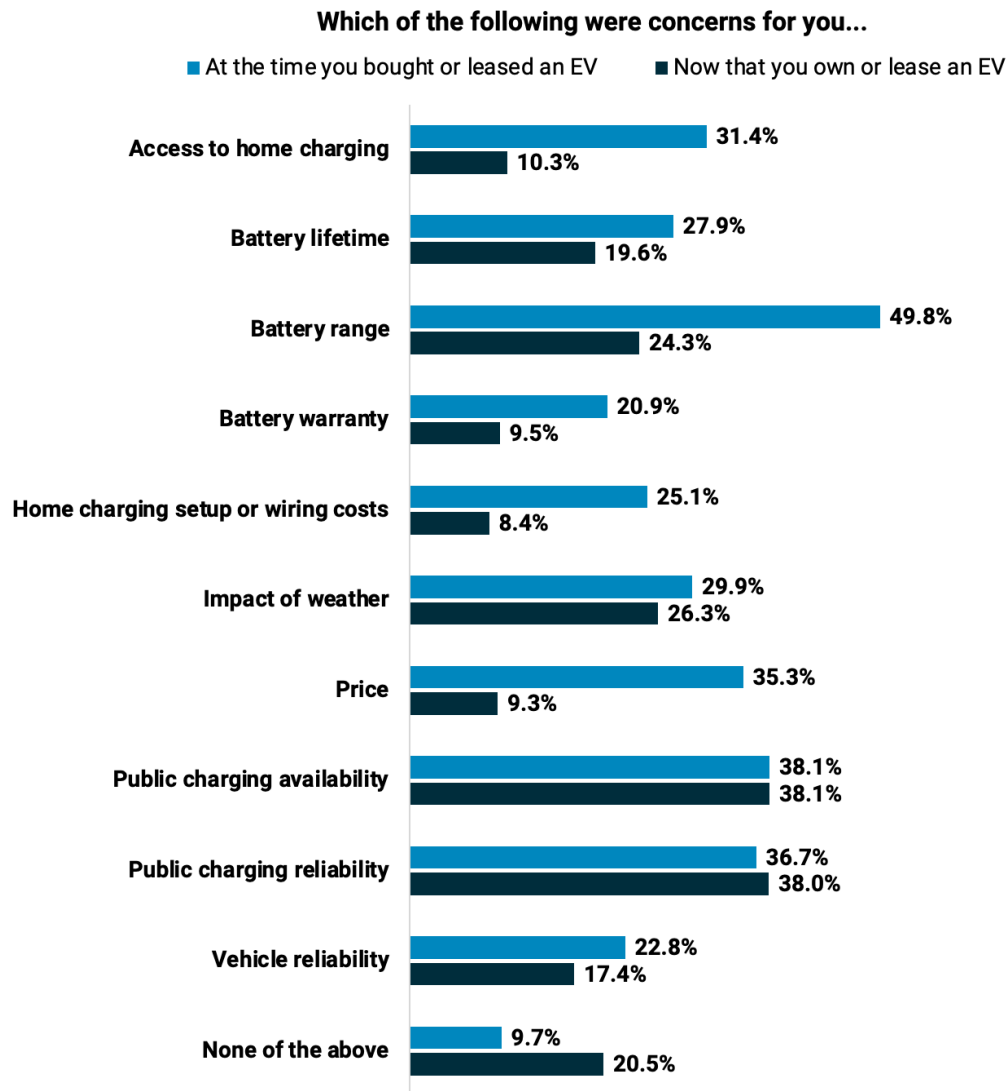


Figure 28: "Which of the following were concerns for you at the time you bought or leased an EV?" compared to "Which of the following are concerns for you now that you own or lease an EV?" (Among respondents between the ages of 18 and 44)

It's also noteworthy that younger drivers were more likely to report concern over the impact of weather. This can also be tied back to home charging access - those without access to home charging can reasonably be more concerned about the impact of weather on their range. By addressing the home charging question for younger drivers, other concerns can be addressed as well.

Lastly, we want to look into the online services that younger EV drivers use in researching EVs and what resources they find useful. The major takeaway here is the comparative popularity of sources like YouTube and Reddit among younger drivers. Once again, our survey was advertised on Reddit, so many respondents came from there. Even then, the difference in use between younger and older drivers signifies that these sources are a key part of the car buying and leasing process in 2025 and beyond.

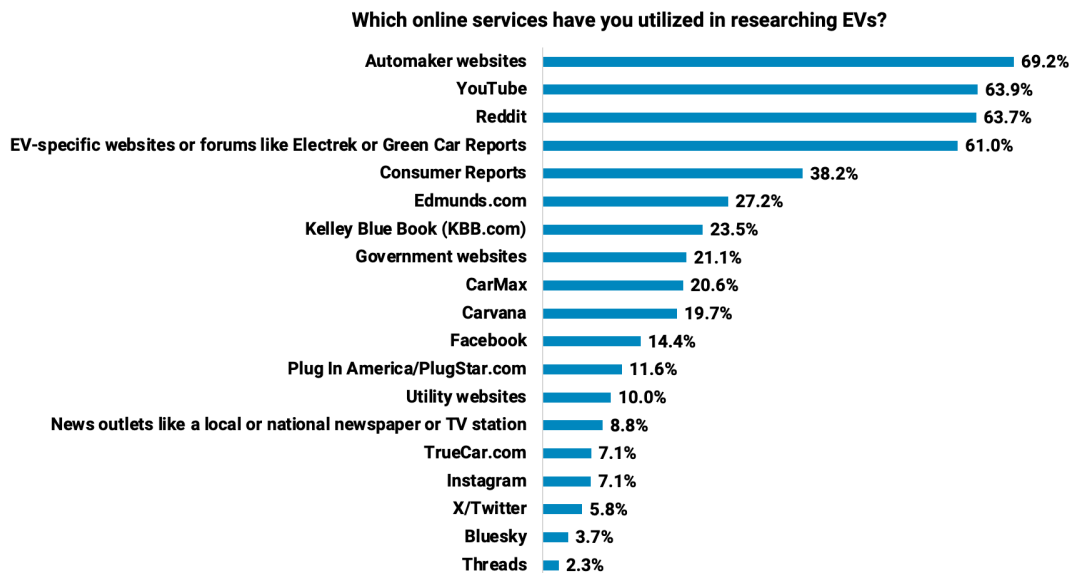


Figure 29: Which online services have you utilized in researching EVs? (Among respondents between the ages of 18 and 44) (n = 864)

To go along with this point, we see that younger EV drivers are more likely to find online sources useful than the general population. With EV-specific websites and video reviewers as the most useful resources going away, it is clear where younger drivers can be reached and educated.

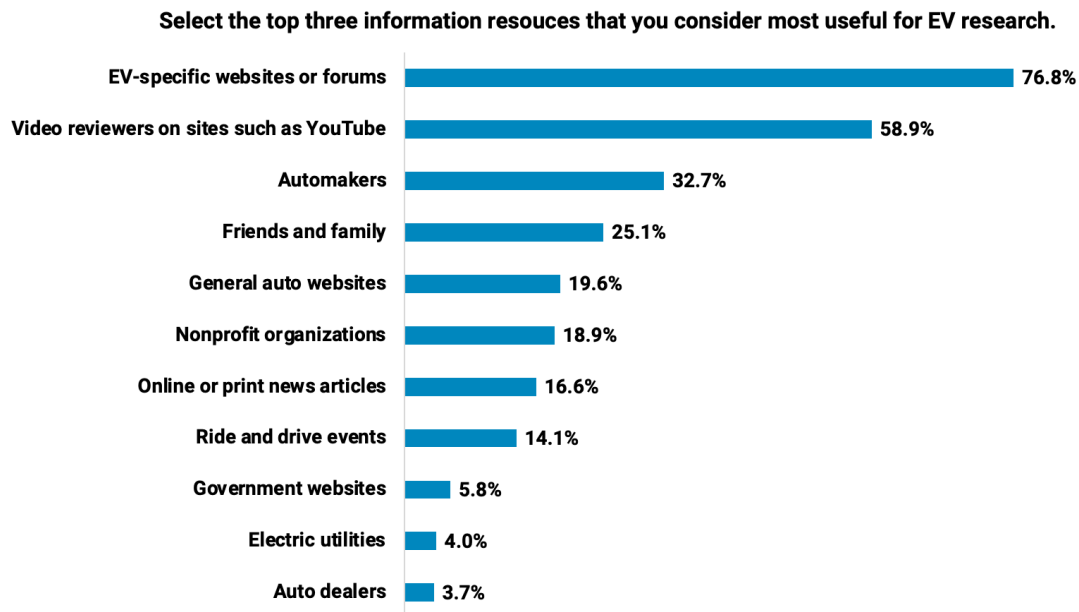


Figure 30: Select the top three information resources that you consider most useful for EV research. (Among respondents between the ages of 18 and 44) (n = 859)

Female EV drivers

1,058 respondents in our survey identified as female. This made up 21.4% of total respondents.

92% of female EV driver respondents said it is likely or very likely their next vehicle will be an EV. This is up from the 88.6% of female EV drivers who said the same last year.

One of the major differences in female EV drivers is in their reasoning for buying or leasing an EV. 52.2% of female EV drivers said that clean air is their main motivation for buying or leasing an EV. While other considerations were less frequently selected, this is largely because of the importance of clean air for female EV drivers.

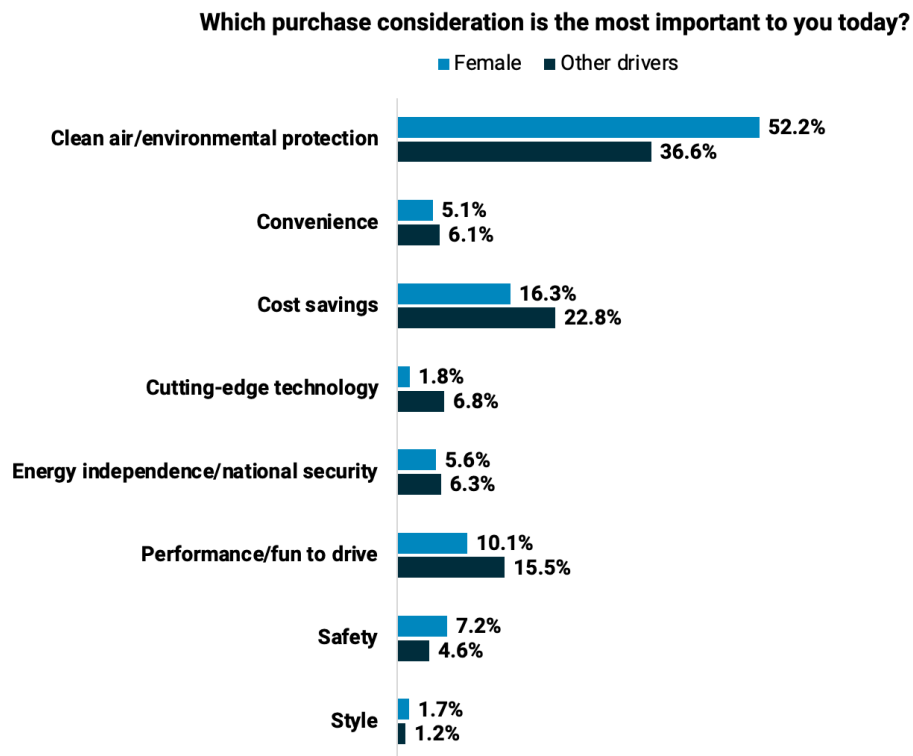


Figure 31: Which purchase consideration is the most important to you today? (Comparing the results of respondents who reported as female to other respondents) (Female: n = 923, Other drivers: n = 3,682)

In fact, 75% of female EV drivers said that clean air is a crucial consideration to them, compared to 58% of male EV drivers. Safety was another big consideration, with 71% of female EV drivers saying this is a crucial consideration.

When looking at concerns for female EV drivers, the same concerns pop up at almost the same rate as the general population and continue to drop just as we saw with the general population. However, the one difference is that female EV drivers were slightly more likely to have concerns across the board. While these 5% to 10% increases over the general population seem small, that can mean thousands of people if applied to the population as a whole.

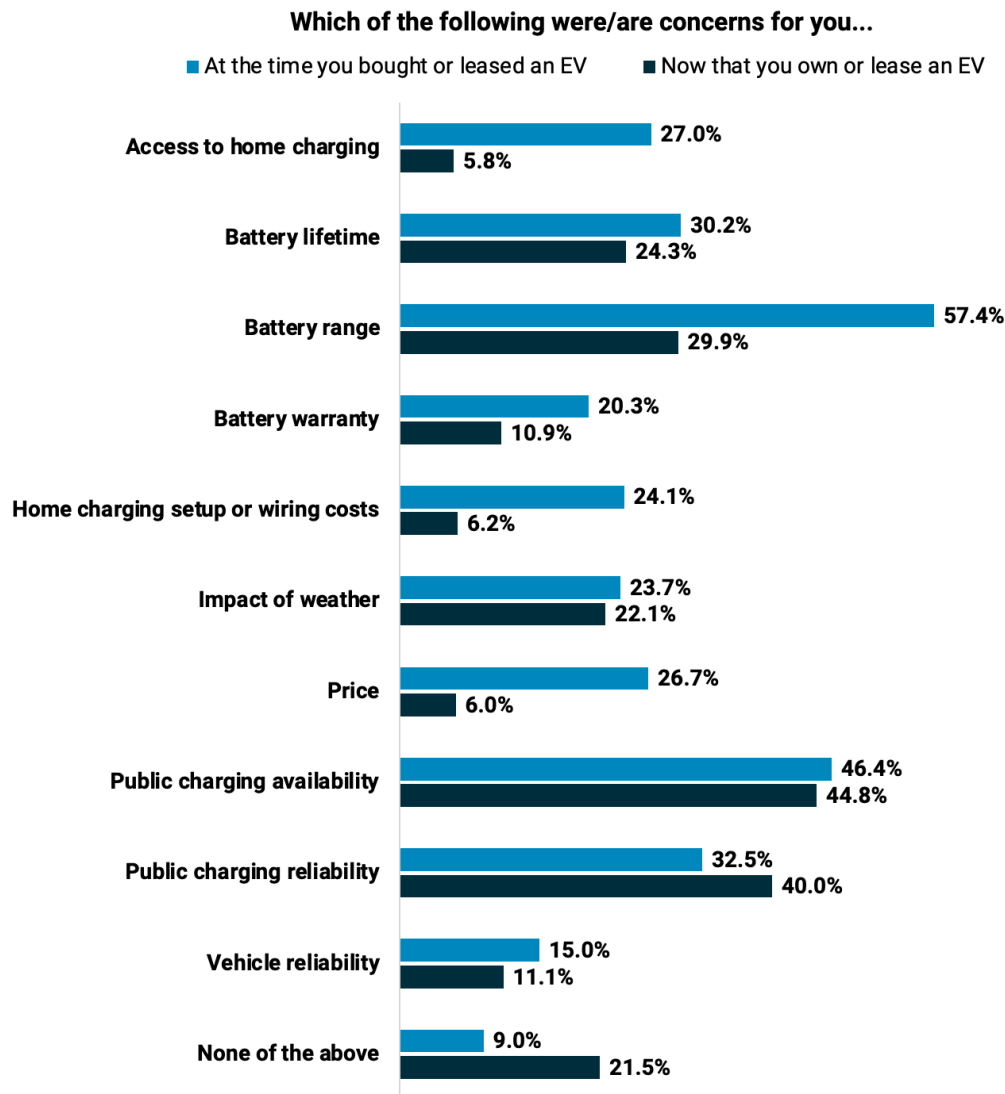


Figure 32: "Which of the following were concerns for you at the time you bought or leased an EV?" compared to "Which of the following are concerns for you now that you own or lease an EV?" (Among respondents who reported as female)

There are also notable differences in concern levels after EV experience. Female EV drivers are more likely to currently have concerns about battery range, public charging, and more.

Lastly, female EV drivers report some differences with their preferences regarding EV research. Especially when it comes to the more popular online services, women were less likely to report use of the same online services, such as EV-specific websites or forums and YouTube, as other respondents. Despite the lower likelihood, there are still a significant number of female EV drivers who reported using these.

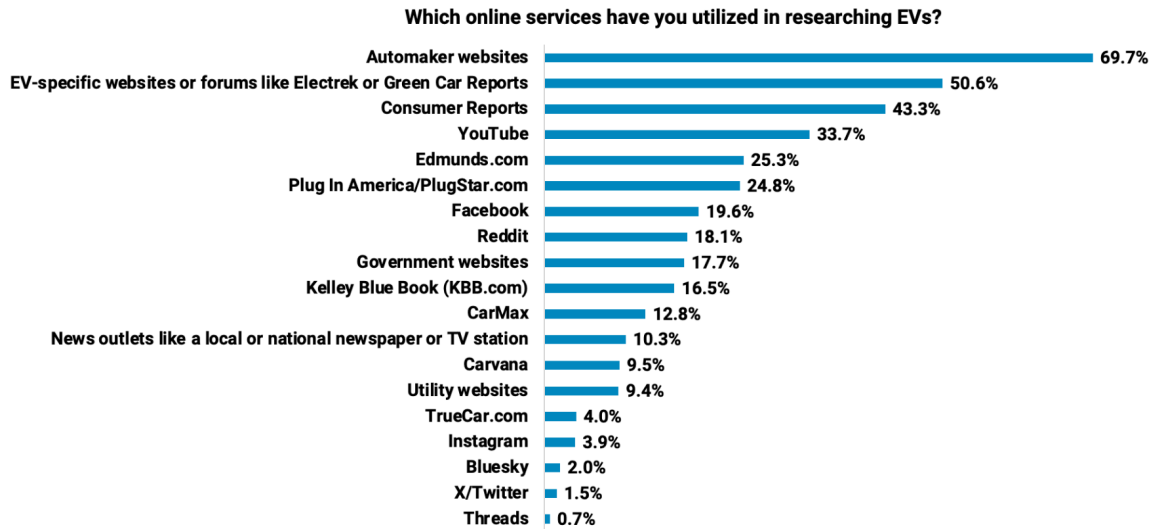


Figure 33: Which online services have you utilized in researching EVs? (Among respondents who reported as female) (n = 904)

When we look at what female EV drivers consider to be useful resources, the results are mostly in line with the general population, with a few small differences. Female drivers were less likely to cite YouTube as a useful resource, with only 33.1% saying this. However, they were more likely to cite nonprofit organizations, and friends and family as useful resources.

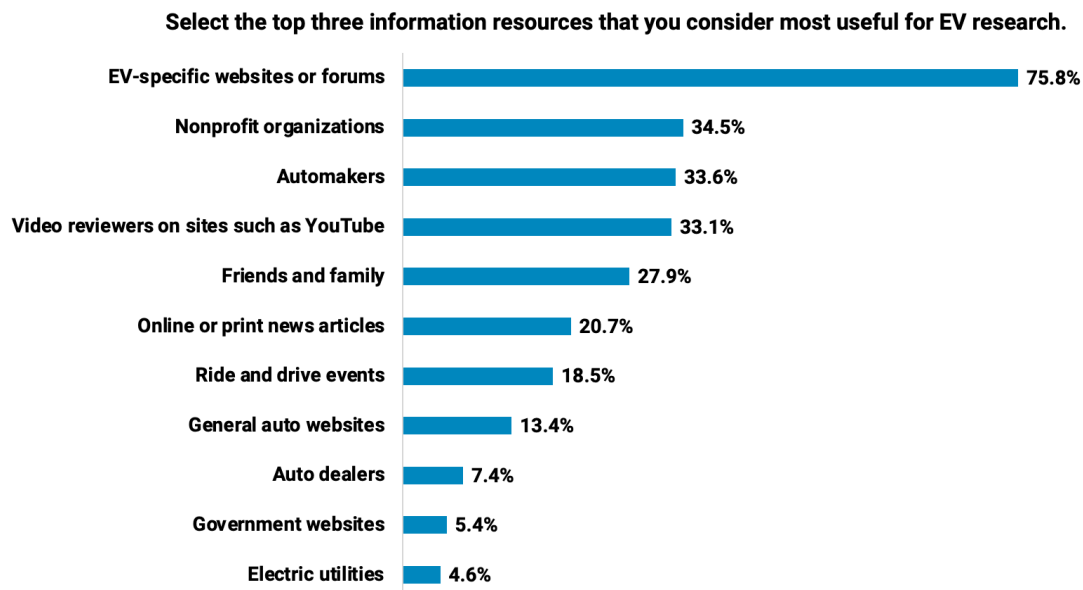


Figure 34: Select the top three information resources that you consider most useful for EV research. (Among respondents who reported as female) (n = 908)

EV drivers in multifamily housing

In total, 532 EV driver respondents said that they live in a multifamily home, such as an apartment, condo, or townhouse. These respondents made up 11.7% of total respondents and represent a group of drivers that may have additional hurdles regarding access and affordability of charging.

91.4% of multifamily housing respondents indicated it is likely or very likely their next vehicle will be an EV. This is right in line with the survey population at large, and is a good sign for electric vehicles as a whole. One thing worth noting is that 83.8% of those without access to home charging said it is likely or very likely their next vehicle will be an EV—this indicates the importance of home charging. Those in multifamily housing have less control over their access to home charging, so the gap in charging convenience needs to be addressed for those without access to charging.

When we look at the concerns of multifamily housing EV drivers, it makes sense that access to home charging is a greater concern both when they got an EV and now. But we can also see some residual effects of that throughout the rest of the listed concerns. Multifamily housing EV drivers were and are slightly more likely to have concerns over battery range, the impact of weather, and public charging. Creating dependable charging solutions for these drivers – whether it be at home or away from home – may help to alleviate these concerns.

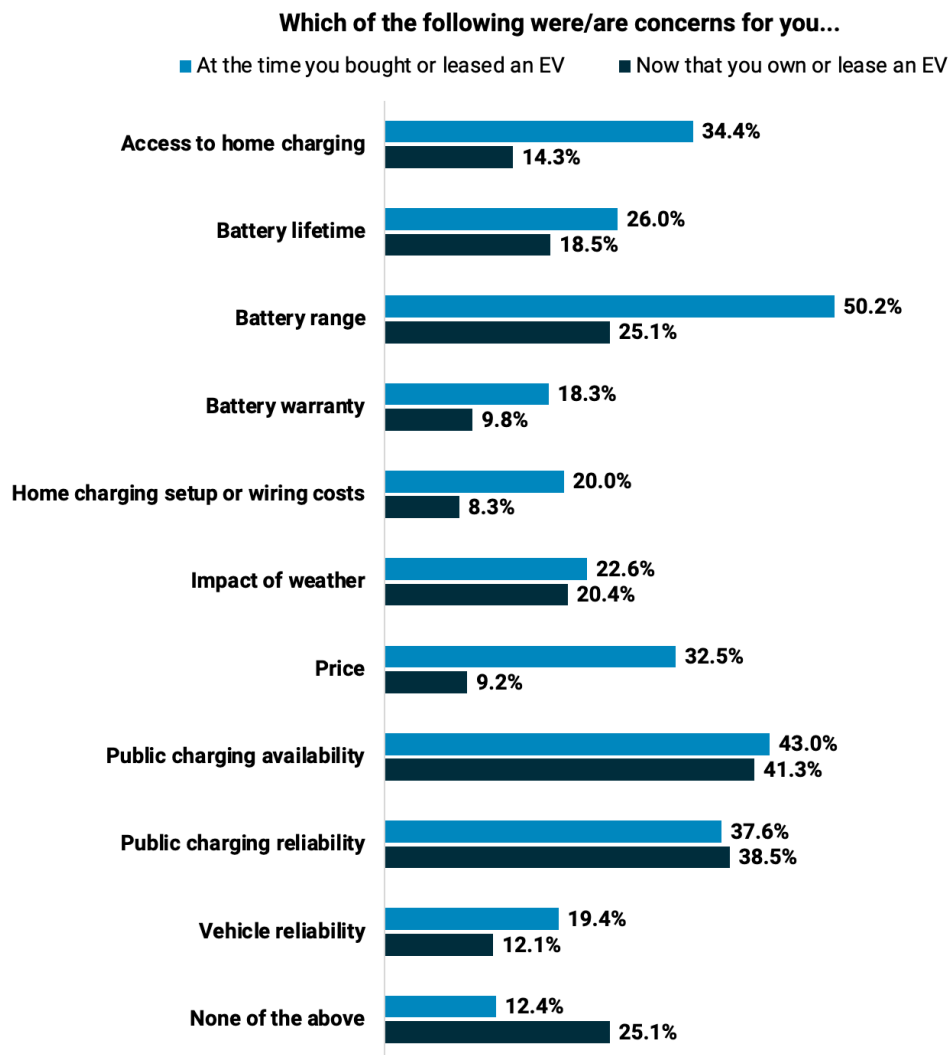


Figure 35: "Which of the following were concerns for you at the time you bought or leased an EV?" compared to "Which of the following are concerns for you now that you own or lease an EV?" (Among respondents who reported as living in a multifamily home residence)

Looking into the charging locations of multifamily housing EV drivers, it seems that many are still able to charge at home consistently. About 91% of those respondents said they still charge at home weekly. We see that multifamily housing EV drivers are much more likely to use DC fast chargers, Level 2 chargers, or work chargers on a weekly basis. Multifamily housing residents with access to home charging can still complete the charging they need to do, but it may take a more varied experience than for those with a private home charger in their garage.

Asian/Asian American or Pacific Islander, Black or African American, Hispanic/Latino, and Native American or Alaska Native EV drivers

This section encompasses drivers of the following races and ethnicities, categories which are also used in the U.S. Census: Asian/Asian American or Pacific Islander, Black or African American, Hispanic/Latino, and Native American or Alaska Native.

In total, this survey had 229 respondents who identified themselves as Asian/Asian American or Pacific Islander, 129 respondents who identified themselves as Black or African American, 219 respondents who identified themselves as Hispanic/Latino, and 53 respondents who identified themselves as Native American or Alaska Native.

We will show graphs of these respondents combined, but report on the individual numbers of interest.

Much like last year, we found that non-white EV drivers are less likely to say that their next vehicle will be an EV. However, the likelihood of their next vehicle being an EV has increased since last year. About 87% of Asian/Asian American EV drivers said it is likely or very likely their next vehicle will be an EV, up from 84% last year. 85% of Black or African American EV drivers said it is likely or very likely their next vehicle will be an EV, up from 74% last year. And 91% of Hispanic/Latino EV drivers said it is likely or very likely their next vehicle will be an EV, up from 78% last year. These numbers represent a significant improvement since last year, but there is still a gap that can be improved upon.

When looking at the main purchase consideration, it is striking how important cost savings are to these drivers. Black or African American respondents (36.7% said cost savings is their most important purchase consideration), Hispanic/Latino respondents (34.9%), Asian/Asian American or Pacific Islander respondents (32.3%), and Native American or Alaska Native respondents (32.1%) are all most likely to say cost savings is their most important consideration. Clean air was still an important factor, but the gap that exists between clean air and cost savings has already been closed when it comes to non-white EV drivers. Non-white EV drivers were also less likely to say performance is their most important consideration, but numbers largely stayed similar outside of those factors.

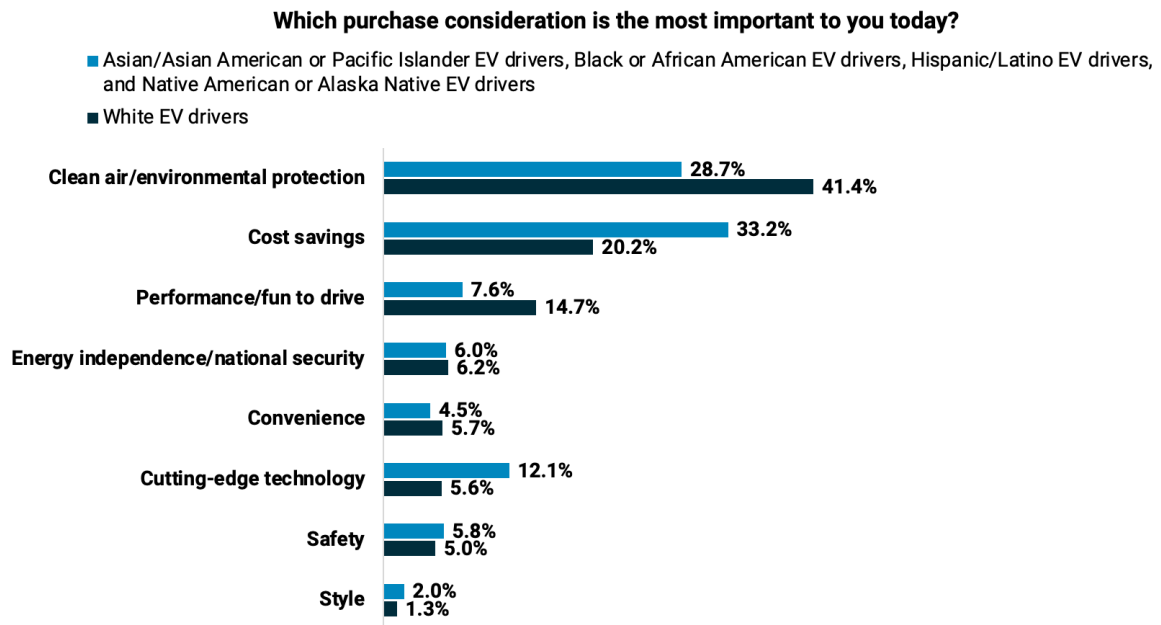


Figure 36: Which purchase consideration is the most important to you today? (Among EV driver respondents who reported as Asian/Asian American or Pacific Islander, Black or African American, Hispanic/Latino or Native American/Alaska Native, in comparison to EV driver respondents who reported as White)

When we look into the concerns respondents experience before and after becoming EV drivers, we see more significant concerns pop up. This is especially true when it comes to public charging. 45% said that public charging availability was a concern, a figure that only dropped to 40.2% after experience with an EV. Notably, only 33% said that public charging reliability was a concern before having an EV, but this figure actually rose to 38% after experience.

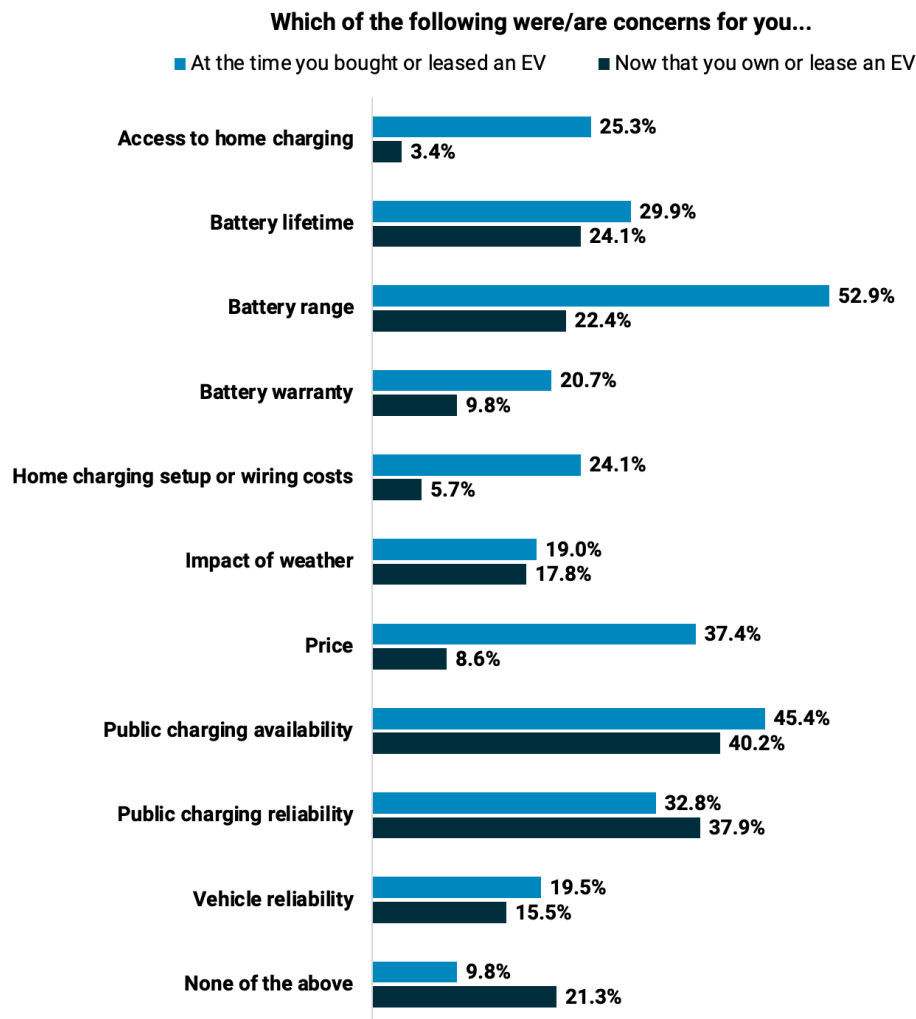


Figure 37: "Which of the following were concerns for you at the time you bought or leased an EV?" compared to "Which of the following are concerns for you now that you own or lease an EV?" (Among respondents who reported as Asian/Asian American or Pacific Islander, Black or African American, Hispanic/Latino or Native American/Alaska Native)

Lastly, we looked into the online sources utilized to research EVs and the resources deemed as most useful in researching EVs. While these resources are ranked the same, we find that each individual online resource is less likely to be selected among these respondents than in the general survey population as a whole. For instance, 63.2% of Asian/Asian American, Black or African American, Hispanic/Latino, and/or Native American/Alaska Native respondents said they used automaker websites in researching EVs, compared to 73% of total respondents.

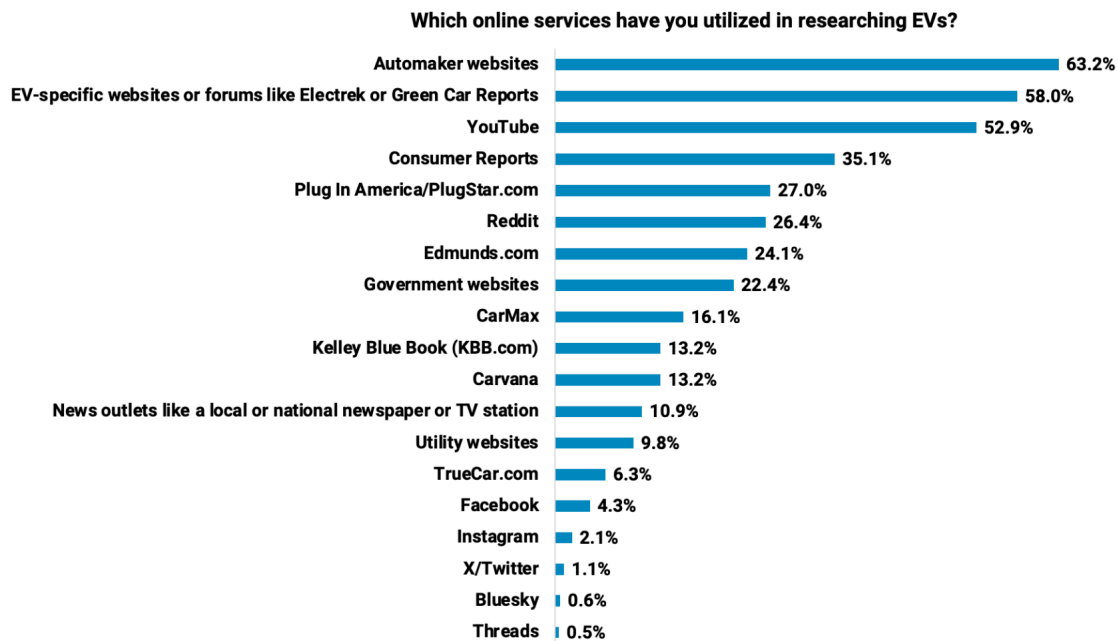


Figure 38: Which online services have you utilized in researching EVs? (Among respondents who reported as Asian/Asian American or Pacific Islander, Black or African American, Hispanic/Latino or Native American/Alaska Native) (n = 622)

YouTube was slightly more likely to be selected as an online resource utilized, driven by 60% of Asian/Asian American respondents who said they used it. Asian/Asian American respondents were also more likely to select Reddit as an online resource utilized, with 41% saying they used this.

Black or African American respondents were also more likely to select YouTube, with 58% of respondents selecting it. Black or African American respondents were notably less likely to select automaker websites or EV-specific websites or forums.

When we look at reaching these groups of EV drivers, it is important to note the increased popularity of less traditional sources such as YouTube or Reddit. This continues as we look into the most useful resources identified as well, where almost half of respondents said they view video reviewers as useful resource. Another notable point is how non-white EV drivers were less likely to select online or news print articles as useful.

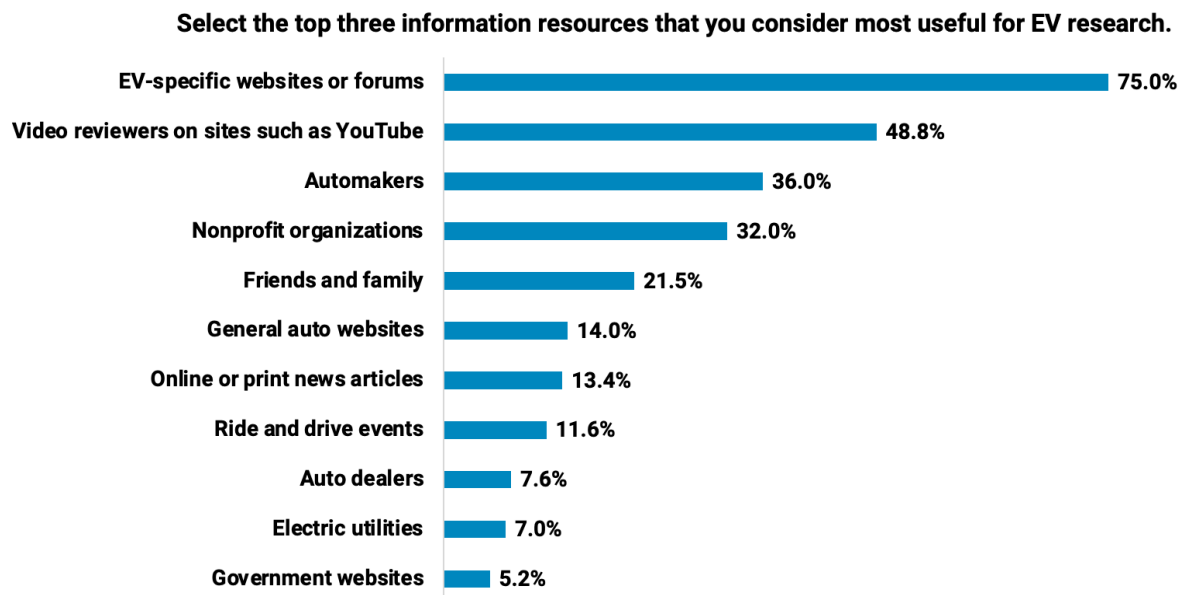


Figure 39: Select the top three information resources that you consider most useful for EV research. (Among respondents who reported as Asian/Asian American or Pacific Islander, Black or African American, Hispanic/Latino or Native American/Alaska Native) (n = 517)

While a strong majority of respondents still selected EV-specific websites or forums as a useful resource, they were less likely to do so than the general population. Furthermore, 57% of Asian/Asian American or Pacific Islander respondents, 50.4% of Black or African American respondents and 50% of Hispanic/Latino respondents (50%) said that YouTube is a useful resource for EV research.

NON-EV DRIVERS

The primary objection of the survey is intended to help better understand the EV driver experience. However, those who do not currently drive EVs also provided responses. These questions are designed to help better understand the consumer EV experience and increase adoption moving forward.

This year, 472 respondents reported that they do not drive an EV. Of those 472, about 48% are considering buying or leasing an all-electric or plug-in hybrid vehicle in the next 12 months. Another 10% are not considering buying or leasing an EV in the next 12 months, while 42% said they are not considering buying or leasing a car at all in the next 12 months.

Are you considering buying or leasing an EV in the next 12 months?

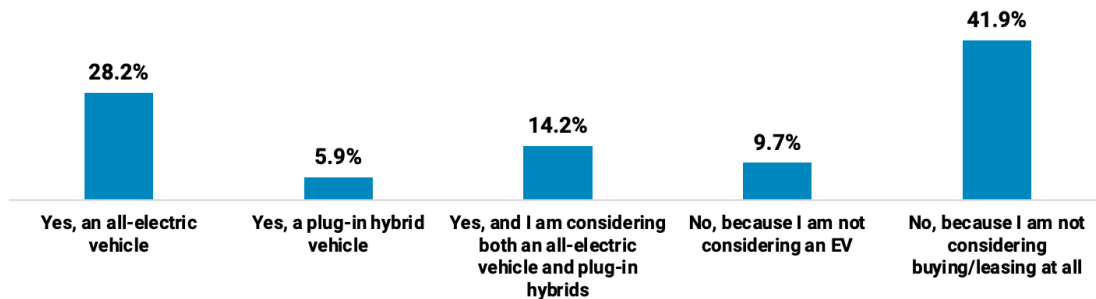


Figure 40: Are you considering buying or leasing an EV in the next 12 months? (Among respondents who do not currently drive an all-electric vehicle or plug-in hybrid vehicle) (n = 472)

These numbers shouldn't be taken as a reflection of every non-EV driver in the country. To take a survey intended for EV drivers, these respondents may at least have an interest in EVs. However, the results provide an idea of what non-EV drivers in the sample are thinking.

Non-EV driver respondents indicated where they go to get car-related information. There is less consensus among non-EV drivers compared to EV drivers, but manufacturer websites (55.8%) and general auto websites like Kelley Blue Book or Edmunds (51.4%) stood out as the most likely sources.

50.4% of non-EV drivers said they go to friends, family, or coworkers to get information related to cars. This word-of-mouth version of research is an interesting finding, especially in comparison to the 18.5% of EV drivers who said that they find them to be a useful resource.

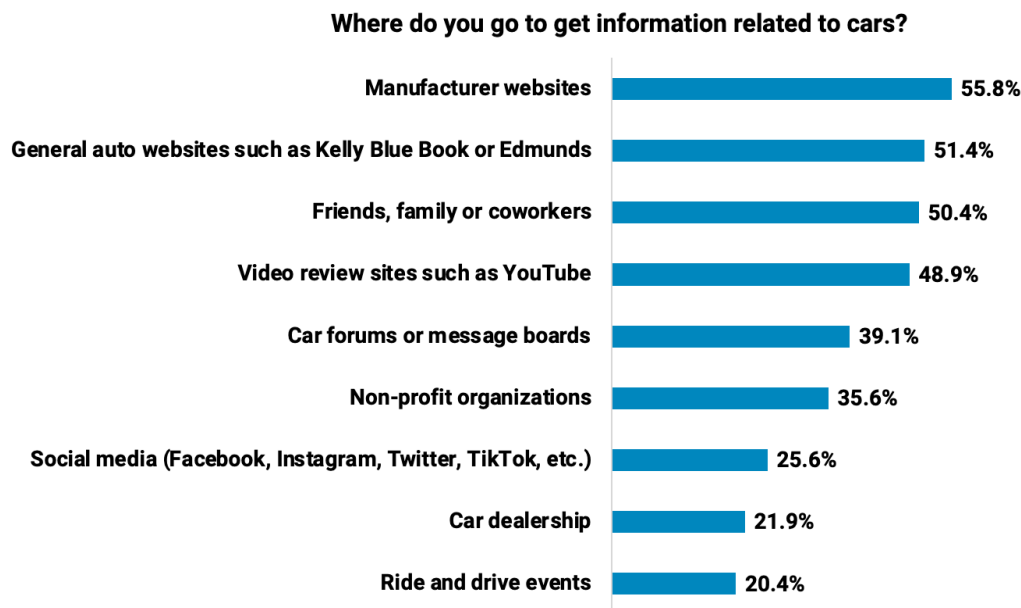


Figure 41: Where do you go to get information related to cars? (Among respondents who do not currently drive an all-electric vehicle or plug-in hybrid vehicle) (n = 472)

On that note, it's also interesting to look at what exposure non-EV drivers have had to EVs in their daily lives. How familiar are they with electric vehicles? Have they ever ridden in or driven an electric vehicle? Do they know anybody who drives an electric vehicle?

Unsprisingly, most of the non-EV driver respondents indicated that they are at least moderately familiar with electric vehicles. About 37% said that they are very familiar with electric vehicles.

Furthermore, about 84% of respondents said that they have ridden in and/or driven an electric vehicle before, with 24% saying they have done both. And lastly, about 88% of respondents said that they know somebody who drives an electric vehicle.

Non-EV drivers also answered questions about concerns related to EVs from. It may not come as a surprise that non-EV drivers were more likely to report concern than EV drivers across the board. However, one notable trend is that this level of concern has dropped since last year's survey.

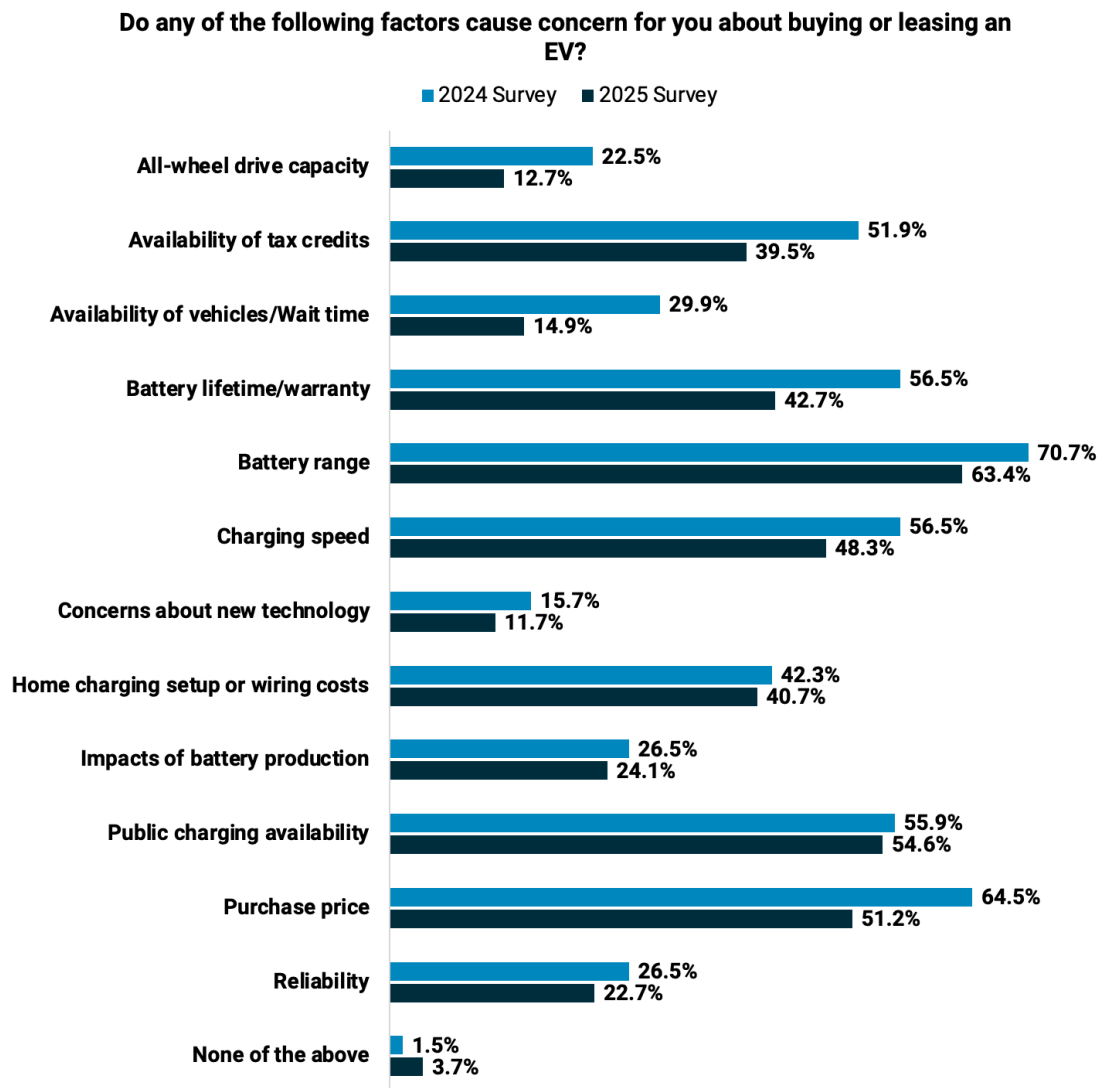


Figure 42: Do any of the following cause concern for you about buying or leasing an EV? (Comparing results of the 2024 EV Driver Survey to the results of the 2025 EV Driver Survey) (Among respondents who do not currently drive an all-electric vehicle or plug-in hybrid vehicle)

Concerns have dropped significantly in price, battery lifetime, and vehicle availability. Small decreases have taken place almost across the board since last year, highlighting the success of ongoing education efforts in the EV world. Results like this should demonstrate that there is value in working to educate consumers, both EV drivers and non-drivers, to help increase EV adoption moving forward.

On this note, it is also interesting to see how these levels of concern shift based on their experience—or lack thereof—with electric vehicles. Although the numbers shown below are from a small sample size, they still show that **familiarity with EVs increases confidence in EVs**.

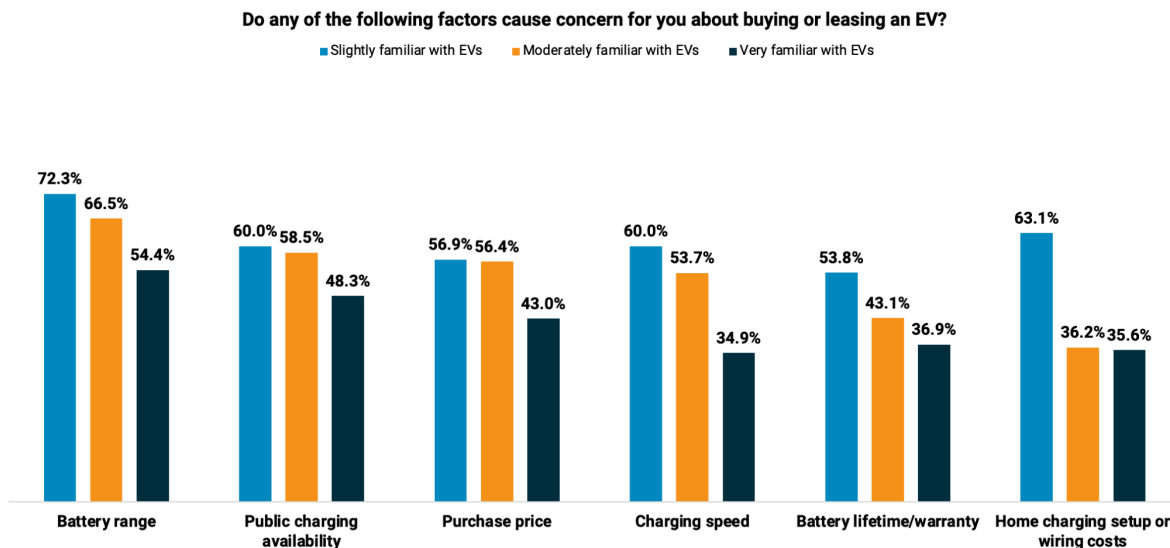


Figure 43: Do any of the following factors cause concern for you about buying or leasing an EV? (Broken out by reported familiarity with EVs) (Among respondents who do not currently drive an all-electric vehicle or plug-in hybrid vehicle)

DEMOGRAPHICS

The following demographics include all respondents who completed the survey in its entirety unless otherwise stated.

Age Range

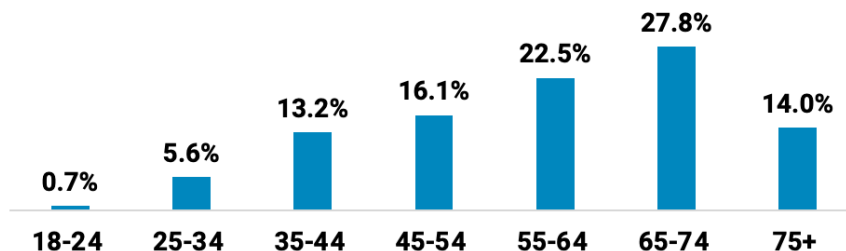


Figure 44: Age range (n = 4,495)

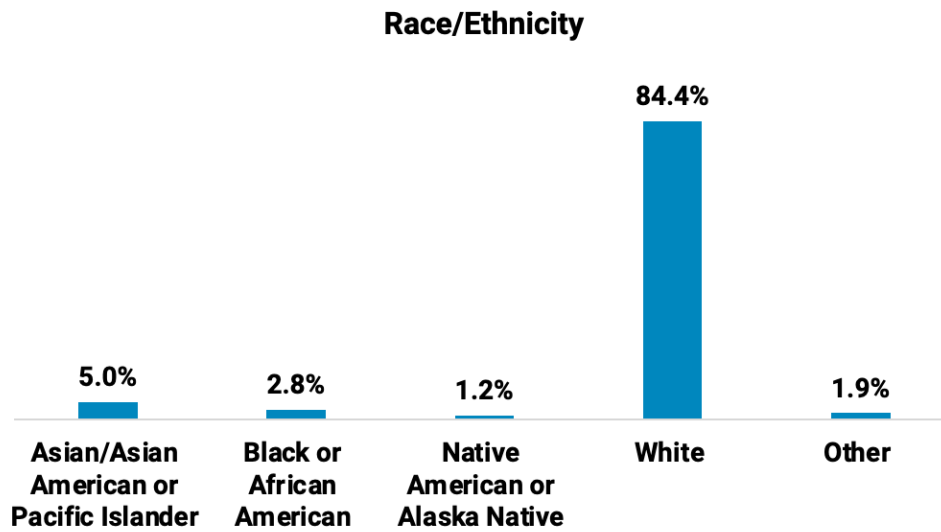


Figure 45: Race/Ethnicity (n = 4,553)

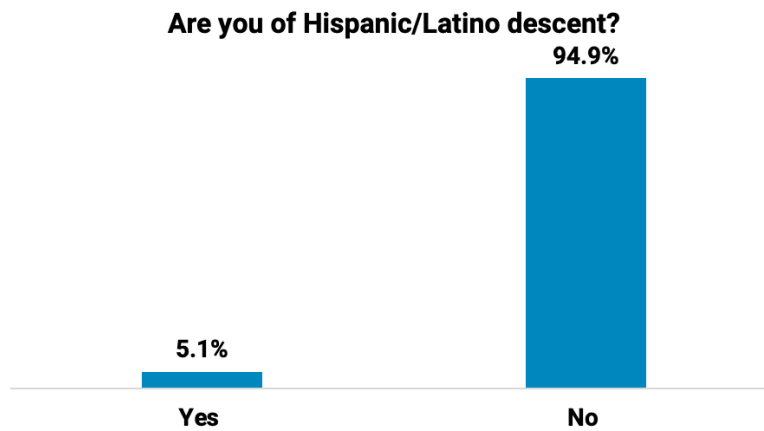


Figure 46: Are you of Hispanic/Latino descent? (n = 4,318)

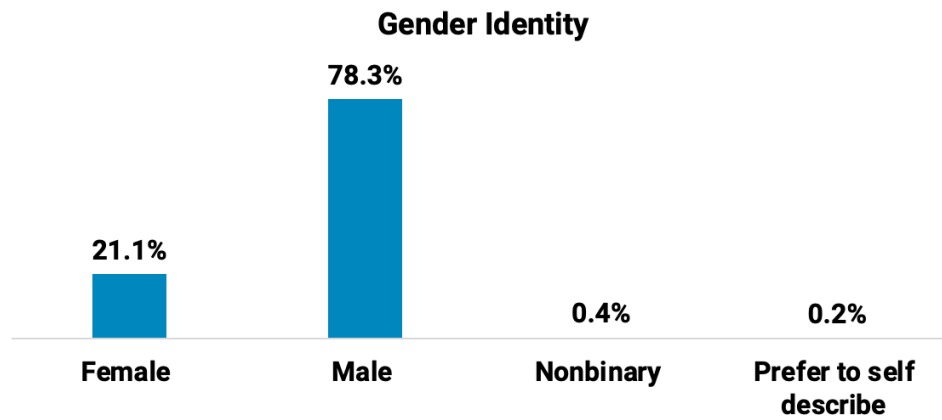


Figure 47: Race/Ethnicity (n = 4,548)

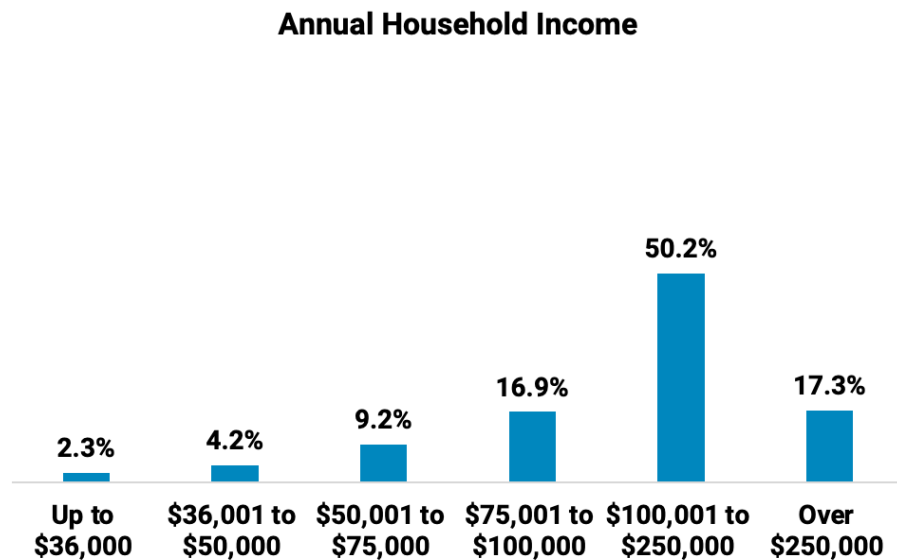


Figure 48: Annual Household Income (n = 4,540)

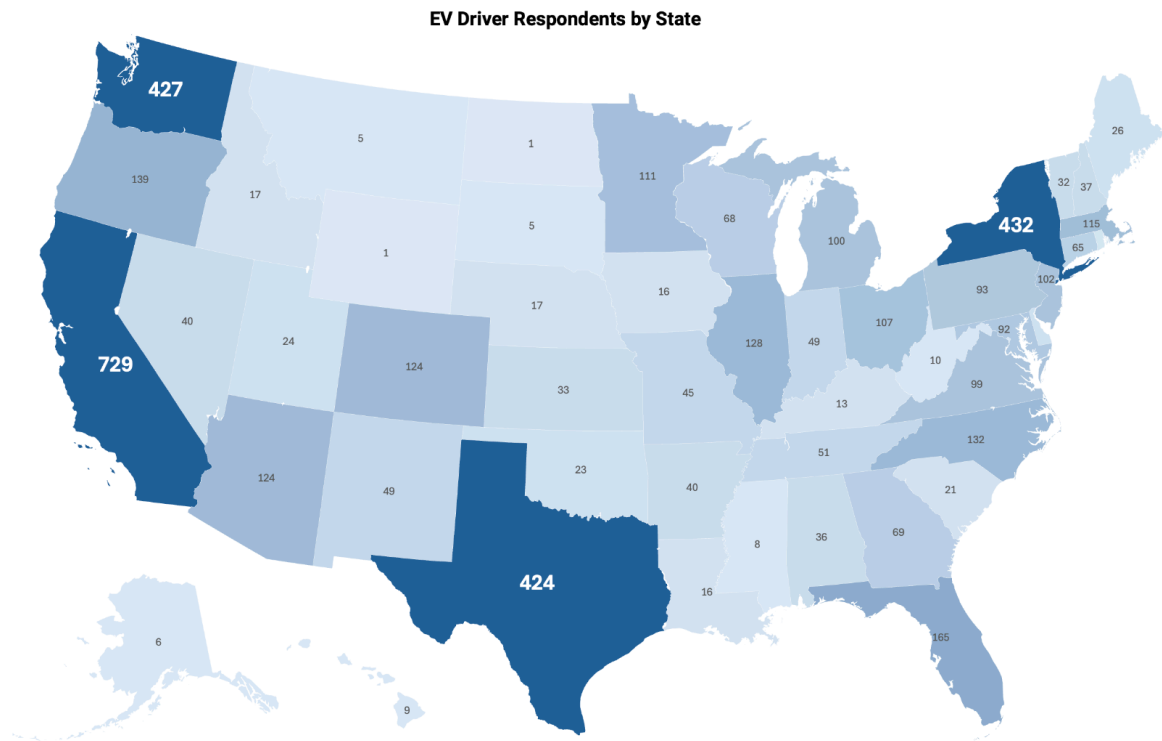


Figure 49: EV driver respondents by state (n = 4,519)

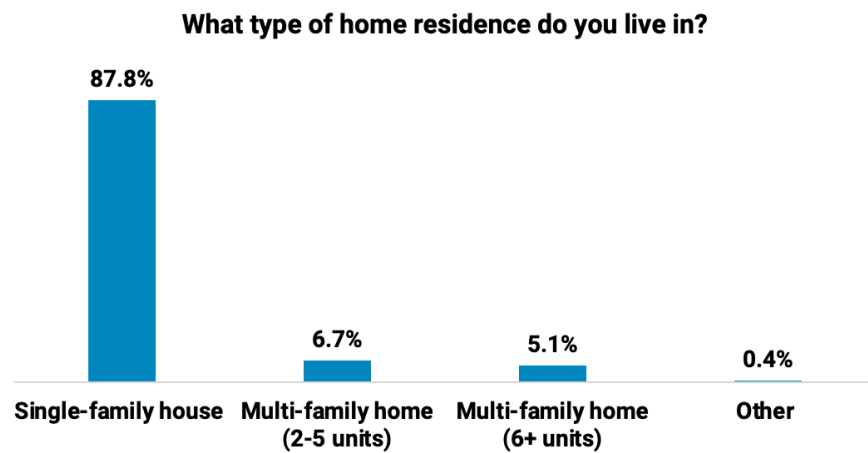


Figure 50: What type of home residence do you live in? (n = 4,551)

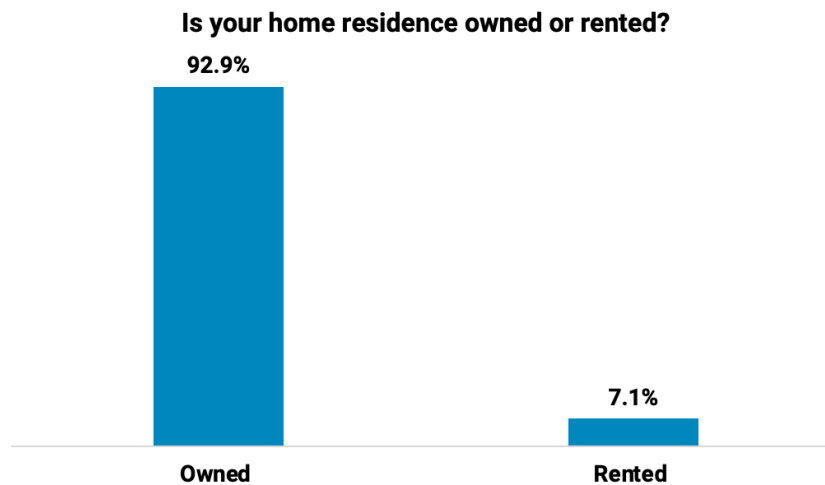


Figure 51: Is your home residence owned or rented? (n = 4,539)

MOVING FORWARD

Messages to emphasize

Based on these findings, Plug In America has identified key messages to accelerate the EV transition.

- **EV drivers enjoy everyday cost savings.** Although the upfront cost of a new EV can be higher than a traditional gas car, everyday savings on fuel costs and maintenance, as well as rebates and incentive programs, can make up the difference in the long term and make EVs significantly cheaper over their lifetime, saving drivers thousands of dollars.
- **Safety is an important EV purchase consideration.** Consumers view safety as a crucial consideration in their decision to drive an EV, and EVs are sought after for their safety features.
- **Government and utility incentives are available.** State, local, and utility incentives are underutilized and not well-known. Policymakers and advocates can promote incentives and assist EV drivers with finding and applying for incentives.
- **EV drivers love their vehicles.** EV driver surveys consistently find that 9 out of 10 EV drivers expect their next car to be electric. EV loyalty increased significantly this year among younger drivers.
- **To know one is to love one.** Many people have concerns about switching to an EV, but once they drive an, EV nearly all of these concerns diminish.

Policies to prioritize

Plug In America also advises policymakers and EV advocates to focus on the following policy priorities.

- **Electrify local fleets.** Increased visibility of EVs in local communities builds trust for potential EV drivers, since friends and family are often trusted sources of information. When residents see EVs in their daily lives and have the chance to ask questions of EV-driving friends and neighbors, and at community events, they are more likely to seriously consider making the switch to an EV.
- **Expand charging infrastructure.** Level 2 public charging is especially needed within walking distance of multifamily housing in order to alleviate concerns about battery range and charging options. Cities can also streamline the permitting process for public charging installation. States and municipalities can adopt right-to-charge policies, which expand access to charging at condominiums, apartments, and homeowners associations.
- **Incentivize EV driving and reduce unnecessary fees.** EV drivers are happy to pay their fair share to support roads and bridges, but excessive charging and annual EV registration fees are often punitive and hit low-income communities hardest. EV drivers already contribute to transportation funding through state taxes and fees. Investment in public charging can bring revenue to local communities and businesses, and the benefits that EVs bring should be rewarded with incentives, rebates, and assistance programs.

Programs to prioritize

Plug In America advises players in the EV industry to continue with these types of efforts to grow adoption:

- **Educate, educate, educate.** Educational programs make a difference. These can be in-person, standalone ride-and-drive events or events associated with a national campaign like National Drive Electric Month or Drive Electric Earth Month. First-hand experience counters harmful myths and misconceptions about EVs.
- **Provide a place for people to ask questions one-on-one.** This happens organically at ride-and-drive events but also can take the form of email or phone support like Plug In America's EV Support Program that answers questions about charging, selecting a vehicle and much more.
- **Share EV driver stories through digital campaigns** to show how today's EVs can fit into a variety of lifestyles and meet different needs. Stories that highlight cost savings, incentives, and drivers' love for their vehicles is impactful.
- **Provide resources in places like EV-specific websites, such as PlugStar.com, and on social media websites like YouTube and Reddit.** These platforms are critical for education and consumer research.
- **Educate retailer and dealer staff who interface with the public about EVs.** Programs like Plug In America's PlugStar offer retailer and dealer training in a variety of formats and ongoing support to improve the consumer experience. Sales staff with knowledge about EVs and charging will be more confident in selling EVs and enhance the consumer experience.

AUTHORS AND ACKNOWLEDGEMENTS

Nick Turner, EV consumer insights analyst at Plug In America, authored this report with editing oversight from Lindsey Perkins, Plug In America's director of marketing and communications. Tatiana Mena Ramos and Christina Roskoph, part of the communications team, are key to sharing the survey and its results.

Nick and Lindsey could not do the work they do without the support of the policy team at Plug In America, led by Ingrid Malmgren and including Alexia Melendez Martineau and Jess Senger. They provide invaluable insight into our research work every day.

Plug In America's programs team was critical in the widespread distribution of the survey, and the administration team is the reason everyone at the organization can focus on our important work. The executive director, Joel Levin, oversees Plug In America and consistently pushes our staff to aim higher and have a broader impact.

Plug In America sincerely thanks Kathryn Urquhart Dunican, Eric Ast, Noah Barnes, and Pete O'Connor, whose dedication to creating, conducting, or analyzing previous surveys laid the foundation for this report and future ones.

Plug In America also extends a special thank you to the following people and groups for helping disseminate the survey.

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- Blue Ridge Electric Vehicle Club
- Cincinnati Electric Car Club
- Electric Auto Association of Northwest Ohio
- Electric Vehicle Association of Oklahoma City
- Electric Vehicle Association of Western New York
- EV Advocates of Ventura County
- Houston Electric Vehicle Association
- Houston EVs Facebook group
- ID.4 Owners Facebook group
- Lone Star Rivian Club - North Texas (Dallas Fort Worth Metroplex)
- Minnesota Electric Vehicle Owners
- Mustang Mach E Girls Club
- New England Electric Auto Association
- North Texas Tesla Owners Group
- Sacramento Electric Vehicle Association
- Seattle Tesla Model Y Owners
- Tesla Club of Greater Houston
- Tesla Owners Club of New Mexico

- Tesla Owners of San Antonio Texas
- The following subreddits:
 - r/BoltEV
 - r/driving
 - r/EquinoxEV
 - r/evcharging
 - r/F150Lightning
 - r/Ioniq5
 - r/KiaEV6
 - r/leaf
 - r/MachE
 - r/Rivian
 - r/volt
- Valley of the Sun Electric Vehicle Association
- Women Drive Electric

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ABOUT PLUG IN AMERICA

Plug In America is the nation's leading nonprofit organization dedicated to the transition to affordable and accessible plug-in vehicles and charging through education, advocacy, and research. Formed in 2008, the organization provides practical, objective information to consumers and dealerships about EVs through various programs, including National Drive Electric Month, Drive Electric Earth Month, PlugStar.com, and other public outreach events. Learn more at PlugInAmerica.org.

Xcel Energy Minnesota 2025 Transportation Electrification Plan (TEP) Stakeholder Meeting Summary

WEDNESDAY, JULY 16: 1:00-2:30 PM CT

Xcel Energy hosted the Minnesota 2025 Transportation Electrification Plan (TEP) Stakeholder Meeting to discuss updates and proposals related to its Transportation Electrification Plan (TEP). The meeting covered several key areas, including evaluations of existing EV pilot programs, the upcoming Minnesota 2025 TEP proposals, and broader regulatory and policy considerations.

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Minnesota Commercial EV Pilots Evaluation

Xcel Energy shared results from its commercial EV pilot programs, which have significantly expanded charging infrastructure across Minnesota. These pilots included installations for fleets, public charging, and multi-unit dwellings (MDUs), with hundreds of new charging ports added. Air quality data used in the evaluation came from the Minnesota Pollution Control Agency, and stakeholders were directed to public reports available through [eDockets](#).

Minnesota 2025 Transportation Electrification Plan (TEP)

The meeting also previewed proposals for the 2025 TEP, which will be officially filed on November 1. These proposals include new rebate programs for commercial EV infrastructure, residential advisory services, and guided electrician program.

Commercial EV Infrastructure, Equipment, and Advisory Program

Xcel Energy proposes offering commercial EV charging rebates as flat amounts based on estimated installation costs, which could be combined with other funding sources like NEVI grants. However, they won't cover demand charges—only installation and construction costs. Xcel plans to recover costs through the [Energy Conservation and Optimization \(ECO\) Programs](#) framework, which uses the [Conservation Improvement Programs \(CIP\)](#) rider, rather than through customer base rates.

For MDUs, the proposed incentives will support both new construction and retrofits, with a cap of 60 percent of project costs, modeled after similar programs in Colorado. Equity-focused rebates will be tied to the location of the charger rather than the routes vehicles travel. Fleet customers, including transit agencies, will be supported through advisory services and infrastructure rebates, though some limitations apply.

A major topic of interest was Xcel Energy's pilot program for Vehicle-to-Grid (V2G) technology using electric school buses. While specific school districts haven't been named, Xcel Energy plans to support infrastructure for selected schools and offer elevated rebates for V2G-capable equipment. The pilot is being developed in partnership with the Minnesota Department of Commerce, and Xcel aims to expand it over time.

Residential Programs (Advisory Services, Guided Electrician Program, Charging Perks)

Proposed offerings for residential programs were also discussed, including advisory services and the Charging Perks managed charging initiative. Charging Perks would include limits on opt-outs to maintain rebate eligibility with expanded compatibility with more chargers and vehicles. Xcel Energy is planning a transition for customers currently enrolled in older programs and is exploring ways to make managed charging available for commercial customers in the future.

Feedback on the 2025 TEP

General sentiment and ratings

The three proposals received moderate support, with average ratings ranging from 2.9 to 3.3 on a scale of 1 to 5.

- Commercial EV Infrastructure, Equipment, and Advisory Program: 3.3
- Residential Advisory Services & Guided Electrician Program: 2.9
- Charging Perks (Active Managed Charging): 3.1

Key questions and concerns (fairness, access, and proportional impact)

A significant portion of the feedback focused on equity and accessibility issues. The main concerns raised include:

- **Limited reach and equity:** Stakeholders voiced concerns that the programs may not effectively reach or be accessible to diverse and disadvantaged communities, including renters, low-income residents, and Tribal communities.
- **Multi-dwelling unit (MDU) and renter access:** Stakeholders want to see more detailed analysis on the success of past pilots in reaching renters and residents of affordable housing. Questions were raised about how to ensure good uptake of incentives in low-income MDUs and how applications will be prioritized.
- **Lack of specific support:** A recurring concern is the lack of specific support for transit and micromobility, which are seen as inherently equitable transportation options.
- **Budget and program size:** Some feedback suggests the overall program budgets may be too small to have a sufficient impact on the market.
- **Administrative and language barriers:** Several comments highlighted the need for plain, non-technical language and clear instructions to help all customers, particularly residential users, understand and participate in the programs.
- **V2G and demand management:** There were specific suggestions for a Vehicle-to-Grid (V2G) electric school bus rebate program and a desire for more solutions to manage demand charges.

Recommendations for Commercial EV Charging Rebates for MDUs

To better serve MDU residents and owners, the following considerations were recommended:

- **Targeted incentives:** Implement point-of-sale or specific programs for income-qualified and affordable housing properties.
- **Diverse charging options:** Consider supporting cost-effective options like curbside Level 1 charging for residents without dedicated parking.
- **Advisory services:** Offer tailored advisory services specifically for MDUs, similar to those planned for fleets.
- **Clear and simple processes:** Provide a clear application process with defined scoring and prioritization and use plain language in all materials.
- **Promotion and outreach:** Increase promotion and outreach, especially to environmental justice areas, and consider using community champions to share success stories.

Recommendations for Effective and Maximized Commercial Rebates

To ensure the effectiveness and maximize the reach of commercial rebates, the following actions were suggested:

- **Enhanced outreach:** Intensify outreach and promotion to the community, local governments, and other stakeholders.

- **Cost and budget transparency:** Provide more details on the expected budget allocation across different types of rebates (e.g., DCFC vs. Level 2).
- **Rate and demand charge solutions:** Pair rebates with commercial rates and demand charge limiters or discounts to help mitigate costs for fleets and fast chargers.
- **Flexibility and options:** Offer customers multiple ways to participate, including options for self-installing equipment.
- **Alignment with costs:** Ensure that rebate levels are evaluated and adjusted as the economy and federal policies evolve and that they align with the varying costs of different commercial customers.
- **Workforce development:** Include a workforce development and outreach program to build a coalition of the willing.
- **Clear evaluation:** Establish clear evaluation criteria to assess program success in the future.
- **Strategic partnerships:** Work closely with charging companies and build a network of ambassadors to promote the programs.

Minnesota 2025 TEP Proceeding

Finally, stakeholders inquired about the regulatory timeline and potential intersections with broader policy efforts, such as a clean transportation standard. Xcel Energy acknowledged the need for further exploration and welcomed continued dialogue.

Overall, the meeting highlighted Xcel Energy's commitment to expanding EV infrastructure, improving accessibility, and engaging stakeholders in shaping Minnesota's clean transportation future.

Attendees

Name	Organization
Mick Aeshliman	Room & Board
Sara Allen	Washington County, MN
MK Anderson	City of Plymouth
Shauna Arriola	Xcel Energy
Grant Askren	Stanley Consultants
Anjali Bains	Fresh Energy
Rick Baird	City of Mankato
Noelle Bakken	City of Roseville
Nurudin Barre	HOURCAR
Emily Belding	IONNA
Katelyn Bocklund	Great Plains Institute
Jamila Boudlali	City of Bloomington
Nestor Carrillo	Buzze, Inc
Peter Chipman	Native Sun Community Power Development
Rick Clark	City of Eden Prairie
James Conely	Wright-Hennepin Electric Cooperative
Beth Croteau-Kallestad	Minnesota Department of Transportation
Lisa Daniels	Native Sun Community Power Development
Carrie Desmond	Metro Transit
Olivia Dorow Hovland	City of Coon Rapids
Christopher Droske	City of Minneapolis

Trisha Duncan	Xcel Energy
Alden Dzwonkowski	ChargePoint
Emily Elia	Weavegrid
Shannon Engstrom	Minnesota Department of Transportation
Samantha Farmer	Great Plains Institute
Jen Fierce	Eden Prairie
Tony Fischer	Met Council
Matthew Gabb	City of Edina
Carl Gillies	City of New Brighton
Nick Haeg	Fresh Energy
Brandon Hagen	Hunt Electric
Chris Heineman	City of Red Wing
Joe Hertenstein	State of Minnesota
Holly Hinman	Xcel Energy
Emma Houghton	Xcel Energy
Sam Houston	Union of Concerned Scientists
John Howard	City of Winona
Jon Hunter	American Lung Association
Alex Jackson	Minnesota Department of Administration
Lindsay Johnson	Xcel Energy
Philip Jones	Alliance for Transportation Electrification
Risi Karim	City of Northfield
Joan Kauppi	Native Sun
Brandon Kirschner	Xcel Energy

Kayla Kirtz	City of Robbinsdale
Matt Kline	City of Bayport
Kevin Knase	City of Bloomington, Port Authority
Kevin Lawless	The Forward Curve LLC
Katelyn Lee	EVgo
John Lundstrom	City of Minneapolis - Public Works
Lexie Lyng	Minnesota Pollution Control Agency
Moaz Mian	Great Plains Institute
Craig Miller	Xcel Energy
Suzanne Murphy	Xcel Energy
Vickie O'Brian-Sinkiewicz	Xcel Energy
Jessica Oh	Minnesota Department of Transportation
Jessica Peterson	Xcel Energy
Annie Pottorff	City of Saint Louis Park
Elisa Rasmussen	Xcel Energy
Mike Reneau	Hunt Electric
Lucas Roach	Xcel Energy
Alison Roth	Xcel Energy
Christopher Royston	City of Minneapolis
Peter Scholtz	Minnesota Attorney General's Office - Residential Utilities
Paul Schroeder	HOURECAR
Adam Schwartz	Kwik Trip, Inc
Andrew Scipioni	City of Edina
Nariman Senna	Xcel Energy

Laura Silver	Minnesota Department of Commerce
Erik Simonson	Xcel Energy
Luke Sponable	City of Bloomington
Lauren Steinhäuser	Xcel Energy
Lauren Sweeney	Minnesota Department of Commerce
Katherine Teiken	Minnesota Housing
MacKenna Theis	Room and Board
Abby Thomas	Xcel Energy
Lisa Thurstin	Minnesota Clean Cities Coalition
Daniel Trajano	Health Professionals for a Healthy Climate
Ethan Trepp	Stanley Consultants
Elizabeth Turnbull	Alliance for Transportation Electrification
Sonita van der Leeuw	MN350
Rochelle Widmer	City of Columbia Heights
Rachel Wiedewitsch	Minnesota Department of Commerce
James Wilder	Xcel Energy
Joshua Williams	Highland Electric Fleets
Rachel Workin	City of Fridley

Sign Up	\$	50.00
Standard Annual	\$	25.00
DISCO Annual	\$	75.00

Standard Avoided Cost (per kW)

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Generation	\$ 105.82	\$ 107.57	\$ 109.35	\$ 111.15	\$ 112.98	\$ 114.85	\$ 116.74	\$ 118.67	\$ 120.63	\$ 122.62	\$ 124.64
T&D	\$11.63	\$11.90	\$12.18	\$12.47	\$12.76	\$13.07	\$13.37	\$13.69	\$14.01	\$14.34	\$14.68
Total	\$ 117.45	\$ 119.47	\$ 121.53	\$ 123.62	\$ 125.75	\$ 127.91	\$ 130.12	\$ 132.36	\$ 134.64	\$ 136.96	\$ 139.32
DISCO T&D (per vehicle)	\$0.00	\$0.00	\$132.63	\$164.90	\$165.90	\$157.44	\$162.27	\$110.34	\$78.17	\$70.21	\$63.28

Program Costs	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Vendor Fees (per vehicle)	\$ 70.00	\$ 65.00	\$ 60.00	\$ 60.00	\$ 55.00	\$ 55.00	\$ 55.00	\$ 55.00	\$ 55.00	\$ 55.00	\$ 55.00
kW/Vehicle	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Value per Standard Vehicle	\$ 89.26	\$ 90.80	\$ 92.36	\$ 93.95	\$ 95.57	\$ 97.21	\$ 98.89	\$ 100.59	\$ 102.33	\$ 104.09	\$ 105.89
Value per DISCO Vehicle	\$ 89.26	\$ 90.80	\$ 224.99	\$ 258.85	\$ 261.47	\$ 254.66	\$ 261.16	\$ 210.93	\$ 180.49	\$ 174.30	\$ 169.17
Total Standard Value		\$ 118,020.11	\$ 301,126.81	\$ 633,055.51	\$ 1,065,770.38	\$ 1,701,819.38	\$ 2,543,004.10	\$ 4,063,829.98	\$ 4,732,887.98	\$ 6,055,883.65	\$ 7,593,547.09
Total DISCO Value		\$ 29,505.03	\$ 183,386.51	\$ 436,044.81	\$ 728,965.37	\$ 1,114,484.66	\$ 1,678,989.29	\$ 2,130,369.72	\$ 2,087,088.38	\$ 2,535,168.60	\$ 3,032,965.85
Total Program Value		\$ 147,525.14	\$ 484,513.32	\$ 1,069,100.32	\$ 1,794,735.74	\$ 2,816,304.04	\$ 4,221,993.39	\$ 6,194,199.70	\$ 6,819,976.36	\$ 8,591,052.24	\$ 10,626,512.95
Program Admin Costs		\$347,863	\$497,526	\$841,225	\$1,192,089	\$1,756,408	\$2,466,503	\$3,688,868	\$4,152,980	\$5,140,003	\$6,254,481
Sign Up Credit		\$ 81,236.94	\$ 134,717.31	\$ 237,571.13	\$ 311,494.26	\$ 443,845.08	\$ 579,695.48	\$ 736,359.49	\$ 744,612.96	\$ 857,078.88	\$ 974,544.65
Annual Credit		\$ 56,865.86	\$ 142,638.09	\$ 294,792.57	\$ 487,893.59	\$ 765,878.25	\$ 1,125,061.35	\$ 1,767,443.79	\$ 2,023,556.29	\$ 2,545,327.15	\$ 3,137,515.12
Total Program Cost		\$485,966	\$774,882	\$1,373,588	\$1,991,477	\$2,966,131	\$4,171,259	\$6,192,671	\$6,921,150	\$8,542,409	\$10,366,541
Annual Cost/Ben		(\$338,441.05)	(\$290,368.27)	(\$304,487.95)	(\$196,741.59)	(\$149,827.00)	\$50,733.92	\$1,528.70	(\$101,173.29)	\$48,642.91	\$259,972.02
Cumulative Cost/Ben		(\$338,441.05)	(\$628,809.31)	(\$933,297.26)	(\$1,130,038.85)	(\$1,279,865.85)	(\$1,229,131.94)	(\$1,227,603.24)	(\$1,328,776.53)	(\$1,280,133.62)	(\$1,020,161.60)

TAM Source												
XE EV Adoption Forecast: Risk Midcase												
O&M Assumptions												
IT costs are included in separate IT budget.												
Marketing and outreach are included in Residential Advisory. (This includes the following budgets: Public Events & Outreach, Brand & Digital Media, EV Advisory Online Tool, Trade Allies, and Marketing)												
Total Working Hours Per Year	1,920	#	40hrs/week; 48 weeks/yr									
Program Manager	\$180,000	\$/yr	X level All-In Costs (Salary, Benefits, etc)									
CP % FTE	75.0%	%	Assumption: 1 FTE supporting multiple DM program									
Billing Operations	\$140,000	\$/yr	X level All-In Costs (Salary, Benefits, etc)									
% FTE	5.0%	%	Assumption: 1 FTE for PSCO and SPS. 50% PSCO, 25% TX; 25% NM; Split evenly between HWR and EVAAH									
Annual inflation rate (Labor)	3.3%	%	From 2021 Corporate Memo									
Marketing (per participant)	\$25	\$/participant										
IT	\$180,000											
Per-Hour Cost	\$93.75											
Application and Data builds (Hrs)	400	Hr										
Application and Data builds (\$)	\$37,500.00	\$										
Site and App Maintenance (%FTE)	5%											
Cost/part/yer	\$9,000.00											
CP Upfront Bill Credit	\$50.00	\$/rebate										
CP Annual Bill Credit	\$25.00	\$/rebate										
DISCO Annual Credit	\$75.00											
DISCO Participation %	20%											
DISCO Vendor Cost	\$90.00											
Attrition Rate	15%	%	Assumed attrition rate within managed charging programs									
			1	2	3	4	5	6	7	8	9	10
			Unit	2026	2027	2028	2029	2030	2031	2032	2033	2035
TAM (Incremental) and Program Adoption												
BEV LDV Adoption	Cumulative	#		106,643	143,133	190,352	250,923	328,092	428,733	551,784	628,915	821,926
BEV LDV Adoption	Incremental	#		27,915	36,490	47,219	60,571	77,169	100,641	123,050	77,132	101,746
YOY Growth in Adoption	Incremental	%		44%	38%	48%	38%	37%	35%	34%	33%	31%
Participation Forecast												
Participation Estimate												
New Vehicle Adoption Rate (CP)	Incremental	%		3%	3%	4%	4%	5%	5%	5%	5%	5%
Existing Vehicle Adoption Rate	Incremental	%		1.0%	1.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
New Participants Participants (CP)	Incremental	#		1,625	2,694	4,751	6,230	8,877	11,594	14,727	14,892	19,491
Total Participants	Cumulative	#		1,625	4,319	9,071	15,300	24,177	35,771	50,498	65,391	102,023
Total Participants with Attrition	Cumulative	#		1,625	4,075	8,423	13,940	21,882	32,145	50,498	57,816	89,643
Standard Participants	Cumulative	#		1,300	3,260	6,738	11,152	17,506	25,716	40,399	46,253	71,715
DISCO Participants	Cumulative	#		325	815	1,685	2,788	4,376	6,429	10,100	11,563	17,929
% of Total Vehicles		%		2%	3%	4%	6%	7%	7%	9%	9%	11%
DISCO % of total Vehicles		%		0.3%	0.6%	0.9%	1.1%	1.3%	1.5%	1.8%	1.8%	2.2%
Customer Credits												
Standard Sign Up Credits	Annual	\$		\$81,237	\$134,717	\$237,571	\$311,494	\$443,845	\$579,695	\$736,359	\$744,613	\$974,545
Standard Ongoing Credits	Annual	\$		\$32,495	\$81,507	\$168,453	\$278,796	\$437,645	\$642,892	\$1,009,968	\$1,156,318	\$1,792,866
DICO Ongoing Credits	Annual	\$		\$24,371	\$61,131	\$126,340	\$209,097	\$328,234	\$482,169	\$757,476	\$867,238	\$1,344,649
Total Customer Credits	Annual	\$		\$113,732	\$216,225	\$406,024	\$590,291	\$881,490	\$1,222,588	\$1,746,327	\$1,900,931	\$2,767,410
Average Credit/Customer				\$70	\$53	\$48	\$42	\$40	\$38	\$35	\$33	\$31
O&M												
CP Program Manager Costs	Incremental	\$		\$139,482.00	\$144,112.80	\$148,897.35	\$153,840.74	\$158,948.25	\$164,225.33	\$169,677.61	\$175,310.91	\$187,144.79
Program admin - Billing ops	Incremental	\$		\$7,232.40	\$7,472.52	\$7,720.60	\$7,976.93	\$8,241.76	\$8,515.39	\$8,798.10	\$9,090.20	\$9,703.80
Program Administration - Vendor Costs	Incremental	\$		\$113,732	\$268,975	\$555,895	\$864,269	\$1,356,699	\$1,992,966	\$3,130,900	\$3,584,585	\$5,557,884
Marketing Spend	Incremental	\$		\$40,618	\$67,359	\$118,786	\$155,747	\$221,923	\$289,848	\$368,180	\$372,306	\$487,272
IT	Incremental	\$		\$46,799	\$9,608	\$9,926	\$10,256	\$10,597	\$10,948	\$11,312	\$11,687	\$12,476
Total O&M expenses	Incremental	\$		\$347,863	\$497,526	\$841,225	\$1,192,089	\$1,756,408	\$2,466,503	\$3,688,868	\$4,152,980	\$6,254,481
Total Budget												
CAPEX + O&M	Incremental	\$		\$429,100	\$632,243	\$1,078,796	\$1,503,584	\$2,200,253	\$3,046,198	\$4,425,227	\$4,897,593	\$7,229,026

	2026	2027	2028	2029	Total
Standard Participants	1,300	3,260	6,738	11,152	11,152
Dist. Optimized Participants	325	815	1,685	2,788	2,788
Total Participants	1,625	4,075	8,423	13,940	13,940
Market Penetration %	1.5%	2.8%	4.4%	5.6%	5.6%
Customer Credits	\$113,700	\$216,200	\$406,000	\$590,300	\$1,326,200
Program O&M	\$347,900	\$497,500	\$841,200	\$1,192,100	\$2,878,700
Total Program Cost	\$461,600	\$713,700	\$1,247,200	\$1,782,400	\$4,204,900

Redline

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL EV ACCELERATE AT HOME PAY AS YOU GO
SERVICE
RATE CODE A79, A80, AND A81**

Section No. 5
~~4th~~^{5th} Revised Sheet No. 7.1

RATE

Customer Charge per Month

Bundled (A80)

~~\$46.63~~^{\$17.00}

~~R~~

Pre-Pay Option/Installation Only (A81) (CLOSED)

~~\$5.96~~^{\$5.28}

~~R~~

BYOC (A79)

~~\$6.73~~^{\$7.77}

~~R~~

Energy Charge per kWh

June – September

On-Peak Period

~~\$0.278~~^{\$0.213}

~~R~~

Mid-Peak Period

~~\$0.113~~^{\$0.134}

~~R~~

Off-Peak Period

~~\$0.038~~^{\$0.074}

~~R~~

Other Months

On-Peak Period

~~\$0.248~~^{\$0.173}

~~R~~

Mid-Peak Period

~~\$0.099~~^{\$0.114}

~~R~~

Off-Peak Period

~~\$0.038~~^{\$0.074}

~~R~~

PRE-PAY/INSTALLATION ONLY OPTION

The Pre-Pay/Installation Only Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

The Company will continue to support existing customers on the Pre-Pay/Installation Only Option, but the Option is closed to new customers.

BYOC OPTION

Customers choosing the BYOC Service are required to have a Company-contracted electrician perform a site visit and hardwire the charging equipment if needed, and to confirm equipment eligibility and that the equipment is correctly set up for the program. The cost of the site visit is included in the monthly customer charge. Customers choosing the BYOC Service are required to utilize a vehicle charger model that is approved by the Company for use for this rate.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the "Interim Rate Surcharge Rider" to service provided beginning January 1, 2025.

FUEL CLAUSE

Bills are subject to the adjustments provided for in the Fuel Clause Rider

RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

MONTHLY MINIMUM CHARGE

Customer Charge.

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

SALES TRUE-UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

(Continued on Sheet No. 7.2)

Date Filed: ~~11-01-24~~¹⁰⁻³¹⁻²⁵

By: ~~Ryan J. Long~~^{Bria E. Shea}

Effective Date: ~~01-01-25~~

President, Northern States Power Company, a Minnesota Corporation

Docket No. E002/~~GR-24-320~~^{M-25-142}

Order Date: ~~12-30-24~~

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL EV ACCELERATE AT HOME PAY AS YOU
GO SERVICE
RATE CODE A79, A80, AND A81**

Section No. 5
~~2nd~~3rd Revised Sheet No. 7.2

DEFINITION OF PEAK PERIODS

The on-peak period is defined as those hours between ~~36~~:00 p.m. and ~~89~~:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The mid-peak period is defined as all hours not defined as on-peak or off-peak periods. The off-peak period is defined as those hours between midnight (12:00 a.m.) and 6:00 a.m. every day. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

C

COMMUNICATION COSTS

The Company will maintain separate accounting of the information, education, advertising and promotion costs associated with electric vehicles.

TERMS AND CONDITIONS OF SERVICE

1. EV Accelerate At Home Pay As You Go Service shall be served through wiring connected to customer's single meter provided for Residential Service. Consumption under this rate schedule will be subtracted from the main meter for purposes of billing customer's non-Electric Vehicle electricity usage.
2. The customer shall supply, at no expense to the Company, premises wiring and a suitable location for connection of charging and associated equipment.
3. Company may require customer to provide access to charging equipment for the recording and wireless communication of energy usage.
4. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditure for facilities necessary to serve this load which would not otherwise be required to serve customer's load.
5. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
6. Customer must execute an EV Accelerate At Home Customer Service Agreement with the Company.
7. Company waives for participants enrolled in an EV rate program tariff the CIAC requirements related to transformer upgrades for residential customers under the General Extension Rules under Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-26 through 6-27.

~~N~~
~~N~~
~~N~~

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL EV ACCELERATE AT HOME
VOLUNTARY SERVICE
RATE CODE A76, A77**

Section No. 5
~~7th~~^{8th} Revised Sheet No. 8

AVAILABILITY

Available to Residential Service customers taking service under the Residential Time of Day (Rate Codes A02 and A04) or Time-of-Use ~~Pilot Service~~ (Rate Codes A72 and A74) to provide electric vehicle charging equipment to serve electric vehicle loads including battery charging and accessory usage. Customers' energy usage will be billed based on their applicable rate codes. Bundled service includes Company installed and provided charging equipment. ~~Pre-Pay Option service is available to customers electing to pay Company for the installed cost of charging equipment prior to beginning service.~~ Pre-Pay Option is closed and not available to new customers.

C
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CONTRACT

Customers must contract for this service through an EV Accelerate At Home Customer Service Agreement with the Company. The contract period will be as long as the customer wishes to use the equipment

CHARACTER OF SERVICE

Single-phase 60-Hertz service at approximately 120 or 120/240 volts will be provided hereunder. Three-phase service or other service upgrade requests will be provided in accordance with Company service regulations.

COST OF SERVICE

Customer Charge per Month

Bundled (A76)

~~\$41.99~~^{12.73}

Pre-Pay/Installation Only Option (A77) (Closed)

~~\$4.34~~^{1.00}

R
R

PRE-PAY/INSTALLATION-ONLY OPTION

The Pre-Pay/Installation Only Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

The Company will continue to support existing customers on the Pre-Pay/Installation Only Option, but the Option is closed to new customers.

COMMUNICATION COSTS

The Company will maintain separate accounting of the information, education, advertising and promotion costs associated with electric vehicles.

TERMS AND CONDITIONS OF SERVICE

1. EV Accelerate At Home Voluntary Service shall be serviced through wiring connected to customer's single meter provided for Residential Service.
2. The customer shall supply, at no expense to the Company, premises wiring and a suitable location for connection of charging and associated equipment.
3. Company may require customer to provide access to charging equipment.
4. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditure for facilities necessary to serve this load which would not otherwise be required to serve customer's load.
5. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
6. Customer must execute an EV Accelerate At Home Customer Service Agreement with the Company.
7. Company waives for participants enrolled in an EV rate program tariff the CIAC requirements related to transformer upgrades for residential customers under the General Extension Rules under Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-26 through 6-27.

N
N
N

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL EV ACCELERATE AT HOME
SUBSCRIPTION SERVICE (Continued)
RATE CODE A82, A83, A84**

Section No. 5
~~7th~~^{8th} Revised Sheet No. 8.2

RATE

Customer Charge per Month (Up to 1,000 kWh of off-peak charging per month)

General System Energy

Bundled (A82)	~~\$48.80~~ <u>\$60.91</u>	<u>R</u>
Pre-Pay Option (A83) (Closed)	~~\$38.02~~ <u>\$48.90</u>	<u>R</u>
BYOC (A84)	~~\$38.84~~ <u>\$51.45</u>	<u>R</u>

Renewable Energy

Bundled (A82)	~~\$49.93~~ <u>\$63.70</u>	<u>R</u>
Pre-Pay Option (A83) (Closed)	~~\$39.15~~ <u>\$51.69</u>	<u>R</u>
BYOC (A84)	~~\$39.94~~ <u>\$54.24</u>	<u>R</u>

Excess On-Peak Period Energy Charge per kWh

June - September	~~\$0.2784~~ <u>\$0.21329</u>	<u>R</u>
Other Months	~~\$0.2486~~ <u>\$0.17314</u>	<u>R</u>

Excess Mid-Peak Period Energy Charge per kWh

June – September	~~\$0.1130~~ <u>\$0.13468</u>	<u>R</u>
Other Months	~~\$0.0990~~ <u>\$0.11485</u>	<u>R</u>

Excess Off-Peak Energy Charge per kWh (above 1,000 kWh per month)

All Months	~~\$0.0382~~ <u>\$0.07479</u>	<u>R</u>

PRE-PAY OPTION (CLOSED)

The Pre-Pay Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

BYOC OPTION

Customers choosing the BYOC Service are required to utilize a vehicle charger model that is approved by the Company for use for this rate. Customers choosing the BYOC Service are required to have a Company-contracted electrician perform a site visit to install and hardwire the charging equipment, if needed, or to confirm equipment eligibility and equipment set up to ensure program compatibility. The cost of the site visit is included in the monthly customer charge. Customers choosing the BYOC Service are required to utilize a vehicle charger model that is approved by the Company for use for this rate.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

FUEL CLAUSE

The monthly customer charge includes preset fuel charges for established energy usage during the off-peak period. Excess on-peak, mid-peak, and off-peak period energy charges are subject to the adjustments provided for in the Fuel Clause Rider.

RESOURCE ADJUSTMENT

The monthly customer charge includes a preset Resource Adjustment charge for established energy usage during the off-peak period. Excess on-peak, mid-peak, and off-peak period energy charges are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

MONTHLY MINIMUM CHARGE

Customer Charge.

(Continued on Sheet No. 5-8.3)

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**RESIDENTIAL EV ACCELERATE AT HOME
SUBSCRIPTION SERVICE (Continued)
RATE CODE A82, A83, A84**

Section No. 5
~~3rd~~4th Revised Sheet No. 8.3

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the "Interim Rate Surcharge Rider" to service provided beginning January 1, 2025.

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

SALES TRUE UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

DEFINITION OF PEAK PERIODS

The on-peak period is defined as those hours between ~~36~~:00 p.m. and ~~89~~:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The mid-peak period is defined as all hours not defined as on-peak or off-peak periods. The off-peak period is defined as those hours between midnight (12:00 a.m.) and 6:00 a.m. every day. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

DEFINITION OF EXPECTED AVERAGE ELECTRIC VEHICLE KWH USAGE

The expected average electric vehicle kWh usage is defined as the Company's estimated average monthly EV energy consumption across all program participants.

COMMUNICATION COSTS

The Company will maintain separate accounting of the information, education, advertising and promotion costs associated with electric vehicles.

TERMS AND CONDITIONS OF SERVICE

1. Residential EV Accelerate At Home Subscription Service shall be served through wiring connected to customer's single meter provided for Residential Service. Consumption under this rate schedule will be subtracted from the main meter for purposes of billing customer's non-Electric Vehicle electricity usage.
2. The customer shall supply, at no expense to the Company, premises wiring and a suitable location for connection of charging and associated equipment.
3. Company may require customer to provide access to charging equipment for the recording and wireless communication of energy usage.
4. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditure for facilities necessary to serve this load which would not otherwise be required to serve customer's load.
5. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
6. Customer must execute an EV Accelerate At Home Customer Service Agreement with the Company.
7. Company waives for participants enrolled in an EV rate program tariff the CIAC requirements related to transformer upgrades for residential customers under the General Extension Rules under Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-26 through 6-27.

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RESIDENTIAL OPTIMIZE YOUR CHARGE

Section No. 5

~~1st~~2nd Revised Sheet No. 16

CANCELED

AVAILABILITY

~~Available to residential customers under the Residential (A01, A03), Residential Time of Day (A02, A04), Residential Time of Use Pilot Program (A72, A74), Residential Electric Vehicle Service (A08), Electric Vehicle Home Service (A80, A81), Voluntary Electric Vehicle Charger Service (A76, A77), Residential Electric Vehicle Subscription (A82 and A84) for customers who own or lease light duty electric vehicles (EVs) and charge them at a home address that receives electricity from Northern States Power Company.~~

~~Participating customers agree to utilize the charging schedule they select during the enrollment process to shift EV charging into hours that are better for the power grid, while still meeting driving requirements, and agree to share essential enrollment and charging data with Xcel Energy.~~

BILL CREDIT

~~The Pilot is available to residential electric customers who own or lease a light duty electric vehicle (EV). Participating customers will receive a yearly \$50 Bill Credit.~~

TERMS AND CONDITIONS OF SERVICE

1. ~~Eligibility~~

~~1.1 Residential customers meeting the following criteria are eligible to participate in the Pilot:~~

- ~~• Own or lease an EV;~~
- ~~• Have an active Xcel Energy account that receives electric service in Minnesota under an eligible rate;~~
- ~~• Be a residential customer and charge an electric vehicle at the customer's home address in Minnesota;~~
- ~~• Use eligible charging equipment or drive an eligible vehicle;~~
- ~~• Complete a Pilot application and be selected by Xcel Energy to participate in the Pilot (Participation in the Pilot will be determined by Xcel Energy, in its sole discretion);~~

~~For a participating customer, failure to meet any of the above eligibility requirements at any time will void any obligation Xcel Energy has to provide the Bill Credit, and Xcel Energy may immediately terminate the customer's participation in the Pilot.~~

(Continued on Sheet 5-16.1)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL OPTIMIZE YOUR CHARGE (Continued)

Section No. 5

~~1st~~^{2nd} Revised Sheet No. 16.1

CANCELED

~~1. Customer Communications~~

~~2.1 Customer consents to receive communications from Xcel Energy relating to the Pilot in electronic or text-based form and sent to Customer's email address or phone provided during enrollment.~~

~~3. Compliance with Terms and Conditions~~

~~3.1 Xcel Energy reserves the right to refuse payment if the customer violates Pilot terms and conditions.~~

~~4. Pilot Requirements~~

~~4.1 Provide accurate and complete information as part of participation in the Pilot; Xcel Energy is not responsible for any harm caused by the customer or customer misstatements, misrepresentations, or failure to provide accurate and complete information.~~

~~4.2 If required by the Pilot Vendor (selected by Xcel Energy), the customer will: download any Vendor software application required for Pilot participation; install any Vendor hardware required for Pilot participation; comply with any Vendor terms and conditions; and meet any other requirements of the Vendor related to Pilot participation.~~

~~4.3 For customers relying on the use of a networked charging station for participation, the charging station must be connected to the Vendor's network via the customer's home Wi-Fi network and be able to maintain on-going and stable connection throughout the Pilot.~~

~~4.3.1 Customers driving eligible vehicles may supply their charging data through one of the Company's Pilot Vendors listed at www.xcelenergy.com. If customer is relying on the built-in telematics of their EV for participation in the Pilot, their EV must be connected to the Pilot Vendor; and~~

~~4.4 Customers agree to these Pilot Terms and to participate in the Pilot as set forth in these Pilot Requirements.~~

~~5. Sharing of Xcel Energy Customer Information~~

~~5.1 Xcel Energy will provide Vendors with data ("Customer Information"), including, but not limited to, one or more of the following: name, address, vehicle identification number (VIN), charging station serial number, and e-mail address, for the purposes of allowing the Vendor to carry out services in relation to this Pilot. Upon enrolling, Vendors will share information about the customer's charging ("Charging Data") with Xcel Energy that includes but is not limited to when the customer plug-ins and charges the EV, how much energy is used in charging the EV, the state of charge of the vehicle before and after plugging in, and the use of a charging schedule.~~

~~5.2 Vendors will be required to follow all applicable rules and requirements for data sharing as defined by Minnesota Public Utilities Commission rulings.~~

~~5.3 Xcel Energy may share this data directly with service providers performing services on behalf of Xcel Energy, and will use this data to validate the customer's eligibility to participate in the Pilot, to study and evaluate the benefits that the Pilot provides to the power grid, in connection with proceedings before the Minnesota Public Utilities Commission, to design future EV and demand management programs, to support power grid planning and management, to share aggregated and anonymized findings, and to inform Program operations.~~

(Continued on Sheet 5-16.2)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL OPTIMIZE YOUR CHARGE (Continued)

Section No. 5

~~1st~~^{2nd} Revised Sheet No. 16.2

CANCELED

~~5.4 Customers will be able to opt-out of sharing non-essential data.~~

~~5 If the Customer withdraws from the Pilot or if the Pilot is discontinued by Xcel Energy, Xcel Energy and Manufacturers will cease the sharing of Xcel Energy Customer Information and Charging Data without reasonable delay.~~

~~6. Schedule Determination and Use~~

~~6.1 During enrollment, a customer will select a charging schedule from a set of options presented to the customer by Xcel Energy that will be used for the EV home charging under the Pilot. The charging schedule is based on the customer's charging needs and the customer's answers to questions during the enrollment process. Customers who believe the charging schedule options presented will not meet the customer's charging needs can email Xcel Energy at electricvehicles@xcelenergy.com to discuss potential adjustment to the charging schedule.~~

~~6.2 Xcel Energy recommends automatically limiting EV charging to the hours allowed by entering the charging schedule into the EV charging station or into the EV smart application; however, a customer may implement the charging schedule in any manner that is suitable to the customer.~~

~~6.3 The customer may override the recommended charging schedule, without penalty, whenever it is necessary to meet the customer's driving requirements. The customer must, however, maintain the minimum threshold set forth in paragraph 7.1.~~

~~7. Participation Details~~

~~7.1 In order to remain enrolled in the Pilot, 25% of the participating EV charging sessions must be conducted during the customer-selected charging schedule. Xcel Energy will review participation on a quarterly basis and assess compliance for each full year of participation measured from the Enrollment Date. Xcel Energy will remove a customer from the Pilot if it has determined, at its sole discretion, that the customer did not meet this participation level.~~

(Continued on Sheet 5-16.3)

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~~8. Pilot Term and Withdrawal~~

~~8.1 Customer may withdraw from the Pilot at any time without penalty.~~

~~8.2 Xcel Energy may discontinue the Pilot at any time for any reason.~~

~~Xcel Energy will make best efforts to provide Pilot participants a discontinuation notice at least thirty (30) days prior to such termination date.~~

~~8.3 Customer will notify Xcel Energy by emailing electricvehicles@xcelenergy.com in the event the customer wishes to unenroll from the Pilot, if the ownership of the EV enrolled in the Pilot changes, or if the customer moves out of Xcel Energy's Minnesota service territory.~~

~~8.4 If Xcel Energy becomes aware that the enrolled EV has changed ownership or that the customer has moved outside of Xcel Energy's Minnesota service territory, without first being informed by the customer, it will be deemed by Xcel Energy as a Customer-initiated termination of this Agreement.~~

~~8.5 If the customer terminates this Agreement prior to October 1 of any year that the Pilot continues, or if Xcel Energy terminates this Agreement because of the customer's failure to honor the terms of this Agreement at any time, or upon discovery of any tampering with vehicle equipment, then Xcel Energy shall have the right to terminate this Agreement immediately and discontinue payment of the Bill Credit.~~

~~9. Limitations~~

~~9.1 Pilot terms are subject to change any time. Please visit www.xcelenergy.com to determine whether any Pilot changes have occurred. Any material changes will be communicated the customer by e-mail using the e-mail address provided.~~

~~9.2 If customer enrolls more than one eligible vehicle or charging station, they will receive a Bill Credit for each vehicle and charging station enrolled. A single EV and charging station can only be enrolled to participate once—the same vehicle and charging station cannot be registered by multiple accounts.~~

~~9.3 Xcel Energy reserves the right to modify all Pilot incentives based on future performance, Pilot modifications, technology upgrades, and changes to Xcel Energy's electrical distribution system. Any such changes will be communicated to Customer by e-mail using the e-mail address provided by the Customer at least thirty (30) days prior to deployment of such changes.~~

~~9.4 Customer agrees not to tamper with vehicle, vehicle data, charging station, charging station data, or any hardware related to the Pilot and to reasonably attempt to restrict access by others attempting to tamper with the vehicle, vehicle data, charging station, charging station data, or Pilot-related hardware (as applicable). If Xcel Energy or its Vendors identify any evidence of tampering, the customer will be removed from the Pilot. The customer agrees to protect and hold harmless Xcel Energy from any and all claims, damages and liability caused by the customer's fault or negligence, or customer's failure to comply. If Xcel Energy is made a party (without fault on its part) to any lawsuit or arbitration started by or against the customer, they agree to protect and hold Xcel Energy harmless, and to pay all costs, expenses and reasonable attorneys' fees incurred or paid by Xcel Energy in connection with that lawsuit or arbitration. Customer agrees to pay all costs, expenses and reasonable attorneys' fees that Xcel Energy may incur or pay in enforcing this agreement.~~

(Continued on Sheet 5-16.4)

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CANCELED

~~9.5— Participation in the Pilot is entirely voluntary. Xcel Energy and vendor do not assume any responsibility for customer's EV, the inability to use or unavailability of the EV, or any damages to or incurred by the customer EV or charging station which may result from participation in the Pilot. In no event, whether based on contract, indemnity, warranty, tort (including negligence), strict liability or otherwise, shall Xcel Energy or vendor be liable to the customer for special, indirect, exemplary, punitive, incidental, or consequential damages whatsoever including, without limitation, loss of profits or revenue, and in no event shall Xcel Energy's or Vendor's liability on any claim of any kind, or from any loss or damage arising out of or in connection with or resulting from the pilot, these pilot terms, or from performance or breach thereof, exceed the total amount of the participation reward.~~

10.— Requirements

~~10.1— Customer agrees to maintain services needed to participate in the Pilot at no expense to Xcel Energy. These services may include but are not limited to subscription services with the Manufacturer of the enrolled vehicle to allow communication between the Manufacturer and the EV. Depending on the EV and the Manufacturer, this may require the Customer to activate and/or pay for a subscription. For further information, please communicate with the EV Manufacturer. This is applicable for customers that provide their Charging Data through one of the Vehicle Vendors listed at xcelenergy.com.~~

~~10.2— Customer agrees to maintain a functioning high-speed internet connection that allows the charging station to gather Charging Data at no expense to Xcel Energy. This is applicable for customers that provide their Charging Data to Xcel Energy through one of the Charging Station Vendors listed at xcelenergy.com.~~

~~10.3— Customer is responsible for maintaining in working order home EV charging or electrical equipment and the participating EV.~~

~~10.4— Customer is responsible for downloading any Vendor software application required for Pilot participation.~~

~~10.5— Customer responsible for installing any hardware from the Vendor that is required for Pilot participation.~~

11.— Governing Law; Disputes.

~~11.1— The Customer and Xcel Energy agree that all disputes arising out of these Pilot Terms or the Pilot shall be subject to this section. The internal laws of the State of Minnesota, without regard to conflicts of law's provisions, govern the Pilot and these Pilot Terms and any action brought with respect to the Pilot Terms or the Pilot shall be brought in the courts located in Minneapolis, Minnesota.~~

COMMERCIAL OPTIMIZE YOUR CHARGE

Section No. 5
~~4st~~2nd Revised Sheet No. 50.6

CANCELED

AVAILABILITY

~~Available to Commercial Customers under the Small General (A10), Small General Time of Day (A12, A16), General Service (A14), General Time of Day (A15, A17), and Electric Vehicle Fleet Pilot Service (A87, A88, A89), for customers who own or lease light duty electric vehicles (EVs) and charge them at a commercial address that receives electricity from Northern States Power Company.~~

~~Participating customers agree to utilize the charging schedule they select during the enrollment process to shift EV charging into hours that are better for the power grid, while still meeting driving requirements, and agree to share essential enrollment and charging data with Xcel Energy.~~

BILL CREDIT

~~The Pilot is available to commercial electric customers who own or lease a light duty electric vehicle (EV). Participating customers will receive a yearly \$50 Bill Credit.~~

TERMS AND CONDITIONS

1. Eligibility

~~1.2 Commercial customers meeting the following criteria Customers meeting the following criteria are eligible to participate in Pilot:~~

- ~~• Be a commercial customer and charge an electric vehicle at the customer's business address in Minnesota;~~
- ~~• Use eligible charging equipment or drive an eligible vehicle;~~
- ~~• Complete a Pilot application and be selected by Xcel Energy to participate in the Pilot (Participation in the Pilot will be determined by Xcel Energy, in its sole discretion);~~

~~For a participating customer, failure to meet any of the above eligibility requirements at any time will void any obligation Xcel Energy has to provide the Bill Credit, and Xcel Energy may immediately terminate the customer's participation in the Pilot.~~

2. Customer Communications

~~2.1 Customer consent to receive communications from Xcel Energy relating to the Pilot in electronic or text-based form and sent to your email address or phone provided during enrollment.~~

3. Compliance with Terms and Conditions

~~3.1 Xcel Energy reserves the right to refuse payment if the customer violates Pilot Terms and Conditions.~~

(Continued on Sheet No. 5-50.7)

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COMMERCIAL OPTIMIZE YOUR CHARGE (Continued)

Section No. 5
~~Original~~1st Revised Sheet No. 50.7

CANCELED

4.—Pilot Requirements

- 4.1—Provide accurate and complete information as part of participation in the Pilot; Xcel Energy is not responsible for any harm caused by the customer or customer misstatements, misrepresentations, or failure to provide accurate and complete information.
- 4.2—If required by the Pilot Vendor (selected by Xcel Energy), the customer will: download any Vendor software application required for Pilot participation; install any Vendor hardware required for Pilot participation; comply with any Vendor terms and conditions; and meet any other requirements of the Vendor related to Pilot participation.
- 4.3—For customers relying on the use of a networked charging station for participation, the charging station must be connected to the Vendor's network via the customer's Wi-Fi network and be able to maintain on-going and stable connection throughout the Pilot.
- 4.3.1 Customers driving eligible vehicles may supply their charging data through one of the Company's Pilot Vendors identified at www.xcelenergy.com. If customer is relying on the built-in telematics of their EV for participation in the Pilot, their EV must be connected to the Pilot Vendor; and
- 4.4—Customers agree to these Pilot Terms and to participate in the Pilot as set forth in these Pilot Terms.

5.—Sharing of Xcel Energy Customer Information

- 5.1—Xcel Energy will provide Vendors with data ("Customer Information"), including, but not limited to, one or more of the following: name, address, vehicle identification number (VIN), charging station serial number, and e-mail address, for the purposes of allowing the Vendor to carry out services in relation to this Pilot. Upon enrolling, Vendors will share information about the customer's business charging ("Charging Data") with Xcel Energy that includes but is not limited to when the customer plug-ins and charges the EV, how much energy is used in charging the EV, the state of charge of the vehicle before and after plugging in, and the use of a charging schedule.
- 5.2—Vendors will be required to follow all applicable rules and requirements for data sharing as defined by Minnesota Public Utilities Commission rulings.
- 5.3—Xcel Energy may share this data directly with service providers performing services on behalf of Xcel Energy, and will use this data to validate the customer's eligibility to participate in the Pilot, to study and evaluate the benefits that the Pilot provides to the power grid, in connection with proceedings before the Minnesota Public Utilities Commission, to design future EV and demand management programs, to support power grid planning and management, to share aggregated and anonymized findings, and to inform Program operations.
- 5.4—Customers will be able to opt-out of sharing non-essential data.
- 5.5—If the Customer withdraws from the Pilot or if the Pilot is discontinued by Xcel Energy, Xcel Energy and Manufacturers will cease the sharing of Xcel Energy Customer Information and Charging Data without reasonable delay.

(Continued on Sheet No. 5-50.8)

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COMMERCIAL OPTIMIZE YOUR CHARGE (Continued)

Section No. 5
~~Original~~1st Revised Sheet No. 50.8

CANCELED

6.—Schedule Determination and Use

- ~~6.1 During enrollment, a customer will select a charging schedule from a set of options presented to the customer by Xcel Energy that will be used for the EV business charging under the Pilot. The charging schedule is based on the customer's charging needs and the customer's answers to questions during the enrollment process. Customers who believe the charging schedule options presented will not meet the customer's charging needs can email Xcel Energy at electricvehicles@xcelenergy.com to discuss potential adjustment to the charging schedule.~~
- ~~6.2 Xcel Energy recommends automatically limiting EV charging to the hours allowed by entering the charging schedule into the EV charging station or into the EV smart application; however, a customer may implement the charging schedule in any manner that is suitable to the customer.~~
- ~~6.3 The customer may override the recommended charging schedule, without penalty, whenever it is necessary to meet the customer's driving requirements. The customer must, however, maintain the minimum threshold set forth in paragraph 7.1.~~

7.—Participation Details

- ~~7.1 In order to remain enrolled in the Pilot, 25% of the participating EV charging sessions must be conducted during the customer selected charging schedule. Xcel Energy will review participation on a quarterly basis and assess compliance for each full year of participation measured from the Enrollment Date. Xcel Energy will remove a customer from the Pilot if it has determined, at its sole discretion, that the customer did not meet this participation level.~~

8.—Pilot Term and Withdrawal

- ~~8.1 Customer may withdraw from the Pilot at any time without penalty.~~
- ~~8.2 Xcel Energy may discontinue the Pilot at any time for any reason. Xcel Energy will make best efforts to provide Pilot participants a discontinuation notice at least thirty (30) days prior to such termination date.~~
- ~~8.3 Customer will notify Xcel Energy by emailing electricvehicles@xcelenergy.com in the event the customer wishes to unenroll from the Pilot, if the ownership of the EV enrolled in the Pilot changes, or if the customer moves out of Xcel Energy's Minnesota service territory.~~
- ~~8.4 If Xcel Energy becomes aware that the enrolled EV has changed ownership or that the customer has moved outside of Xcel Energy's Minnesota service territory, without first being informed by the customer, it will be deemed by Xcel Energy as a Customer initiated termination of this Agreement.~~
- ~~8.5 If the customer terminates this Agreement prior to October 1 of any year that the Pilot continues, or if Xcel Energy terminates this Agreement because of the customer's failure to honor the terms of this Agreement at any time, or upon discovery of any tampering with vehicle equipment, then Xcel Energy shall have the right to terminate this Agreement immediately and discontinue payment of the Bill Credit.~~

(Continued on Sheet No. 5-50.9)

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COMMERCIAL OPTIMIZE YOUR CHARGE (Continued)

Section No. 5
~~Original~~1st Revised Sheet No. 50.9

CANCELED

9. Limitations

- ~~9.1 Pilot terms are subject to change any time. Please visit www.xcelenergy.com to determine whether any Pilot changes have occurred. Any material changes will be communicated the customer by e-mail using the e-mail address provided.~~
- ~~9.2 If customer enrolls more than one eligible vehicle or charging station, they will receive a Bill Credit for each vehicle and charging station enrolled. A single EV and charging station can only be enrolled to participate once—the same vehicle and charging station cannot be registered by multiple accounts.~~
- ~~9.3 Xcel Energy reserves the right to modify all Pilot incentives based on future performance, Pilot modifications, technology upgrades, and changes to Xcel Energy's electrical distribution system. Any such changes will be communicated to Customer by e-mail using the e-mail address provided by the Customer at least thirty (30) days prior to deployment of such changes.~~
- ~~9.4 Customer agrees not to tamper with vehicle, vehicle data, charging station, charging station data, or any hardware related to the Pilot and to reasonably attempt to restrict access by others attempting to tamper with the vehicle, vehicle data, charging station, charging station data, or Pilot related hardware (as applicable). If Xcel Energy or its Vendors identify any evidence of tampering, the customer will be removed from the Pilot. The customer agrees to protect and hold harmless Xcel Energy from any and all claims, damages and liability caused by customer fault or negligence, or customer's failure to comply. If Xcel Energy is made a party (without fault on its part) to any lawsuit or arbitration started by or against the customer, they agree to protect and hold Xcel Energy harmless, and to pay all costs, expenses and reasonable attorneys' fees incurred or paid by Xcel Energy in connection with that lawsuit or arbitration. Customer also agree to pay all costs, expenses and reasonable attorneys' fees that Xcel Energy may incur or pay in enforcing this agreement.~~
- ~~9.5 Participation in the Pilot is entirely voluntary. Xcel Energy and vendor do not assume any responsibility for customer's EV, the inability to use or unavailability of the EV, or any damages to or incurred by the customer EV or charging station which may result from participation in the Pilot. In no event, whether based on contract, indemnity, warranty, tort (including negligence), strict liability or otherwise, shall Xcel Energy or vendor be liable to the customer for special, indirect, exemplary, punitive, incidental, or consequential damages whatsoever including, without limitation, loss of profits or revenue, and in no event shall Xcel Energy's or Vendor's liability on any claim of any kind, or from any loss or damage arising out of or in connection with or resulting from the pilot, these pilot terms, or from performance or breach thereof, exceed the total amount of the participation reward.~~

10. Requirements

- ~~10.1 Customer agrees to maintain services needed to participate in the Pilot at no expense to Xcel Energy. These services may include but are not limited to subscription services with the Manufacturer of the enrolled vehicle to allow communication between the Manufacturer and the EV. Depending on the EV and the Manufacturer, this may require the Customer to activate and/or pay for a subscription. For further information, please communicate with the EV Manufacturer. This is applicable for customers that provide their Charging Data through one of the Vehicle Vendors listed at xcelenergy.com.~~

(Continued on Sheet No. 5-50.10)

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COMMERCIAL OPTIMIZE YOUR CHARGE (Continued)

Section No. 5
~~Original~~1st Revised Sheet No. 50.10

CANCELED

~~10.2 Customer agrees to maintain a functioning high-speed internet connection that allows the charging station to gather Charging Data at no expense to Xcel Energy. This is applicable for customers that provide their Charging Data to Xcel Energy through one of the Charging Station Vendors listed at xcelenergy.com.~~

~~10.3 Customer is responsible for maintaining in working order EV charging or electrical equipment and the participating EV.~~

~~10.4 Customer is responsible for downloading any Vendor software application required for Pilot participation.~~

~~10.5 Customer responsible for installing any hardware from the Vendor that is required for Pilot participation.~~

~~**11. Governing Law; Disputes.**~~

~~11.1 The Customer and Xcel Energy agree that all disputes arising out of these Pilot Terms or the Pilot shall be subject to this section. The internal laws of the State of Minnesota, without regard to conflicts of law's provisions, govern the Pilot and these Pilot Terms and any action brought with respect to the Pilot Terms or the Pilot shall be brought in the courts located in Minneapolis, Minnesota.~~

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Northern States Power Company, a Minnesota corporation
Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ELECTRIC VEHICLE FLEET PILOT SERVICE

Section No. 5

(CLOSED)

~~13th~~ 14th Revised Sheet No. 51

RATE CODE A87, A88, A89

AVAILABILITY

~~Available while this Pilot Service is in effect to non-residential customers for service only to electric vehicle loads including battery charging and accessory usage. The customer must complete Company approved documentation verifying ownership or lease of a minimum of five electric vehicles as defined in Section 169.011, subdivision 26a of Minnesota law. Please note that the minimum electric vehicle requirement does not apply to customers participating in the electric school bus demonstration. This pilot is now closed and not available to new customers.~~

CONTRACT

Customers must contract for this service through an Electric Vehicle Fleet Pilot Service Agreement with the Company. The contract period will be for 120 months.

RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable*Connect Program Rider (Renewable*Connect Flex), or other available rate schedule for voluntary renewable energy supply that is applicable.

DETERMINATION OF CUSTOMER BILLS

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and /or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

RATE

Customer Charge per Month	\$29.98	
Service at Secondary Voltage	<u>Oct-May</u>	<u>Jun-Sep</u>
Demand Charge per Month per kW		
On-Peak Period Demand	\$11.90	\$16.49
Off-Peak Period Demand in Excess of On-Peak Period Demand	\$3.35	\$3.35
Energy Charge per kWh		
On-Peak Period Energy	\$0.06538	
Off-Peak Period Energy	\$0.03441	
Energy Charge Credit per Month per kWh		
All kWh in Excess of 400 Hours Times the On-Peak Period Billing Demand, Not to Exceed 50% of Total kWh	\$0.01825	
	<u>January - December</u>	
Voltage Discounts per Month	Per kW	Per kWh
Primary Voltage	\$0.70	\$0.00137

(Continued on Sheet No. 5-51.1)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ELECTRIC VEHICLE FLEET PILOT SERVICE

Section No. 5

(CLOSED)

~~2nd~~3rd Revised Sheet No. 51.1

RATE CODE A87, A88, A89

OPTIONAL CHARGER SERVICE

Charging equipment may be supplied and installed either by customer or by the Company through an optional charger service. Optional charger service by Company is available as a Bundled Option that includes a monthly charge for the installed cost of charging equipment or as a Pre-Pay Option to customers electing to pay Company for the installed cost of charging equipment prior to beginning service with this tariff. Customers electing the Pre-Pay Option are separately invoiced at the time of installation and are subject to the Pre-Pay Option service charge in place of the Bundled Option service charge.

Service Charge per Month per Port	Group A	Group B	Group C
Bundled Option – Single Port (A88)	\$37.88	\$52.92	\$67.96
Bundled Option – Dual Port (A88)	\$32.85	\$45.80	\$54.94
Pre-Pay Option – Single Port (A89)	\$11.73	\$25.31	\$33.37
Pre-Pay Option – Dual Port (A89)	\$10.86	\$20.80	\$29.85

Pricing for charging infrastructure for transit buses is determined on a per project basis.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the “Interim Rate Surcharge Rider” to service provided beginning January 1, 2025.

FUEL CLAUSE

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

ENVIRONMENTAL IMPROVEMENT RIDER

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

SALES TRUE-UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

MONTHLY MINIMUM CHARGE

For the first two years after the original effective date establishing this tariff, the minimum charge shall be equal to the Customer Charge. Effective two years after the original effective date establishing this tariff, the minimum charge shall be the total of the Customer Charge and a Facilities Charge based on the number of installed charging ports.

Facilities Charge	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Number of Charging Ports	1-9	10-19	20-29	30-39	40+
Monthly Minimum Charge	\$75	\$150	\$300	\$450	\$600

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

(Continued on Sheet No. 5-51.2)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ELECTRIC VEHICLE FLEET PILOT SERVICE

Section No. 5

(CLOSED)

Original 1st Revised Sheet No. 51.2

RATE CODE A87, A88, A89

DEFINITION OF PEAK PERIODS

The on-peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off-peak period is defined as all other hours. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

DETERMINATION OF ON-PEAK PERIOD DEMAND

The actual on-peak period demand in kW shall be the greatest 15-minute load for the on-peak period during the month for which the bill is rendered. The adjusted demand in kW for billing purposes shall be determined by dividing the actual on-peak demand by the power factor expressed in percent but not more than 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW. In no month shall the on-peak period demand to be billed be considered as less than the current month's adjusted on-peak period demand in kW, or 50% of the greatest monthly adjusted on peak period demand in kW during the preceding 11 months. In no month shall the on-peak billing demand be greater than the value in kW determined by dividing the kWh sales for the billing month by 100 hours per month.

The greatest monthly adjusted on-peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

DETERMINATION OF OFF-PEAK PERIOD DEMAND IN EXCESS OF ON-PEAK PERIOD DEMAND

The actual off-peak period demand in kilowatts shall be the greatest 15-minute load for the off-peak period during the month for which the bill is rendered rounded to the nearest whole kW. In no month shall the off-peak period demand for billing purposes be considered as less than the current month's actual off-peak period demand in kW, or 50% of the greatest monthly actual off-peak period demand in kW during the preceding 11 months.

The greatest monthly adjusted off-peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

The off-peak period demand in excess of on-peak period demand in kW to be billed shall be determined by subtracting the billing on-peak period demand from the actual off-peak period demand as defined above, but only if the off-peak period demand is greater than the on-peak period demand.

POWER FACTOR

For three phase customers with services above 200 amperes, or above 480 volts, the power factor for the month shall be determined by permanently installed metering equipment. For all single phase customers and three phase customers with services 200 amperes or less, a power factor of 90% will be assumed.

(Continued on Sheet No. 5-51.3)

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Northern States Power Company, a Minnesota corporation
Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ELECTRIC VEHICLE FLEET PILOT SERVICE

Section No. 5

(CLOSED)

~~Original~~ 1st Revised Sheet No. 51.3

RATE CODE A87, A88, A89

MINIMUM DEMAND TO BE BILLED

The monthly minimum on-peak period billing demand shall not be less than provided above.

TERMS AND CONDITIONS OF SERVICE

1. Electric Vehicle Fleet Pilot Service shall be served through wiring connected to customer's dedicated meter.
2. Company may require customer to provide access for Company-owned equipment for the recording and wireless communication of energy usage.
3. The rate contemplates that this service will require the installation of new facilities to provide electric service to the electric vehicle charger.
4. Customer must execute an Electric Vehicle Fleet Pilot Service Agreement with the Company.
5. Customer must retain a minimum four ports per site, or, in cases with less than four ports, a minimum of 50 kW of charging capacity.
6. Company waives CIAC requirements for non-residential customers under the Standard Installation and Extension Rules under Section 5.1(A)(1)(b), Section 5.1 (A)(2) and (3) and Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-23 through 6-27.
7. Alternating current service is provided at the following nominal voltages:
 - a. Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts.
 - b. Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

RIGHT TO REFUSE SERVICE

The Company reserves the right to refuse applicants for service under this Pilot service if it determines that excessive additional capital expenditures will be required to provide service to that applicant.

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Order Date: ~~07-17-19~~

**ELECTRIC VEHICLE PUBLIC CHARGING PILOT
SERVICE (CLOSED)
RATE CODE A90**

Section No. 5
~~12th~~13th Revised Sheet No. 52

AVAILABILITY

~~Available while this Pilot Service is in effect to non-residential customers for service only to electric vehicle loads including battery charging and accessory usage for the express purpose of providing public charging service to electric vehicles. This pilot is now closed and not available to new customers.~~

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CONTRACT

Customers must contract for this service through an Electric Vehicle Public Charging Pilot Service Agreement with the Company. The contract period will be for 120 months.

RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable*Connect Program Rider (Renewable*Connect Flex), or other available rate schedule for voluntary renewable energy supply that is applicable.

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DETERMINATION OF CUSTOMER BILLS

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and /or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

RATE

Customer Charge per Month	\$29.98	
Service at Secondary Voltage	<u>Oct-May</u>	<u>Jun-Sep</u>
Demand Charge per Month per kW		
On-Peak Period Demand	\$11.90	\$16.49
Off-Peak Period Demand in Excess of On-Peak Period Demand	\$3.35	\$3.35
Energy Charge per kWh		
On-Peak Period Energy	\$0.06538	
Off-Peak Period Energy	\$0.03441	
Energy Charge Credit per Month per kWh		
All kWh in Excess of 400 Hours Times the On-Peak Period Billing Demand, Not to Exceed 50% of Total kWh	\$0.01825	
Voltage Discounts per Month	<u>January - December</u>	
	<u>Per kW</u>	<u>Per kWh</u>
Primary Voltage	\$0.70	\$0.00137

(Continued on Sheet No. 5-52.1)

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Northern States Power Company, a Minnesota corporation
Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**ELECTRIC VEHICLE PUBLIC CHARGING PILOT
SERVICE ~~(CLOSED)~~
RATE CODE A90**

Section No. 5
~~2nd~~3rd Revised Sheet No. 52.1

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the "Interim Rate Surcharge Rider" to service provided beginning January 1, 2025.

FUEL CLAUSE

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

ENVIRONMENTAL IMPROVEMENT RIDER

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

MONTHLY MINIMUM CHARGE

For the first two years after the original effective date establishing this tariff, the minimum charge shall be equal to the Customer Charge. Effective two years after the original effective date establishing this tariff, the minimum charge shall be the total of the Customer Charge and a Facilities Charge based on the number of installed charging ports.

Facilities Charge	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Number of Charging Ports	1-9	10-19	20-29	30-39	40+
Monthly Minimum Charge	\$75	\$150	\$300	\$450	\$600

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

SALES TRUE-UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

(Continued on Sheet No. 5-52.2)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**ELECTRIC VEHICLE PUBLIC CHARGING PILOT
SERVICE (CLOSED)
RATE CODE A90**

Section No. 5
~~Original~~1st Revised Sheet No. 52.2

DEFINITION OF PEAK PERIODS

The on-peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off-peak period is defined as all other hours. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

DETERMINATION OF ON-PEAK PERIOD DEMAND

The actual on-peak period demand in kW shall be the greatest 15-minute load for the on-peak period during the month for which the bill is rendered. The adjusted demand in kW for billing purposes shall be determined by dividing the actual on-peak demand by the power factor expressed in percent but not more than 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW. In no month shall the on-peak period demand to be billed be considered as less than the current month's adjusted on-peak period demand in kW, or 50% of the greatest monthly adjusted on-peak period demand in kW during the preceding 11 months. In no month shall the on-peak billing demand be greater than the value in kW determined by dividing the kWh sales for the billing month by 100 hours per month.

The greatest monthly adjusted on-peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

DETERMINATION OF OFF-PEAK PERIOD DEMAND IN EXCESS OF ON-PEAK PERIOD DEMAND

The actual off peak period demand in kilowatts shall be the greatest 15-minute load for the off peak period during the month for which the bill is rendered rounded to the nearest whole kW. In no month shall the off-peak period demand for billing purposes be considered as less than the current month's actual off-peak period demand in kW, or 50% of the greatest monthly actual off-peak period demand in kW during the preceding 11 months.

The greatest monthly adjusted off-peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

The off-peak period demand in excess of on-peak period demand in kW to be billed shall be determined by subtracting the billing on-peak period demand from the actual off-peak period demand as defined above, but only if the off-peak period demand is greater than the on-peak period demand.

POWER FACTOR

For three phase customers with services above 200 amperes, or above 480 volts, the power factor for the month shall be determined by permanently installed metering equipment. For all single phase customers and three phase customers with services 200 amperes or less, a power factor of 90% will be assumed.

(Continued on Sheet No. 5-52.3)

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Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**ELECTRIC VEHICLE PUBLIC CHARGING PILOT
SERVICE (CLOSED)
RATE CODE A90**

Section No. 5
~~Original~~ 1st Revised Sheet No. 52.3

MINIMUM DEMAND TO BE BILLED

The monthly minimum on-peak period billing demand shall not be less than provided above.

TERMS AND CONDITIONS OF SERVICE

1. Electric Vehicle Fleet Pilot Service shall be served through wiring connected to customer's dedicated-meter.
2. Company may require customer to provide access for Company-owned equipment for the recording and wireless communication of energy usage.
3. The rate contemplates that this service will require the installation of new facilities to provide electric service to the electric vehicle charger.
4. Customer must execute an Electric Vehicle Public Charging Pilot Service Agreement with the Company.
5. Customer must retain a minimum four ports per site, or, in cases with less than four ports, a minimum of 50 kW of charging capacity.
6. Company waives CIAC requirements for non-residential customers under the Standard Installation and Extension Rules under Section 5.1(A)(1)(b), Section 5.1 (A)(2) and (3) and Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-23 through 6-27.
7. Alternating current service is provided at the following nominal voltages:
 - a. Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts.
 - b. Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

RIGHT TO REFUSE SERVICE

The Company reserves the right to refuse applicants for service under this Pilot service if it determines that excessive additional capital expenditures will be required to provide service to that applicant.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MULTI-DWELLING UNIT ELECTRIC VEHICLE
SERVICE PILOT ~~(CLOSED)~~
RATE CODE A91, A92, A93**

Section No. 5
~~4th~~2nd Revised Sheet No. 52.4

AVAILABILITY

~~Available while the Pilot is in effect to Multi-Dwelling Unit site hosts for service only to resident electric vehicle loads including battery charging and accessory usage for the express purpose of providing charging service to the residents of the site. This pilot is now closed and not available to new customers.~~

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CONTRACT

Participants must contract for the service through a Multi-Dwelling Unit Electric Vehicle Service Pilot Customer Service Agreement with the Company. For site hosts participating under both the Shared Parking and Assigned Parking options, the contract will be for 120 months. For EV driver participating under the Assigned Parking option, the contract will be month-to-month.

RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable and High-Efficiency Energy Purchase (WindsorSource Program) Rider, or other available rate schedule for voluntary renewable energy supply that is applicable.

DETERMINATION OF CUSTOMER BILLS

Site host bills shall reflect the standard customer charge, energy charges (if applicable) based on metered kWh usage, plus an optional charger service charge (if applicable). Assigned parking participant bills shall reflect energy charges (if applicable) based on kWh usage measured by their charging equipment, plus the charger service charge. Bills may be subject to a minimum charge based on the monthly customer charge plus optional charger service charge (if applicable). Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

RATE

Standard Customer Charge Per Month \$4.95

Optional Charger Service Charge Per Month Per Port

Assigned Parking (A91) \$16.99

	<u>Group A</u>	<u>Group B</u>	<u>Group C</u>
Shared Parking – Full Service (A93)	\$30.59	\$45.55	\$60.51

Energy Charge per kWh

June-September

On-Peak Period	~~\$0.2784~~ <u>\$0.21329</u>
Mid-Peak Period	~~\$0.11307~~ <u>\$0.13468</u>
Off-Peak Period	~~\$0.03825~~ <u>\$0.07479</u>

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(Continued on Sheet No. 5-52.5)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MULTI-DWELLING UNIT ELECTRIC VEHICLE
SERVICE PILOT ~~(CLOSED)~~ (Continued)
RATE CODE A91, A92, A93**

Section No. 5
~~3rd~~^{4th} Revised Sheet No. 52.5

RATE (Continued)

Energy Charge per kWh

Other Months

On-Peak Period	~~\$0.248690.17314~~
Mid-Peak Period	~~\$0.099070.11485~~
Off-Peak Period	~~\$0.038250.07479~~

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the "Interim Rate Surcharge Rider" to service provided beginning January 1, 2025.

FUEL CLAUSE

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

MONTHLY MINIMUM CHARGE

Customer Charge plus Optional Charger Service (if applicable).

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

SALES TRUE-UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

DEFINITION OF PEAK PERIODS

The On-Peak period is defined as those hours between ~~36~~³:00 p.m. and ~~89~~⁹:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The Mid-Peak period is defined as all hours not defined as On-Peak or Off-Peak periods. The Off-Peak period is defined as those hours between midnight (12:00 a.m.) and 6:00 a.m. every day.

TERMS AND CONDITIONS OF SERVICE

1. Multi-dwelling unit electric vehicle service shall be separately served and metered and must at no time be connected to facilities serving site host's other loads. Metering may be installed as a sub-meter behind the site host's main meter, in which case consumption under this rate schedule will be subtracted from the main meter for purposes of billing site host's non-electric vehicle electricity usage.

(Continued on Sheet No. 5-52.6)

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Northern States Power Company, a Minnesota corporation
Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MULTI-DWELLING UNIT ELECTRIC VEHICLE
SERVICE PILOT ~~(CLOSED)~~ (Continued)
RATE CODE A91, A92, A93**

Section No. 5
~~Original~~ 1st Revised Sheet No. 52.6

TERMS AND CONDITIONS OF SERVICE (Continued)

2. Consumption under the Assigned Parking option will be measured by charging equipment for each assigned parking spot and will be subtracted from the dedicated meter for charging equipment. Site hosts will be responsible for meter usage not accounted for from assigned parking spot usage.
3. The rate contemplates that the service will require the installation of new facilities to provide electric service to the electric vehicle chargers.
4. Site Host must retain a minimum of four ports per site (minimum of two ports per site for Affordable MDUs), or in cases with less than four ports, a minimum of 50kW of charging capacity.
5. For participating affordable housing site hosts and market-rate site hosts in the first tranche of participants, the Company waives CIAC requirements for non-residential customers under the Standard Installation and Extension Rules under Section 5.1(A)(1))(b), Section 5.1 (A)(2) and (3) and Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-23 through 6.27. The Company waives a portion of the CIAC requirements for market-rate site hosts in the second tranche of participants.
6. Company will cover 100 percent of EV Service Connection Costs for affordable housing site hosts and market-rate site hosts in first tranche. Market-rate site hosts in second and third tranche of participants will receive a revenue-based allowance for EV Service Connection costs.
7. The site host shall supply, at no expense to the Company, a suitable location for meters and associated equipment used for billing. Installations must conform to the Company's specifications.
8. Company may require site host to provide access for Company-owned equipment for the recording and wireless communication of energy usage.
9. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
10. Participants must execute a Multi-Dwelling Unit Electric Vehicle Service Customer Service Agreement with the Company

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**EV ACCELERATE AT HOME CUSTOMER SERVICE
AGREEMENT (Continued)**

Section No. 7
~~3rd~~4th Revised Sheet No. 115

1. Eligibility and Availability

1.1. To be eligible for the EV Accelerate At Home Program Rate Codes A79, A80, you, must:

- Agree to the terms and conditions of this Services Agreement;
- have an active Xcel Energy residential electric service account in Xcel Energy's Minnesota regulated electric service territory with no past due bills, disconnection notices, or pay arrangements;
- rent or own the Site, provided that if you rent the Site, you must have a separately metered service, pay for any necessary Premises Wiring, and have the Site owner's written consent to participate in the EV Accelerate At Home Program;
- represent that the Site is owned or rented by the Customer, is located within Xcel Energy's Minnesota regulated electrical service territory, and corresponds with a Xcel Energy residential electrical account on which the Charger will be installed;
- have an approved Charger installed by Xcel Energy, or an authorized third-party independent contractor on Xcel Energy's behalf, or be inspected and confirmed as eligible by an Xcel Energy contracted electrician, for the exclusive use of tracking the electricity used to charge your Electric Vehicle;
- have wireless internet ("Wi-Fi") service at Site;
- not be on current Xcel Energy Residential EV Service Rate (Rate Code A08). If you are already enrolled on Rate Code A08, you must unenroll for the duration of your participation on the EV Accelerate At Home Program; and
- not participate in Xcel Energy's Residential Time of Use Service Rate (Rate Codes A72 and A74) Design Pilot Program. If you are already enrolled in the Residential Time of Use Service Rate Design Pilot Program, you must unenroll for the duration of your participation in the EV Accelerate At Home Program; and
- ~~not participate in Xcel Energy's Net Metering tariffs.~~

1.2 To be eligible for the EV Accelerate At Home Program Voluntary Electric Service (Rate Code A76), you must:

- Agree to the terms and conditions of this Service Agreement;
- have an active Xcel Energy residential electric service account in Xcel Energy's Minnesota regulated electric service territory with no past due bills, disconnection notices, or pay arrangements;
- rent or own the Site, provided if you rent the Site, you must have a separately metered service, pay for any necessary Premises Wiring, and have the Site owner's written consent to participate in the EV Accelerate At Home Program ;
- represent that the Site is owned or rented by you, is located within Xcel Energy's Minnesota regulated electrical service territory, and corresponds with an Xcel Energy residential electrical account on which the Charger will be installed;
- have an approved Charger installed by Xcel Energy, or an authorized third-party independent contractor on Xcel Energy's behalf, or be inspected and confirmed as eligible by an Xcel Energy contracted electrician for the exclusive use of tracking the electricity used to charge your electric vehicle; and
- have Wi-Fi service at Site;
- be on a current Xcel Energy Residential Time of Day rate (Rate Codes A02 and A04) or Residential Time of Use Service Rate (Rate Codes A72 and A74) Design Pilot Program.

(Continued on Sheet No. 7-115.1)

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**EV ACCELERATE AT HOME CUSTOMER SERVICE
AGREEMENT (Continued)**

Section No. 7
~~Original~~1st Revised Sheet No. 115.1

To be eligible for the EV Accelerate At Home Subscription Program (Rate Codes A82, A84), Customers must:

- Agree to the terms and conditions of this Services Agreement;
- Have an active Xcel Energy residential electric service account in Xcel Energy's Minnesota regulated electric service territory with no past due bills, disconnection notices, or pay arrangements;
- rent or own the Site, provided that if you rent the Site, you must have a separately metered service, pay for any necessary Premises Wiring, and have the Site owner's written consent to participate in the EV Accelerate At Home Program;
- represent that the Site is owned or rented by the Customer, is located within Xcel Energy's Minnesota regulated electrical service territory, and corresponds with a Xcel Energy residential electrical account on which the Charger will be installed;
- have an approved Charger installed by Xcel Energy, or an authorized third-party independent contractor on Xcel Energy's behalf, or be inspected and confirmed as eligible by an Xcel Energy contracted electrician, for the exclusive use of tracking the electricity used to charge your Electric Vehicle;
- have wireless internet ("Wi-Fi") service at Site;
- not be on current Xcel Energy Residential EV Service Rate (Rate Code A08). If you are already enrolled on Rate Code A08, you must unenroll for the duration of your participation in the EV Accelerate At Home Program;
- not participate in the Residential Time of Day Service Rate (Rate Codes A02, A04); if Participant is already enrolled, they must unenroll for the duration of their participation in the EVAAH Subscription Program;
- not participate in the EVAAH Pay-As-You-Go (Rate Codes A80, A81); and
- not participate in the Residential Time of Use Service Rate (Rate Codes A72, A74) Design Pilot Program; if Participant is already enrolled, they must unenroll for the duration of their participation in the EVAAH Subscription Program; and
- ~~not participate in the Company's Net Metering tariffs.~~

(Continued on Sheet No. 7-116)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL EV ACCELERATE AT HOME PAY AS YOU GO
SERVICE
RATE CODE A79, A80, AND A81**

Section No. 5
5th Revised Sheet No. 7.1

RATE

Customer Charge per Month

Bundled (A80)	\$17.00	R
Pre-Pay Option/Installation Only (A81) (CLOSED)	\$5.28	R
BYOC (A79)	\$7.77	R

Energy Charge per kWh

June – September		
On-Peak Period	\$0.21329	R
Mid-Peak Period	\$0.13468	R
Off-Peak Period	\$0.07479	R

Other Months

On-Peak Period	\$0.17314	R
Mid-Peak Period	\$0.11485	R
Off-Peak Period	\$0.07479	R

PRE-PAY/INSTALLATION ONLY OPTION

The Pre-Pay/Installation Only Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

The Company will continue to support existing customers on the Pre-Pay/Installation Only Option, but the Option is closed to new customers.

BYOC OPTION

Customers choosing the BYOC Service are required to have a Company-contracted electrician perform a site visit and hardwire the charging equipment if needed, and to confirm equipment eligibility and that the equipment is correctly set up for the program. The cost of the site visit is included in the monthly customer charge. Customers choosing the BYOC Service are required to utilize a vehicle charger model that is approved by the Company for use for this rate.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the "Interim Rate Surcharge Rider" to service provided beginning January 1, 2025.

FUEL CLAUSE

Bills are subject to the adjustments provided for in the Fuel Clause Rider

RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

MONTHLY MINIMUM CHARGE

Customer Charge.

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

SALES TRUE-UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

(Continued on Sheet No. 7.2)

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**RESIDENTIAL EV ACCELERATE AT HOME PAY AS YOU
GO SERVICE
RATE CODE A79, A80, AND A81**

Section No. 5
3rd Revised Sheet No. 7.2

DEFINITION OF PEAK PERIODS

The on-peak period is defined as those hours between 6:00 p.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The mid-peak period is defined as all hours not defined as on-peak or off-peak periods. The off-peak period is defined as those hours between midnight (12:00 a.m.) and 6:00 a.m. every day. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

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COMMUNICATION COSTS

The Company will maintain separate accounting of the information, education, advertising and promotion costs associated with electric vehicles.

TERMS AND CONDITIONS OF SERVICE

1. EV Accelerate At Home Pay As You Go Service shall be served through wiring connected to customer's single meter provided for Residential Service. Consumption under this rate schedule will be subtracted from the main meter for purposes of billing customer's non-Electric Vehicle electricity usage.
2. The customer shall supply, at no expense to the Company, premises wiring and a suitable location for connection of charging and associated equipment.
3. Company may require customer to provide access to charging equipment for the recording and wireless communication of energy usage.
4. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditure for facilities necessary to serve this load which would not otherwise be required to serve customer's load.
5. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
6. Customer must execute an EV Accelerate At Home Customer Service Agreement with the Company.
7. Company waives for participants enrolled in an EV rate program tariff the CIAC requirements related to transformer upgrades for residential customers under the General Extension Rules under Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-26 through 6-27.

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President, Northern States Power Company, a Minnesota Corporation

Effective Date:

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Order Date:

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL EV ACCELERATE AT HOME
VOLUNTARY SERVICE
RATE CODE A76, A77**

Section No. 5
8th Revised Sheet No. 8

AVAILABILITY

Available to Residential Service customers taking service under the Residential Time of Day (Rate Codes A02 and A04) or Time-of-Use Service (Rate Codes A72 and A74) to provide electric vehicle charging equipment to serve electric vehicle loads including battery charging and accessory usage. Customers' energy usage will be billed based on their applicable rate codes. Bundled service includes Company installed and provided charging equipment. Pre-Pay Option is closed and not available to new customers.

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CONTRACT

Customers must contract for this service through an EV Accelerate At Home Customer Service Agreement with the Company. The contract period will be as long as the customer wishes to use the equipment

CHARACTER OF SERVICE

Single-phase 60-Hertz service at approximately 120 or 120/240 volts will be provided hereunder. Three-phase service or other service upgrade requests will be provided in accordance with Company service regulations.

COST OF SERVICE

Customer Charge per Month	
Bundled (A76)	\$12.73
Pre-Pay/Installation Only Option (A77) (Closed)	\$1.00

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PRE-PAY/INSTALLATION-ONLY OPTION

The Pre-Pay/Installation Only Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

The Company will continue to support existing customers on the Pre-Pay/Installation Only Option, but the Option is closed to new customers.

COMMUNICATION COSTS

The Company will maintain separate accounting of the information, education, advertising and promotion costs associated with electric vehicles.

TERMS AND CONDITIONS OF SERVICE

1. EV Accelerate At Home Voluntary Service shall be serviced through wiring connected to customer's single meter provided for Residential Service.
2. The customer shall supply, at no expense to the Company, premises wiring and a suitable location for connection of charging and associated equipment.
3. Company may require customer to provide access to charging equipment.
4. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditure for facilities necessary to serve this load which would not otherwise be required to serve customer's load.
5. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
6. Customer must execute an EV Accelerate At Home Customer Service Agreement with the Company.
7. Company waives for participants enrolled in an EV rate program tariff the CIAC requirements related to transformer upgrades for residential customers under the General Extension Rules under Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-26 through 6-27.

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL EV ACCELERATE AT HOME
SUBSCRIPTION SERVICE (Continued)
RATE CODE A82, A83, A84**

Section No. 5
8th Revised Sheet No. 8.2

RATE

Customer Charge per Month (Up to 1,000 kWh of off-peak charging per month)

<u>General System Energy</u>		
Bundled (A82)	\$60.91	R
Pre-Pay Option (A83) (Closed)	\$48.90	R
BYOC (A84)	\$51.45	R
<u>Renewable Energy</u>		
Bundled (A82)	\$63.70	R
Pre-Pay Option (A83) (Closed)	\$51.69	R
BYOC (A84)	\$54.24	R
Excess On-Peak Period Energy Charge per kWh		
June - September	\$0.21329	R
Other Months	\$0.17314	R
Excess Mid-Peak Period Energy Charge per kWh		
June – September	\$0.13468	R
Other Months	\$0.11485	R
Excess Off-Peak Energy Charge per kWh (above 1,000 kWh per month)		
All Months	\$0.07479	R

PRE-PAY OPTION (CLOSED)

The Pre-Pay Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

BYOC OPTION

Customers choosing the BYOC Service are required to utilize a vehicle charger model that is approved by the Company for use for this rate. Customers choosing the BYOC Service are required to have a Company-contracted electrician perform a site visit to install and hardwire the charging equipment, if needed, or to confirm equipment eligibility and equipment set up to ensure program compatibility. The cost of the site visit is included in the monthly customer charge. Customers choosing the BYOC Service are required to utilize a vehicle charger model that is approved by the Company for use for this rate.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

FUEL CLAUSE

The monthly customer charge includes preset fuel charges for established energy usage during the off-peak period. Excess on-peak, mid-peak, and off-peak period energy charges are subject to the adjustments provided for in the Fuel Clause Rider.

RESOURCE ADJUSTMENT

The monthly customer charge includes a preset Resource Adjustment charge for established energy usage during the off-peak period. Excess on-peak, mid-peak, and off-peak period energy charges are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

MONTHLY MINIMUM CHARGE

Customer Charge.

(Continued on Sheet No. 5-8.3)

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**RESIDENTIAL EV ACCELERATE AT HOME
SUBSCRIPTION SERVICE (Continued)
RATE CODE A82, A83, A84**

Section No. 5
4th Revised Sheet No. 8.3

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the "Interim Rate Surcharge Rider" to service provided beginning January 1, 2025.

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

SALES TRUE UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

DEFINITION OF PEAK PERIODS

The on-peak period is defined as those hours between 6:00 p.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The mid-peak period is defined as all hours not defined as on-peak or off-peak periods. The off-peak period is defined as those hours between midnight (12:00 a.m.) and 6:00 a.m. every day. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

C

DEFINITION OF EXPECTED AVERAGE ELECTRIC VEHICLE KWH USAGE

The expected average electric vehicle kWh usage is defined as the Company's estimated average monthly EV energy consumption across all program participants.

COMMUNICATION COSTS

The Company will maintain separate accounting of the information, education, advertising and promotion costs associated with electric vehicles.

TERMS AND CONDITIONS OF SERVICE

1. Residential EV Accelerate At Home Subscription Service shall be served through wiring connected to customer's single meter provided for Residential Service. Consumption under this rate schedule will be subtracted from the main meter for purposes of billing customer's non-Electric Vehicle electricity usage.
2. The customer shall supply, at no expense to the Company, premises wiring and a suitable location for connection of charging and associated equipment.
3. Company may require customer to provide access to charging equipment for the recording and wireless communication of energy usage.
4. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditure for facilities necessary to serve this load which would not otherwise be required to serve customer's load.
5. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
6. Customer must execute an EV Accelerate At Home Customer Service Agreement with the Company.
7. Company waives for participants enrolled in an EV rate program tariff the CIAC requirements related to transformer upgrades for residential customers under the General Extension Rules under Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-26 through 6-27.

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RESIDENTIAL OPTIMIZE YOUR CHARGE

Section No. 5
2nd Revised Sheet No. 16

CANCELED

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(Continued on Sheet 5-16.1)

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RESIDENTIAL OPTIMIZE YOUR CHARGE (Continued)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL OPTIMIZE YOUR CHARGE (Continued)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL OPTIMIZE YOUR CHARGE (Continued)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL OPTIMIZE YOUR CHARGE (Continued)

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COMMERCIAL OPTIMIZE YOUR CHARGE

Section No. 5
2nd Revised Sheet No. 50.6

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(Continued on Sheet No. 5-50.7)

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COMMERCIAL OPTIMIZE YOUR CHARGE (Continued)

Section No. 5
1st Revised Sheet No. 50.7

CANCELED

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(Continued on Sheet No. 5-50.8)

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COMMERCIAL OPTIMIZE YOUR CHARGE (Continued)

Section No. 5
1st Revised Sheet No. 50.8

CANCELED

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(Continued on Sheet No. 5-50.9)

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COMMERCIAL OPTIMIZE YOUR CHARGE (Continued)

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1st Revised Sheet No. 50.9

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COMMERCIAL OPTIMIZE YOUR CHARGE (Continued)

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1st Revised Sheet No. 50.10

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**ELECTRIC VEHICLE FLEET PILOT SERVICE
(CLOSED)
RATE CODE A87, A88, A89**

Section No. 5
14th Revised Sheet No. 51

AVAILABILITY

This pilot is now closed and not available to new customers.

CONTRACT

Customers must contract for this service through an Electric Vehicle Fleet Pilot Service Agreement with the Company. The contract period will be for 120 months.

RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable*Connect Program Rider (Renewable*Connect Flex), or other available rate schedule for voluntary renewable energy supply that is applicable.

DETERMINATION OF CUSTOMER BILLS

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and /or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

RATE

Customer Charge per Month	\$29.98	
Service at Secondary Voltage	<u>Oct-May</u>	<u>Jun-Sep</u>
Demand Charge per Month per kW		
On-Peak Period Demand	\$11.90	\$16.49
Off-Peak Period Demand in Excess of On-Peak Period Demand	\$3.35	\$3.35
Energy Charge per kWh		
On-Peak Period Energy	\$0.06538	
Off-Peak Period Energy	\$0.03441	
Energy Charge Credit per Month per kWh		
All kWh in Excess of 400 Hours Times the On-Peak Period Billing Demand, Not to Exceed 50% of Total kWh	\$0.01825	
<u>January - December</u>		
Voltage Discounts per Month	Per kW	Per kWh
Primary Voltage	\$0.70	\$0.00137

(Continued on Sheet No. 5-51.1)

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**ELECTRIC VEHICLE FLEET PILOT SERVICE
(CLOSED)
RATE CODE A87, A88, A89**

Section No. 5
3rd Revised Sheet No. 51.1

OPTIONAL CHARGER SERVICE

Charging equipment may be supplied and installed either by customer or by the Company through an optional charger service. Optional charger service by Company is available as a Bundled Option that includes a monthly charge for the installed cost of charging equipment or as a Pre-Pay Option to customers electing to pay Company for the installed cost of charging equipment prior to beginning service with this tariff. Customers electing the Pre-Pay Option are separately invoiced at the time of installation and are subject to the Pre-Pay Option service charge in place of the Bundled Option service charge.

Service Charge per Month per Port	Group A	Group B	Group C
Bundled Option – Single Port (A88)	\$37.88	\$52.92	\$67.96
Bundled Option – Dual Port (A88)	\$32.85	\$45.80	\$54.94
Pre-Pay Option – Single Port (A89)	\$11.73	\$25.31	\$33.37
Pre-Pay Option – Dual Port (A89)	\$10.86	\$20.80	\$29.85

Pricing for charging infrastructure for transit buses is determined on a per project basis.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the “Interim Rate Surcharge Rider” to service provided beginning January 1, 2025.

FUEL CLAUSE

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

ENVIRONMENTAL IMPROVEMENT RIDER

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

SALES TRUE-UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

MONTHLY MINIMUM CHARGE

For the first two years after the original effective date establishing this tariff, the minimum charge shall be equal to the Customer Charge. Effective two years after the original effective date establishing this tariff, the minimum charge shall be the total of the Customer Charge and a Facilities Charge based on the number of installed charging ports.

Facilities Charge	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Number of Charging Ports	1-9	10-19	20-29	30-39	40+
Monthly Minimum Charge	\$75	\$150	\$300	\$450	\$600

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

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**ELECTRIC VEHICLE FLEET PILOT SERVICE
(CLOSED)
RATE CODE A87, A88, A89**

Section No. 5
1st Revised Sheet No. 51.2

DEFINITION OF PEAK PERIODS

The on-peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off-peak period is defined as all other hours. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

DETERMINATION OF ON-PEAK PERIOD DEMAND

The actual on-peak period demand in kW shall be the greatest 15-minute load for the on-peak period during the month for which the bill is rendered. The adjusted demand in kW for billing purposes shall be determined by dividing the actual on-peak demand by the power factor expressed in percent but not more than 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW. In no month shall the on-peak period demand to be billed be considered as less than the current month's adjusted on-peak period demand in kW, or 50% of the greatest monthly adjusted on peak period demand in kW during the preceding 11 months. In no month shall the on-peak billing demand be greater than the value in kW determined by dividing the kWh sales for the billing month by 100 hours per month.

The greatest monthly adjusted on-peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

DETERMINATION OF OFF-PEAK PERIOD DEMAND IN EXCESS OF ON-PEAK PERIOD DEMAND

The actual off-peak period demand in kilowatts shall be the greatest 15-minute load for the off-peak period during the month for which the bill is rendered rounded to the nearest whole kW. In no month shall the off-peak period demand for billing purposes be considered as less than the current month's actual off-peak period demand in kW, or 50% of the greatest monthly actual off-peak period demand in kW during the preceding 11 months.

The greatest monthly adjusted off-peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

The off-peak period demand in excess of on-peak period demand in kW to be billed shall be determined by subtracting the billing on-peak period demand from the actual off-peak period demand as defined above, but only if the off-peak period demand is greater than the on-peak period demand.

POWER FACTOR

For three phase customers with services above 200 amperes, or above 480 volts, the power factor for the month shall be determined by permanently installed metering equipment. For all single phase customers and three phase customers with services 200 amperes or less, a power factor of 90% will be assumed.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**ELECTRIC VEHICLE FLEET PILOT SERVICE
(CLOSED)
RATE CODE A87, A88, A89**

Section No. 5
1st Revised Sheet No. 51.3

MINIMUM DEMAND TO BE BILLED

The monthly minimum on-peak period billing demand shall not be less than provided above.

TERMS AND CONDITIONS OF SERVICE

1. Electric Vehicle Fleet Pilot Service shall be served through wiring connected to customer's dedicated meter.
2. Company may require customer to provide access for Company-owned equipment for the recording and wireless communication of energy usage.
3. The rate contemplates that this service will require the installation of new facilities to provide electric service to the electric vehicle charger.
4. Customer must execute an Electric Vehicle Fleet Pilot Service Agreement with the Company.
5. Customer must retain a minimum four ports per site, or, in cases with less than four ports, a minimum of 50 kW of charging capacity.
6. Company waives CIAC requirements for non-residential customers under the Standard Installation and Extension Rules under Section 5.1(A)(1)(b), Section 5.1 (A)(2) and (3) and Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-23 through 6-27.
7. Alternating current service is provided at the following nominal voltages:
 - a. Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts.
 - b. Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

RIGHT TO REFUSE SERVICE

The Company reserves the right to refuse applicants for service under this Pilot service if it determines that excessive additional capital expenditures will be required to provide service to that applicant.

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**ELECTRIC VEHICLE PUBLIC CHARGING PILOT
SERVICE (CLOSED)
RATE CODE A90**

Section No. 5
13th Revised Sheet No. 52

AVAILABILITY

This pilot is now closed and not available to new customers.

C

CONTRACT

Customers must contract for this service through an Electric Vehicle Public Charging Pilot Service Agreement with the Company. The contract period will be for 120 months.

RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable*Connect Program Rider (Renewable*Connect Flex), or other available rate schedule for voluntary renewable energy supply that is applicable.

DETERMINATION OF CUSTOMER BILLS

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and /or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

RATE

Customer Charge per Month	\$29.98	
Service at Secondary Voltage	<u>Oct-May</u>	<u>Jun-Sep</u>
Demand Charge per Month per kW		
On-Peak Period Demand	\$11.90	\$16.49
Off-Peak Period Demand in Excess of On-Peak Period Demand	\$3.35	\$3.35
Energy Charge per kWh		
On-Peak Period Energy	\$0.06538	
Off-Peak Period Energy	\$0.03441	
Energy Charge Credit per Month per kWh		
All kWh in Excess of 400 Hours Times the On-Peak Period Billing Demand, Not to Exceed 50% of Total kWh	\$0.01825	
Voltage Discounts per Month	<u>January - December</u>	
Primary Voltage	Per kW	Per kWh
	\$0.70	\$0.00137

(Continued on Sheet No. 5-52.1)

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Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**ELECTRIC VEHICLE PUBLIC CHARGING PILOT
SERVICE (CLOSED)
RATE CODE A90**

Section No. 5
3rd Revised Sheet No. 52.1

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the "Interim Rate Surcharge Rider" to service provided beginning January 1, 2025.

FUEL CLAUSE

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

ENVIRONMENTAL IMPROVEMENT RIDER

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

MONTHLY MINIMUM CHARGE

For the first two years after the original effective date establishing this tariff, the minimum charge shall be equal to the Customer Charge. Effective two years after the original effective date establishing this tariff, the minimum charge shall be the total of the Customer Charge and a Facilities Charge based on the number of installed charging ports.

Facilities Charge	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Number of Charging Ports	1-9	10-19	20-29	30-39	40+
Monthly Minimum Charge	\$75	\$150	\$300	\$450	\$600

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

SALES TRUE-UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

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**ELECTRIC VEHICLE PUBLIC CHARGING PILOT
SERVICE (CLOSED)
RATE CODE A90**

Section No. 5
1st Revised Sheet No. 52.2

DEFINITION OF PEAK PERIODS

The on-peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off-peak period is defined as all other hours. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

DETERMINATION OF ON-PEAK PERIOD DEMAND

The actual on-peak period demand in kW shall be the greatest 15-minute load for the on-peak period during the month for which the bill is rendered. The adjusted demand in kW for billing purposes shall be determined by dividing the actual on-peak demand by the power factor expressed in percent but not more than 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW. In no month shall the on-peak period demand to be billed be considered as less than the current month's adjusted on-peak period demand in kW, or 50% of the greatest monthly adjusted on-peak period demand in kW during the preceding 11 months. In no month shall the on-peak billing demand be greater than the value in kW determined by dividing the kWh sales for the billing month by 100 hours per month.

The greatest monthly adjusted on-peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

DETERMINATION OF OFF-PEAK PERIOD DEMAND IN EXCESS OF ON-PEAK PERIOD DEMAND

The actual off peak period demand in kilowatts shall be the greatest 15-minute load for the off peak period during the month for which the bill is rendered rounded to the nearest whole kW. In no month shall the off-peak period demand for billing purposes be considered as less than the current month's actual off-peak period demand in kW, or 50% of the greatest monthly actual off-peak period demand in kW during the preceding 11 months.

The greatest monthly adjusted off-peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

The off-peak period demand in excess of on-peak period demand in kW to be billed shall be determined by subtracting the billing on-peak period demand from the actual off-peak period demand as defined above, but only if the off-peak period demand is greater than the on-peak period demand.

POWER FACTOR

For three phase customers with services above 200 amperes, or above 480 volts, the power factor for the month shall be determined by permanently installed metering equipment. For all single phase customers and three phase customers with services 200 amperes or less, a power factor of 90% will be assumed.

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**ELECTRIC VEHICLE PUBLIC CHARGING PILOT
SERVICE (CLOSED)
RATE CODE A90**

Section No. 5
1st Revised Sheet No. 52.3

MINIMUM DEMAND TO BE BILLED

The monthly minimum on-peak period billing demand shall not be less than provided above.

TERMS AND CONDITIONS OF SERVICE

1. Electric Vehicle Fleet Pilot Service shall be served through wiring connected to customer's dedicated-meter.
2. Company may require customer to provide access for Company-owned equipment for the recording and wireless communication of energy usage.
3. The rate contemplates that this service will require the installation of new facilities to provide electric service to the electric vehicle charger.
4. Customer must execute an Electric Vehicle Public Charging Pilot Service Agreement with the Company.
5. Customer must retain a minimum four ports per site, or, in cases with less than four ports, a minimum of 50 kW of charging capacity.
6. Company waives CIAC requirements for non-residential customers under the Standard Installation and Extension Rules under Section 5.1(A)(1)(b), Section 5.1 (A)(2) and (3) and Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-23 through 6-27.
7. Alternating current service is provided at the following nominal voltages:
 - a. Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts.
 - b. Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

RIGHT TO REFUSE SERVICE

The Company reserves the right to refuse applicants for service under this Pilot service if it determines that excessive additional capital expenditures will be required to provide service to that applicant.

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MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MULTI-DWELLING UNIT ELECTRIC VEHICLE
SERVICE PILOT (CLOSED)
RATE CODE A91, A92, A93**

Section No. 5
2nd Revised Sheet No. 52.4

AVAILABILITY

This pilot is now closed and not available to new customers.

C

CONTRACT

Participants must contract for the service through a Multi-Dwelling Unit Electric Vehicle Service Pilot Customer Service Agreement with the Company. For site hosts participating under both the Shared Parking and Assigned Parking options, the contract will be for 120 months. For EV driver participating under the Assigned Parking option, the contract will be month-to-month.

RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable and High-Efficiency Energy Purchase (WindsorSource Program) Rider, or other available rate schedule for voluntary renewable energy supply that is applicable.

DETERMINATION OF CUSTOMER BILLS

Site host bills shall reflect the standard customer charge, energy charges (if applicable) based on metered kWh usage, plus an optional charger service charge (if applicable). Assigned parking participant bills shall reflect energy charges (if applicable) based on kWh usage measured by their charging equipment, plus the charger service charge. Bills may be subject to a minimum charge based on the monthly customer charge plus optional charger service charge (if applicable). Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

RATE

Standard Customer Charge Per Month \$4.95

Optional Charger Service Charge Per Month Per Port

Assigned Parking (A91) \$16.99

	<u>Group A</u>	<u>Group B</u>	<u>Group C</u>
Shared Parking – Full Service (A93)	\$30.59	\$45.55	\$60.51

Energy Charge per kWh

June-September

On-Peak Period	\$0.21329
Mid-Peak Period	\$0.13468
Off-Peak Period	\$0.07479

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(Continued on Sheet No. 5-52.5)

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**MULTI-DWELLING UNIT ELECTRIC VEHICLE
SERVICE PILOT (CLOSED) (Continued)
RATE CODE A91, A92, A93**

Section No. 5
4th Revised Sheet No. 52.5

RATE (Continued)

Energy Charge per kWh

Other Months

On-Peak Period	\$0.17314
Mid-Peak Period	\$0.11485
Off-Peak Period	\$0.07479

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In addition, customer bills under this rate are subject to the following adjustments and/or charges.

INTERIM RATE ADJUSTMENT

A 7.14% Interim Rate Surcharge will be applied to rate components specified in the "Interim Rate Surcharge Rider" to service provided beginning January 1, 2025.

FUEL CLAUSE

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

MONTHLY MINIMUM CHARGE

Customer Charge plus Optional Charger Service (if applicable).

SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

SALES TRUE-UP RIDER

Bills are subject to the adjustments provided for in the Sales True-Up Rider.

DEFINITION OF PEAK PERIODS

The On-Peak period is defined as those hours between 6:00 p.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The Mid-Peak period is defined as all hours not defined as On-Peak or Off-Peak periods. The Off-Peak period is defined as those hours between midnight (12:00 a.m.) and 6:00 a.m. every day.

C

TERMS AND CONDITIONS OF SERVICE

1. Multi-dwelling unit electric vehicle service shall be separately served and metered and must at no time be connected to facilities serving site host's other loads. Metering may be installed as a sub-meter behind the site host's main meter, in which case consumption under this rate schedule will be subtracted from the main meter for purposes of billing site host's non-electric vehicle electricity usage.

(Continued on Sheet No. 5-52.6)

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**MULTI-DWELLING UNIT ELECTRIC VEHICLE
SERVICE PILOT (CLOSED) (Continued)
RATE CODE A91, A92, A93**

Section No. 5
1st Revised Sheet No. 52.6

TERMS AND CONDITIONS OF SERVICE (Continued)

2. Consumption under the Assigned Parking option will be measured by charging equipment for each assigned parking spot and will be subtracted from the dedicated meter for charging equipment. Site hosts will be responsible for meter usage not accounted for from assigned parking spot usage.
3. The rate contemplates that the service will require the installation of new facilities to provide electric service to the electric vehicle chargers.
4. Site Host must retain a minimum of four ports per site (minimum of two ports per site for Affordable MDUs), or in cases with less than four ports, a minimum of 50kW of charging capacity.
5. For participating affordable housing site hosts and market-rate site hosts in the first tranche of participants, the Company waives CIAC requirements for non-residential customers under the Standard Installation and Extension Rules under Section 5.1(A)(1)(b), Section 5.1 (A)(2) and (3) and Section 5.2 of the General Rules and Regulations on Tariff Sheets No. 6-23 through 6.27. The Company waives a portion of the CIAC requirements for market-rate site hosts in the second tranche of participants.
6. Company will cover 100 percent of EV Service Connection Costs for affordable housing site hosts and market-rate site hosts in first tranche. Market-rate site hosts in second and third tranche of participants will receive a revenue-based allowance for EV Service Connection costs.
7. The site host shall supply, at no expense to the Company, a suitable location for meters and associated equipment used for billing. Installations must conform to the Company's specifications.
8. Company may require site host to provide access for Company-owned equipment for the recording and wireless communication of energy usage.
9. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
10. Participants must execute a Multi-Dwelling Unit Electric Vehicle Service Customer Service Agreement with the Company

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**EV ACCELERATE AT HOME CUSTOMER SERVICE
AGREEMENT (Continued)**

Section No. 7
4th Revised Sheet No. 115

1. Eligibility and Availability

1.1. To be eligible for the EV Accelerate At Home Program Rate Codes A79, A80, you, must:

- Agree to the terms and conditions of this Services Agreement;
- have an active Xcel Energy residential electric service account in Xcel Energy's Minnesota regulated electric service territory with no past due bills, disconnection notices, or pay arrangements;
- rent or own the Site, provided that if you rent the Site, you must have a separately metered service, pay for any necessary Premises Wiring, and have the Site owner's written consent to participate in the EV Accelerate At Home Program;
- represent that the Site is owned or rented by the Customer, is located within Xcel Energy's Minnesota regulated electrical service territory, and corresponds with a Xcel Energy residential electrical account on which the Charger will be installed;
- have an approved Charger installed by Xcel Energy, or an authorized third-party independent contractor on Xcel Energy's behalf, or be inspected and confirmed as eligible by an Xcel Energy contracted electrician, for the exclusive use of tracking the electricity used to charge your Electric Vehicle;
- have wireless internet ("Wi-Fi") service at Site;
- not be on current Xcel Energy Residential EV Service Rate (Rate Code A08). If you are already enrolled on Rate Code A08, you must unenroll for the duration of your participation on the EV Accelerate At Home Program; and
- not participate in Xcel Energy's Residential Time of Use Service Rate (Rate Codes A72 and A74). If you are already enrolled in the Residential Time of Use Service Rate, you must unenroll for the duration of your participation in the EV Accelerate At Home Program.

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1.2 To be eligible for the EV Accelerate At Home Program Voluntary Electric Service (Rate Code A76), you must:

- Agree to the terms and conditions of this Service Agreement;
- have an active Xcel Energy residential electric service account in Xcel Energy's Minnesota regulated electric service territory with no past due bills, disconnection notices, or pay arrangements;
- rent or own the Site, provided if you rent the Site, you must have a separately metered service, pay for any necessary Premises Wiring, and have the Site owner's written consent to participate in the EV Accelerate At Home Program ;
- represent that the Site is owned or rented by you, is located within Xcel Energy's Minnesota regulated electrical service territory, and corresponds with an Xcel Energy residential electrical account on which the Charger will be installed;
- have an approved Charger installed by Xcel Energy, or an authorized third-party independent contractor on Xcel Energy's behalf, or be inspected and confirmed as eligible by an Xcel Energy contracted electrician for the exclusive use of tracking the electricity used to charge your electric vehicle; and
- have Wi-Fi service at Site;
- be on a current Xcel Energy Residential Time of Day rate (Rate Codes A02 and A04) or Residential Time of Use Service Rate (Rate Codes A72 and A74).

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(Continued on Sheet No. 7-115.1)

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Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-25-142

Order Date:

**EV ACCELERATE AT HOME CUSTOMER SERVICE
AGREEMENT (Continued)**

Section No. 7
1st Revised Sheet No. 115.1

To be eligible for the EV Accelerate At Home Subscription Program (Rate Codes A82, A84), Customers must:

- Agree to the terms and conditions of this Services Agreement;
- Have an active Xcel Energy residential electric service account in Xcel Energy's Minnesota regulated electric service territory with no past due bills, disconnection notices, or pay arrangements;
- rent or own the Site, provided that if you rent the Site, you must have a separately metered service, pay for any necessary Premises Wiring, and have the Site owner's written consent to participate in the EV Accelerate At Home Program;
- represent that the Site is owned or rented by the Customer, is located within Xcel Energy's Minnesota regulated electrical service territory, and corresponds with a Xcel Energy residential electrical account on which the Charger will be installed;
- have an approved Charger installed by Xcel Energy, or an authorized third-party independent contractor on Xcel Energy's behalf, or be inspected and confirmed as eligible by an Xcel Energy contracted electrician, for the exclusive use of tracking the electricity used to charge your Electric Vehicle;
- have wireless internet ("Wi-Fi") service at Site;
- not be on current Xcel Energy Residential EV Service Rate (Rate Code A08). If you are already enrolled on Rate Code A08, you must unenroll for the duration of your participation in the EV Accelerate At Home Program;
- not participate in the Residential Time of Day Service Rate (Rate Codes A02, A04); if Participant is already enrolled, they must unenroll for the duration of their participation in the EVAAH Subscription Program;
- not participate in the EVAAH Pay-As-You-Go (Rate Codes A80, A81); and
- not participate in the Residential Time of Use Service Rate (Rate Codes A72, A74); if Participant is already enrolled, they must unenroll for the duration of their participation in the EVAAH Subscription Program;

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(Continued on Sheet No. 7-116)

Date Filed: 10-31-25

By: Bria E. Shea

Effective Date:

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-25-142

Order Date:

EV Service Expansion - Charger Pricing

Pricing per Charger

Bundled Pricing Option

Charger Delivered Cost	(A)	[Trade Secret data begins here...]
Installation	(B)	[Trade Secret data begins here...]
		...Trade Secret data ends here]
Total Installed Cost	(C = A + B)	\$923.79
Shipping	(D)	\$0.00
Total Installed Cost with Tax	(E = C + D)	\$923.79
LARR Percentage	(F)	15.23%
Annual Revenue Requirement of the Charger Investment	(G = E * F)	\$140.71
Operations & Maintenance	(H)	\$ 12.00
Customer Accounting & Service	(I)	\$0.00
Data Services	(J)	\$0.00
Revenue Requirement per Charger	(K = G + H + I + J)	\$152.71
Months per Year	(L)	12
Price per Month	(M = K / L)	\$12.73

Prepay (Closed)

Charger Delivered Cost	(A)	Upfront Payment
Installation	(B)	
Total Installed Cost	(C = A + B)	
Shipping	(D)	
Total Installed Cost with Tax	(E = C + D)	
LARR Percentage	(F)	
Annual Revenue Requirement of the Charger Investment	(G = E * F)	
Operations & Maintenance	(H)	\$12.00
Customer Accounting & Service	(I)	\$0.00
Network Services	(J)	\$0.00
Revenue Requirement per Charger	(K = H + I + J)	\$12.00
Months per Year	(L)	12
Price per Month	(M = K / L)	\$1.00

EVA AH - Pay As You Go - Charger Pricing*Pricing per Charger*

		Bundled	
		[Trade Secret data begins here...	
Bundled Pricing Option			
Charger Delivered Cost	(A)		
Installation	(B)		
		...Trade Secret data end here]	
Total Installed Cost	(C = A + B)	\$923.79	
Shipping	(D)	\$0.00	
Total Installed Cost with Shipping	(E = C + D)	\$923.79	
LARR Percentage	(F)	15.23%	
Annual Revenue Requirement of the Charger Investment	(G = E * F)	\$140.71	
Operations & Maintenance	(H)	\$12.00	
Customer Accounting & Service	(I)	\$27.31	
Data Services	(J)	\$24.00	
Annual Revenue Requirement per Charger	(K = G + H + I + J)	\$204.03	
Months per Year	(L)	12	
Price per Month	(M = K / L)	\$17.00	
		Prepay (Closed)	BYOC
Customer Funded Charger Option			
Charger Delivered Cost	(A)		
Installation	(B)		
Total Installed Cost	(C = A + B)		
Shipping	(D)		
Total Installed Cost with Tax	(E = C + D)		
LARR Percentage	(F)		
Annual Revenue Requirement of the Charger Investment	(G = E * F)		
Operations & Maintenance (+ Electrician Site Visit For BYOC)	(H)	\$12.00	\$41.88
Customer Accounting & Service	(I)	\$27.31	\$27.31
Network Services	(J)	\$24.00	\$24.00
Revenue Requirement per Charger	(K = H + I + J)	\$63.31	\$93.20
Months per Year	(L)	12	12
Price per Month	(M = K / L)	\$5.28	\$7.77

EVAAH - Subscription Service Pricing Workpaper

In dollars, except where specified

		Standard						Renewable			
		Rate	KWh	Bundled	BYOC	Pre-Pay (Closed)	Rate	KWh	Bundled	BYOC	Pre-Pay (Closed)
Customer Charge				\$17.00	\$7.77	\$5.28			\$17.00	\$7.77	\$5.28
Energy Charges											
Off-Peak	\$0.074790	383	\$28.64	\$28.64	\$28.64		\$0.074790	383	\$28.64	\$28.64	\$28.64
Fuel Clause Rider	\$0.027070	383	\$10.37	\$10.37	\$10.37		\$0.034359	383	\$13.16	\$13.16	\$13.16
Other Riders Charges											
Transmission Cost Recovery	\$0.007073	383	\$2.71	\$2.71	\$2.71		\$0.007073	383	\$2.71	\$2.71	\$2.71
Renewable Development Fund	\$0.001358	383	\$0.52	\$0.52	\$0.52		\$0.001358	383	\$0.52	\$0.52	\$0.52
Conservation Improvement Program	\$0.001397	383	\$0.54	\$0.54	\$0.54		\$0.001397	383	\$0.54	\$0.54	\$0.54
State Energy Policy Rider	\$0.000000	383	\$0.00	\$0.00	\$0.00		\$0.000000	383	\$0.00	\$0.00	\$0.00
Renewable Energy Standard	2.467%		\$1.13	\$0.90	\$0.84		2.467%		\$1.13	\$0.90	\$0.84
Sub-Total Other Rider Charges			\$4.90	\$4.67	\$4.61			\$4.90	\$4.67	\$4.61	
Total Monthly Charge			\$60.91	\$51.45	\$48.90			\$63.70	\$54.24	\$51.69	

CERTIFICATE OF SERVICE

I, Victor Barreiro, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped
with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

DOCKET No. E002/M-25-142

Dated this 31st day of October 2025

/s/

Victor Barreiro
Regulatory Administrator

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Daniel	Abelson	daniel.abelson@metc.state.mn.us	Metropolitan Council		390 Robert Street N. St. Paul MN, 55101 United States	Electronic Service		No	M-25-142
2	Brian	Allen	brian.allen@allenergysolar.com	All Energy Solar, Inc		1642 Carroll Ave Saint Paul MN, 55104 United States	Electronic Service		No	M-25-142
3	Michael	Allen	michael.allen@allenergysolar.com	All Energy Solar		721 W 26th st Suite 211 Minneapolis MN, 55405 United States	Electronic Service		No	M-25-142
4	Ellen	Anderson	ellena@umn.edu	325 Learning and Environmental Sciences		1954 Buford Ave Saint Paul MN, 55108 United States	Electronic Service		No	M-25-142
5	Janet	Anderson	jcainstp@icloud.com	-		1799 Sargent St. Paul MN, 55105 United States	Electronic Service		No	M-25-142
6	Jay	Anderson	jaya@cmpas.org	CMPAS		7550 Corporate Way Suite 100 Eden Prairie MN, 55344 United States	Electronic Service		No	M-25-142
7	MK	Anderson	anderson@fresh-energy.org	Fresh Energy		408 St Peter Street Saint Paul MN, 55102 United States	Electronic Service		No	M-25-142
8	David	Assaf	daassaf@flaherty-hood.com	Flaherty & Hood, P.A.		525 Park Street Suite 470 St. Paul MN, 55102 United States	Electronic Service		No	M-25-142
9	Donna	Attanasio	dattanasio@gwu.edu	George Washington University		2000 H Street NW Washington DC, 20052 United States	Electronic Service		No	M-25-142
10	John	Bailey	bailey@ilsr.org	Institute For Local Self-Reliance		1313 5th St SE Ste 303 Minneapolis MN, 55414 United States	Electronic Service		No	M-25-142
11	Anjali	Bains	bains@fresh-energy.org	Fresh Energy		408 Saint Peter Ste 220 Saint Paul MN, 55102 United States	Electronic Service		No	M-25-142
12	Mark	Bakk	mbakk@lcp.coop	Lake Country Power		26039 Bear Ridge Drive Cohasset MN, 55721 United States	Electronic Service		No	M-25-142
13	Jared	Ballew	jared.ballew@ev.energy	EV.ENERGY CORP		726 18th St. Des Moines IA, 50314 United States	Electronic Service		No	M-25-142
14	Shay	Banton	shayb@irecusa.org	Interstate Renewable Energy Council		600 H Street NE Apt. 341 Washington DC, 20002 United States	Electronic Service		No	M-25-142
15	Laura	Beaton	beaton@smwlaw.com	Shute, Mihaly & Weinberger LLP		396 Hayes Street San Francisco CA, 94102 United States	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
16	Mathias	Bell	mathias@weavegrid.com	WeaveGrid		375 Alabama Street, Suite 325 San Francisco CA, 94110 United States	Electronic Service		No	M-25-142
17	Jeff	Benson	jbenson@southcentralelectric.com	South Central Electric Association		PO Box 150 71176 Tiell Drive St. James MN, 56081 United States	Electronic Service		No	M-25-142
18	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		Yes	M-25-142
19	Derek	Bertsch	derek.bertsch@mrenergy.com	Missouri River Energy Services		3724 West Avera Drive PO Box 88920 Sioux Falls SD, 57109-8920 United States	Electronic Service		No	M-25-142
20	Barb	Bischoff	barb.bischoff@nngco.com	Northern Natural Gas Co.		CORP HQ, 714 1111 So. 103rd Street Omaha NE, 68124-1000 United States	Electronic Service		No	M-25-142
21	Ingrid	Bjorklund	ibjorklund@avisenlegal.com	Avisen Legal		901 S. Marquette Ave. #1675 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
22	Ingrid	Bjorklund	ingrid@bjorklundlaw.com	Bjorklund Law, PLLC		855 Village Center Drive #256 North Oaks MN, 55127 United States	Electronic Service		No	M-25-142
23	William	Black	bblack@mmua.org	MMUA		Suite 200 3131 Fernbrook Lane North Plymouth MN, 55447 United States	Electronic Service		No	M-25-142
24	Kenneth	Bradley	kbradley@environmentminnesota.org			2837 Emerson Ave S Apt CW112 Minneapolis MN, 55408 United States	Electronic Service		No	M-25-142
25	Jon	Brekke	jbrekke@grenergy.com	Great River Energy		12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States	Electronic Service		No	M-25-142
26	Kathleen	Brennan	kbrennan@spencerfane.com	Spencer Fane LLP		100 South Fifth Street, Suite 2500 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
27	Sydney R.	Briggs	sbriggs@swce.coop	Steele-Waseca Cooperative Electric		2411 W. Bridge St PO Box 485 Owatonna MN, 55060-0485 United States	Electronic Service		No	M-25-142
28	Mark B.	Bring	mbring@otpc.com	Otter Tail Power Company		215 South Cascade Street PO Box 496 Fergus Falls	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						MN, 56538-0496 United States				
29	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	M-25-142
30	Ed	Brolin	ed.brolin@rwe.com	RWE Clean Energy		100 Summit Lake Drive Suite 210 Valhalla NY, 10595 United States	Electronic Service		No	M-25-142
31	Christopher	Browning	christopher.browning@nexteraenergy.com			null null, null United States	Electronic Service		No	M-25-142
32	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	M-25-142
33	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		Yes	M-25-142
34	Jessica	Burdette	jessica.burdette@state.mn.us		Department of Commerce	85 7th Place East Suite 500 St. Paul MN, 55101 United States	Electronic Service		No	M-25-142
35	Jerry	Byer	jbyer@itasca-mantrap.com	Itasca-Mantrap Coop. Electrical Ass'n		PO Box 192 Park Rapids MN, 56470 United States	Electronic Service		No	M-25-142
36	Jennifer	Cady	jjcady@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	M-25-142
37	Daniel T	Carlisle	todd-wad@toddwadena.coop	Todd-Wadena Electric Cooperative		550 Ash Ave NE PO Box 431 Wadena MN, 56482 United States	Electronic Service		No	M-25-142
38	Douglas M.	Carnival	dcarnival@carnivalberns.com	McGrann Shea Carnival Straughn & Lamb		800 Nicollet Mall Ste 2600 Minneapolis MN, 55402-7035 United States	Electronic Service		No	M-25-142
39	Pat	Carruth	pat@mnvalleyrec.com	Minnesota Valley Coop. Light & Power Assn.		501 S 1st St. PO Box 248 Montevideo MN, 56265 United States	Electronic Service		No	M-25-142
40	Gabriel	Chan	gabechan@umn.edu			130 Hubert H. Humphrey Center 301 19th Ave S Minneapolis MN, 55455 United States	Electronic Service		No	M-25-142
41	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
42	Eric	Clement	eclement@mnpower.com	Minnesota Power		null null, null United States	Electronic Service		No	M-25-142
43	City	Clerk	gregg.engdahl@ci.stcloud.mn.us	City of St. Cloud		400 Second St. S St. Cloud MN, 56301 United States	Electronic Service		No	M-25-142
44	Joshua	Cohen	josh.cohen@swtchenergy.com	SWTCH Energy, Inc.		Greentown Labs 444 Somerville Avenue Somerville MA, 02143 United States	Electronic Service		No	M-25-142
45	Kenneth A.	Colburn	kcolburn@symbioticstrategies.com	Symbiotic Strategies, LLC		26 Winton Road Meredith NH, 32535413 United States	Electronic Service		No	M-25-142
46	Steve	Coleman	stevecolemanpuma@gmail.com			231 Winifred St W Saint Paul MN, 55107 United States	Electronic Service		No	M-25-142
47	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	M-25-142
48	Kevin	Cray	kevin@communitysolaraccess.org	CCSA		1644 Platte St Denver CO, 80202 United States	Electronic Service		No	M-25-142
49	George	Crocker	gwillc@nawo.org	North American Water Office		5093 Keats Avenue Lake Elmo MN, 55042 United States	Electronic Service		No	M-25-142
50	Stacy	Dahl	sdahl@minnkota.com	Minnkota Power Cooperative, Inc.		5301 32nd Ave S Grand Forks ND, 58201 United States	Electronic Service		No	M-25-142
51	George	Damian	gdamian@cleanenergyeconomymn.org	Clean Energy Economy MN		13713 Washburn Ave S Burnsville MN, 55337 United States	Electronic Service		No	M-25-142
52	Lisa	Daniels	lisadaniels@windustry.org	Windustry		201 Ridgewood Ave Minneapolis MN, 55403 United States	Electronic Service		No	M-25-142
53	James	Darabi	james.darabi@solarfarm.com			2355 Fairview Ave #101 St. Paul MN, 55113 United States	Electronic Service		No	M-25-142
54	Cody	Davis	cdavis@epeconsulting.com	Electric Power Engineers (ELPC/VS)		null null, null United States	Electronic Service		No	M-25-142
55	Danielle	DeMarre	danielle.demarre@allenergysolar.com	All Energy Solar		1264 Energy Lane St Paul MN, 55108 United States	Electronic Service		No	M-25-142
56	Timothy	DenHerder Thomas	timothy@cooperativeenergyfutures.com	Cooperative Energy Futures		3500 Bloomington Ave. S Minneapolis MN, 55407 United States	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
57	James	Denniston	james.r.denniston@xcelenergy.com	Xcel Energy Services, Inc.		414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States	Electronic Service		No	M-25-142
58	Curt	Dieren	curt.dieren@dgr.com	L&O Power Cooperative		1302 S Union St Rock Rapids IA, 51246 United States	Electronic Service		No	M-25-142
59	Cheryl	Dietrich	cheryl.dietrich@nexteraenergy.com	NextEra Energy Resources, LLC		700 Universe Blvd E1W/JB Juno Beach FL, 33408 United States	Electronic Service		No	M-25-142
60	Diane	Dietz	diane.dietz@state.mn.us		Department of Commerce	Suite 280 85 Seventh Place East St. Paul MN, 55101-2198 United States	Electronic Service		No	M-25-142
61	Ian M.	Dobson	ian.m.dobson@xcelenergy.com	Xcel Energy		414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States	Electronic Service		No	M-25-142
62	Kristin	Dolan	kdolan@meeker.coop	Meeker Cooperative Light & Power Assn		1725 US Hwy 12 E. Ste 100 Litchfield MN, 55355 United States	Electronic Service		No	M-25-142
63	Renee	Doyle	guydoyleelectric@gmail.com	Doyle Electric Inc.		PO Box 295 Amboy MN, 56010 United States	Electronic Service		No	M-25-142
64	Carlton	Doyle Fontaine	carlton.doyle.fontaine@senate.mn	MN Senate		75 Rev Dr Martin Luther King Jr Blvd Room G-17 St Paul MN, 55155 United States	Electronic Service		No	M-25-142
65	Adam	Duininck	aduininck@ncsrcc.org	North Central States Regional Council of Carpenters		700 Olive Street St. Paul MN, 55130 United States	Electronic Service		No	M-25-142
66	Scott	Dunbar	sdunbar@kfwlaw.com	Keyes & Fox LLP		1580 Lincoln St Ste 880 Denver CO, 80203 United States	Electronic Service		No	M-25-142
67	John R.	Dunlop, P.E.	jdunlop@resminn.com	Renewable Energy Services		Suite 300 448 Morgan Ave. S. Minneapolis MN, 55405-2030 United States	Electronic Service		No	M-25-142
68	Hannah	Dunn	hannah.dunn@oakdalemn.gov	City of Oakdale		1584 Hadley Ave N Oakdale MN, 55104 United States	Electronic Service		No	M-25-142
69	Kelly	Dybdahl	kdybdahl@llec.coop	Lyon-Lincoln Electric Cooperative, Inc.		205 W. Hwy. 14 Tyler MN, 56178 United States	Electronic Service		No	M-25-142
70	Brian	Edstrom	briane@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota St Ste W1360 Saint Paul MN, 55101 United States	Electronic Service		No	M-25-142
71	Dick	Edwards	dedwards@ci.maple-grove.mn.us	City of Maple Grove		12800 Arbor Lakes Parkway	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						P O Box 1180 Maple Grove MN, 55311-6180 United States				
72	William	Ehrlich	wehrlich@tesla.com	Tesla, Inc.		3500 Deer Creek Rd Palo Alto CA, 94304 United States	Electronic Service		No	M-25-142
73	Kristen	Eide Tollefson	healingsystems69@gmail.com	R-CURE		28477 N Lake Ave Frontenac MN, 55026-1044 United States	Electronic Service		No	M-25-142
74	Bob	Eleff	bob.eleff@house.mn	Regulated Industries Cmte		100 Rev Dr Martin Luther King Jr Blvd Room 600 St. Paul MN, 55155 United States	Electronic Service		No	M-25-142
75	R. Neal	Elliot	rnelliott@aceee.org	American Council for an Energy-Efficient Economy		ACEEE 529 14th St NW Ste 600 Washington DC, 20045 United States	Electronic Service		No	M-25-142
76	Nadav	Enbar	nenbar@epri.com	EPRI		1117 Quince Ave Boulder CO, 80304 United States	Electronic Service		No	M-25-142
77	John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance		2720 E. 22nd St Institute for Local Self-Reliance Minneapolis MN, 55406 United States	Electronic Service		No	M-25-142
78	Christian	Fenstermacher	christian.fenstermacher@owatonnautilities.com	Owatonna Municipal Public Utilities		PO Box 800 208 S Walnut Ave Owatonna MN, 55060 United States	Electronic Service		No	M-25-142
79	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	M-25-142
80	Christine	Fox	cfox@itasca-mantrap.com	Itasca-Mantrap Coop. Electric Assn.		PO Box 192 Park Rapids MN, 56470 United States	Electronic Service		No	M-25-142
81	Kornbaum	Frank	fkornbaum@mnpower.com			null null, null United States	Electronic Service		No	M-25-142
82	Nathan	Franzen	nathan@nationalgridrenewables.com	Geronimo Energy, LLC		8400 Normandale Lake Blvd Ste 1200 Bloomington MN, 55437 United States	Electronic Service		No	M-25-142
83	David	Freestate	dfreestate@epri.com	EPRI		942 Corridor Park Blvd Knoxville TN, 37932 United States	Electronic Service		No	M-25-142
84	Katelyn	Frye	kfrye@mnpower.com	Minnesota Power		30 W Superiot St Duluth MN, 55802-2093 United States	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
85	Jessica	Fyhrie	jfyhrie@otpc.com	Otter Tail Power Company		PO Box 496 Fergus Falls MN, 56538-0496 United States	Electronic Service		No	M-25-142
86	Edward	Garvey	garveyed@aol.com	Residence		32 Lawton St Saint Paul MN, 55102 United States	Electronic Service		No	M-25-142
87	Allen	Gleckner	gleckner@fresh-energy.org	Fresh Energy		408 St. Peter Street Ste 350 Saint Paul MN, 55102 United States	Electronic Service		No	M-25-142
88	Allen	Gleckner	agleckner@elpc.org	Environmental Law & Policy Center		35 E. Wacker Drive, Suite 1600 Suite 1600 Chicago IL, 60601 United States	Electronic Service		No	M-25-142
89	Jenny	Glumack	jenny@mrea.org	Minnesota Rural Electric Association		11640 73rd Ave N Maple Grove MN, 55369 United States	Electronic Service		No	M-25-142
90	Sean	Gosiewski	sean@afors.org	Alliance for Sustainability		2801 21st Ave S Ste 100 Minneapolis MN, 55407 United States	Electronic Service		No	M-25-142
91	Scott	Greenbert	scott@nautilussolar.com	Nautilus Solar Energy, LLC		396 Springfield Aver, Ste 2 Summit NJ, 07901 United States	Electronic Service		No	M-25-142
92	Sarah	Groeber	sgroeber@redwoodelectric.com	Redwood Electric Cooperative		60 Pine St Clements MN, 56224 United States	Electronic Service		No	M-25-142
93	Tim	Gross	tgross@fuelingmn.com	Fueling Minnesota		3244 Rice Street St. Paul MN, 55126 United States	Electronic Service		No	M-25-142
94	Cody	Gustafson	cgustafson@mnpower.com			null null, null United States	Electronic Service		No	M-25-142
95	Tom	Guttormson	tom.guttormson@connexusenergy.com	Connexus Energy		14601 Ramsey Blvd Ramsey MN, 55303 United States	Electronic Service		No	M-25-142
96	Natalie	Haberman	townsend@fresh-energy.org	Fresh Energy		408 St Peter St # 350 St. Paul MN, 55102 United States	Electronic Service		No	M-25-142
97	Nicholas	Haeg	haeg@fresh-energy.org			12298 Bass Trail Sauk Centre MN, 56378 United States	Electronic Service		No	M-25-142
98	James	Haler	jhaler@southcentralelectric.com	South Central Electric Association		71176 Tiell Dr P. O. Box 150 St. James MN, 56081 United States	Electronic Service		No	M-25-142
99	Joe	Halso	joe.halso@sierraclub.org	Sierra Club		1536 Wynkoop St Ste 200 Denver CO, 80202 United States	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
115	Samantha	Houston	shouston@ucsusa.org	Union of Concerned Scientists		1825 K St. NW Ste 800 Washington DC, 20006 United States	Electronic Service		No	M-25-142
116	Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	M-25-142
117	Jan	Hubbard	jan.hubbard@comcast.net			7730 Mississippi Lane Brooklyn Park MN, 55444 United States	Electronic Service		No	M-25-142
118	Dean	Hunter	dean.hunter@state.mn.us		Minnesota Department of Labor & Industry	443 Lafayette Rd N St. Paul MN, 55155-4341 United States	Electronic Service		No	M-25-142
119	Reuben	Hunter	bhunter@madisonei.com	Madison Energy Investments		8100 Boone Blvd Suite 430 Vienna VA, 22182 United States	Electronic Service		No	M-25-142
120	Casey	Jacobson	cjacobson@bepc.com	Basin Electric Power Cooperative		1717 East Interstate Avenue Bismarck ND, 58501 United States	Electronic Service		No	M-25-142
121	John S.	Jaffray	jjaffray@jjrpower.com	JJR Power		350 Highway 7 Suite 236 Excelsior MN, 55331 United States	Electronic Service		No	M-25-142
122	Robert	Jagusch	rjagusch@mmua.org	MMUA		3025 Harbor Lane N Minneapolis MN, 55447 United States	Electronic Service		No	M-25-142
123	Chris	Jarosch	chris@carrcreekelectricservice.com	Carr Creek Electric Service, LLC		209 Sommers Street North Hudson WI, 54016 United States	Electronic Service		No	M-25-142
124	Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law		2950 Yellowtail Ave. Marathon FL, 33050 United States	Electronic Service		No	M-25-142
125	Richard	Johnson	rick.johnson@lawmoss.com	Moss & Barnett		150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
126	Sarah	Johnson Phillips	sjphillips@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
127	Nate	Jones	njones@hcpd.com	Heartland Consumers Power		PO Box 248 Madison SD, 57042 United States	Electronic Service		No	M-25-142
128	Philip	Jones	phil@evtransportationalliance.org			1402 Third Ave Ste 1315 Seattle WA, 98101 United States	Electronic Service		No	M-25-142
129	Julie	Jorgensen	julie@greenmark.us.com	Greenmark Solar		4630 Quebec Ave N New Hope	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						MN, 55428-4973 United States				
130	Kevin	Joyce	kjoyce@tesla.com			null null, null United States	Electronic Service		No	M-25-142
131	Mahmoud	Kabalan	mahmoud.kabalan@stthomas.edu	University of St Thomas		2115 Summit Ave. Mail OSS100 School of Engineering Saint Paul MN, 55105 United States	Electronic Service		No	M-25-142
132	Camille	Kadoch	ckadoch@raponline.org	Regulatory Assistance Project		50 State Street Suite 3 Montpelier VT, 05602 United States	Electronic Service		No	M-25-142
133	Cliff	Kaehler	cliff.kaehler@novelenergy.biz	Novel Energy Solutions LLC		4710 Blaylock Way Inver Grove Heights MN, 55076 United States	Electronic Service		No	M-25-142
134	Ralph	Kaehler	ralph.kaehler@gmail.com			13700 Co. Rd. 9 Eyota MN, 55934 United States	Electronic Service		No	M-25-142
135	Michael	Kampmeyer	mkampmeyer@a-e-group.com	AEG Group, LLC		260 Salem Church Road Sunfish Lake MN, 55118 United States	Electronic Service		No	M-25-142
136	Nick	Kaneski	nick.kaneski@enbridge.com	Enbridge Energy Company, Inc.		11 East Superior St Ste 125 Duluth MN, 55802 United States	Electronic Service		No	M-25-142
137	Jack	Kegel	jkegel@mmua.org	MMUA		3025 Harbor Lane N Suite 400 Plymouth MN, 55447-5142 United States	Electronic Service		No	M-25-142
138	William	Kenworthy	will@votesolar.org			1 South Dearborn St Ste 2000 Chicago IL, 60603 United States	Electronic Service		No	M-25-142
139	Samuel B.	Ketchum	sketchum@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
140	Tom	Key	tkey@epri.com	EPRI		942 Corridor Park Blvd Knoxville TN, 37932 United States	Electronic Service		No	M-25-142
141	Bobby	King	bking@solarunitedneighbors.org	Solar United Neighbors		3140 43rd Ave S Minneapolis MN, 55406 United States	Electronic Service		No	M-25-142
142	Jack	Kluempke	jack.kluempke@state.mn.us		Department of Commerce	85 7th Place East Suite 600 St. Paul MN, 55101 United States	Electronic Service		No	M-25-142
143	Aaron	Knoll	aknoll@greeneespel.com	Greene Espel PLLP		222 South Ninth Street Suite 2200 Minneapolis	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						MN, 55402 United States				
144	Steve	Kosbab	skosbab@meeker.coop	Meeker Cooperative Light and Power		1725 US Hwy 12 E Litchfield MN, 55355 United States	Electronic Service		No	M-25-142
145	Nathan	Kostiuk	nathan.c.kostiuk@xcelenergy.com	Xcel Energy		414 Nicollet Mall, 401-07 Minneapolis MN, 55401 United States	Electronic Service		No	M-25-142
146	Brian	Krambeer	bkrambeer@mienergy.coop	MiEnergy Cooperative		PO Box 626 31110 Cooperative Way Rushford MN, 55971 United States	Electronic Service		No	M-25-142
147	Michael	Krause	michaelkrause61@yahoo.com			1200 Plymouth Avenue Minneapolis MN, 55411 United States	Electronic Service		No	M-25-142
148	Michael	Krikava	mkrikava@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S 8th St Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
149	Corrina	Kumpe	ckumpe@mysunshare.com			null null, null United States	Electronic Service		No	M-25-142
150	Matthew	Lacey	mlacey@grenergy.com	Great River Energy		12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States	Electronic Service		No	M-25-142
151	James D.	Larson	james.larson@avantenergy.com	Avant Energy Services		220 S 6th St Ste 1300 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
152	Mark	Larson	mlarson@meeker.coop	Meeker Coop Light & Power Assn		1725 Highway 12 E Ste 100 Litchfield MN, 55355 United States	Electronic Service		No	M-25-142
153	Burnell	Lauer	blauer.sundial@gmail.com	Sundial Solar		3209 W. 76th St #305 Edina MN, 55435 United States	Electronic Service		No	M-25-142
154	Dean	Leischow	dean@sunrisenrg.com	Sunrise Energy Ventures		315 Manitoba Ave Ste 200 Wayzata MN, 55391 United States	Electronic Service		No	M-25-142
155	Annie	Levenson Falk	annielf@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota Street, Suite W1360 St. Paul MN, 55101 United States	Electronic Service		No	M-25-142
156	Benjamin	Levine	blevine@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	M-25-142
157	Becky	Li	bli@rmi.org			17 State St 25th floor unit 2500 New York NY,	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						10004 United States				
158	Amy	Liberkowski	amy.a.liberkowski@xcelenergy.com	Xcel Energy		414 Nicollet Mall 7th Floor Minneapolis MN, 55401-1993 United States	Electronic Service		No	M-25-142
159	Carl	Linville	clinville@raponline.org			50 State Street Suite #3 Montpelier VT, 05602 United States	Electronic Service		No	M-25-142
160	Phillip	Lipetsky	greenenergyproductsllc@gmail.com	Green Energy Products		PO Box 108 Springfield MN, 56087 United States	Electronic Service		No	M-25-142
161	Jody	Londo	jody.l.londo@xcelenergy.com	Xcel Energy		414 Nicollet Mall 7th Floor Minneapolis MN, 55401-1993 United States	Electronic Service		No	M-25-142
162	Susan	Ludwig	sludwig@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	M-25-142
163	Brian	Lydic	brian@irecusa.org	Interstate Renewable Energy Council, Inc.		PO Box 1156 Latham NY, 12110-1156 United States	Electronic Service		No	M-25-142
164	Madeline	Lydon	madeline.k.lydon@xcelenergy.com	Xcel Energy		401 NICOLLET MALL Floor 7 Minneapolis MN, 55401 United States	Electronic Service		No	M-25-142
165	Richard	Macke	macker@powersystem.org	Power System Engineering, Inc.		10710 Town Square Dr NE Ste 201 Minneapolis MN, 55449 United States	Electronic Service		No	M-25-142
166	Alice	Madden	alice@communitypowermn.org	Community Power		2720 E 22nd St Minneapolis MN, 55406 United States	Electronic Service		No	M-25-142
167	Alex	Magerko	amagerko@epri.com	EPRI		942 Corridor Park Blvd Knoxville TN, 37932 United States	Electronic Service		No	M-25-142
168	Kavita	Maini	kmains@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	M-25-142
169	Tom	Mammen	thomas.j.mammen@xcelenergy.com	Xcel Energy		null null, null United States	Electronic Service		No	M-25-142
170	Discovery	Manager	discoverymanager@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	M-25-142
171	Christine	Marquis	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall MN1180-07-MCA Minneapolis	Electronic Service		Yes	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						MN, 55401 United States				
172	Gregg	Mast	gmast@cleanenergyeconomymn.org	Clean Energy Economy Minnesota		4808 10th Avenue S Minneapolis MN, 55417 United States	Electronic Service		No	M-25-142
173	Jason	Maur	jason.maur@renesolapower.com	Renesola Power Holdings, LLC		850 Canal Street 3rd Floor Stamford CT, 06902 United States	Electronic Service		No	M-25-142
174	Erica	McConnell	emcconnell@elpc.org	Environmental Law & Policy Center		35 E. Wacker Drive, Suite 1600 Chicago IL, 60601 United States	Electronic Service		No	M-25-142
175	Jess	McCullough	jmccullough@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	M-25-142
176	Sara G	McGrane	smcgrane@felhaber.com	Felhaber Larson		220 S 6th St Ste 2200 Minneapolis MN, 55420 United States	Electronic Service		No	M-25-142
177	Natalie	McIntire	natalie.mcintire@gmail.com	Wind on the Wires		570 Asbury St Ste 201 Saint Paul MN, 55104-1850 United States	Electronic Service		No	M-25-142
178	Matthew	Melewski	matthew@theboutiquefirm.com	Nokomis Energy LLC & Ole Solar LLC		2639 Nicollet Ave Ste 200 Minneapolis MN, 55408 United States	Electronic Service		No	M-25-142
179	Thomas	Melone	thomas.melone@allcous.com	Minnesota Go Solar LLC		222 South 9th Street Suite 1600 Minneapolis MN, 55120 United States	Electronic Service		No	M-25-142
180	Michael	Menzel	mike.m@sagiliti.com	Sagiliti		23505 Smithtown Rd. Suite 280 Excelsior MN, 55331 United States	Electronic Service		No	M-25-142
181	Tim	Mergen	tmergen@meeker.coop	Meeker Cooperative Light And Power		1725 US Hwy 12 E. Suite 100 PO Box 68 Litchfield MN, 55355 United States	Electronic Service		No	M-25-142
182	Pontius	Mike	mpontius@mnpower.com			null null, null United States	Electronic Service		No	M-25-142
183	Brian	Millberg	fwengineering@comcast.net			695 Grand Ave #222 Saint Paul MN, 55105 United States	Electronic Service		No	M-25-142
184	Luther	Miller	luther.c.miller@xcelenergy.com	Xcel Energy		null null, null United States	Electronic Service		No	M-25-142
185	Marc	Miller	mmiller@soltage.com	Soltage, LLC		66 York Street, 5th Floor Jersey City NJ, 07302 United States	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
186	Stacy	Miller	stacy.miller@minneapolismn.gov	City of Minneapolis		350 S. 5th Street Room M 301 Minneapolis MN, 55415 United States	Electronic Service		No	M-25-142
187	Marcus	Mills	marcus@communitypowermn.org	Community Power		2720 E 22nd St Minneapolis MN, 55406 United States	Electronic Service		No	M-25-142
188	Darrick	Moe	darrick@mrea.org	Minnesota Rural Electric Association		11640 73rd Ave N Maple Grove MN, 55369 United States	Electronic Service		No	M-25-142
189	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	M-25-142
190	Dalene	Monsebroten	dalene.monsebroten@nmpagency.com	Northern Municipal Power Agency		123 2nd St W Thief River Falls MN, 56701 United States	Electronic Service		No	M-25-142
191	Brian	Monson	brian.t.monson@xcelenergy.com	Xcel Energy		null null, null United States	Electronic Service		No	M-25-142
192	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
193	Susan	Mudd	smudd@elpc.org	Environmental Law and Policy Center		35 E. Wacker Drive, Suite 1600 Chicago IL, 60601 United States	Electronic Service		No	M-25-142
194	Pouya	Najmaie	najm0001@gmail.com	Cooperative Energy Futures		3416 16th Ave S Minneapolis MN, 55407 United States	Electronic Service		No	M-25-142
195	Alex	Nelson	anelson@dakotaelectric.com	Dakota Electric Association		4300 220nd St Farmington MN, 55024 United States	Electronic Service		No	M-25-142
196	Anthony	Nelson	amnelson@otpc.com	Ottertail Power		53233 Sunrise Ln Park Rapids MN, 56470 United States	Electronic Service		No	M-25-142
197	Ben	Nelson	benn@cmpasgroup.org	CMPMA		459 South Grove Street Blue Earth MN, 56013 United States	Electronic Service		No	M-25-142
198	Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment		212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States	Electronic Service		No	M-25-142
199	Darin	Nelson	dnelson@minnetonkamn.gov	City of Minnetonka		14600 Minnetonka Blvd Minnetonka MN, 55345 United States	Electronic Service		No	M-25-142
200	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
201	Sephra	Ninow	sephra.ninow@energycenter.org	Center for Sustainable		426 17th Street, Suite	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
				Energy		700 Oakland CA, 94612 United States				
202	Michael	Noble	noble@fresh-energy.org	Fresh Energy		408 Saint Peter St Ste 350 Saint Paul MN, 55102 United States	Electronic Service		No	M-25- 142
203	Rolf	Nordstrom	rnordstrom@gpisd.net	Great Plains Institute		2801 21ST AVE S STE 220 Minneapolis MN, 55407- 1229 United States	Electronic Service		No	M-25- 142
204	Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company		200 1st Street SE PO Box 351 Cedar Rapids IA, 52406- 0351 United States	Electronic Service		No	M-25- 142
205	David	O'Brien	david.obrien@navigant.com	Navigant Consulting		77 South Bedford St Ste 400 Burlington MA, 01803 United States	Electronic Service		No	M-25- 142
206	Logan	O'Grady	logrady@mnseia.org	Minnesota Solar Energy Industries Association		2288 University Ave W St. Paul MN, 55114 United States	Electronic Service		No	M-25- 142
207	Patty	O'Keefe	patty.okeefe@sierraclub.org			2525 Emerson Ave S Apt 2 Minneapolis MN, 55405 United States	Electronic Service		No	M-25- 142
208	Timothy	O'Leary	toleary@llec.coop	Lyon-Lincoln Electric Cooperative, Inc		P.O. Box 639 Tyler MN, 56178-0639 United States	Electronic Service		No	M-25- 142
209	Jeff	O'Neill	jeff.oneill@ci.monticello.mn.us	City of Monticello		505 Walnut Street Suite 1 Monticello MN, 55362 United States	Electronic Service		No	M-25- 142
210	Matthew	Olsen	molsen@otpc.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	M-25- 142
211	Russell	Olson	rolson@hcpd.com	Heartland Consumers Power District		PO Box 248 Madison SD, 57042-0248 United States	Electronic Service		No	M-25- 142
212	Wendi	Olson	wolson@otpc.com	Otter Tail Power Company		215 South Cascade Fergus Falls MN, 56537 United States	Electronic Service		No	M-25- 142
213	Carol A.	Overland	overland@legalelectric.org	Legalelectric - Overland Law Office		1110 West Avenue Red Wing MN, 55066 United States	Electronic Service		No	M-25- 142
214	Bethany	Owen	bowen@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	M-25- 142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
215	Cezar	Panait	cezar.panait@state.mn.us		Public Utilities Commission	121 7th Place East Suite 350 St. Paul MN, 55101 United States	Electronic Service		No	M-25-142
216	Dan	Patry	dpatry@sunedison.com	SunEdison		600 Clipper Drive Belmont CA, 94002 United States	Electronic Service		No	M-25-142
217	Jeffrey C	Paulson	jeff.jcplaw@comcast.net	Paulson Law Office, Ltd.		4445 W 77th Street Suite 224 Edina MN, 55435 United States	Electronic Service		No	M-25-142
218	Dean	Pawlowski	dpawlowski@otpc.com	Otter Tail Power Company		PO Box 496 215 S. Cascade St. Fergus Falls MN, 56537-0496 United States	Electronic Service		No	M-25-142
219	Susan	Peirce	susan.peirce@state.mn.us		Department of Commerce	85 Seventh Place East St. Paul MN, 55101 United States	Electronic Service		No	M-25-142
220	Mary Beth	Peranteau	mperanteau@fredlaw.com	Fredrikson & Byron, P.A.		44 East Mifflin Street Suite 1000 Madison WI, 53703 United States	Electronic Service		No	M-25-142
221	Jennifer	Peterson	jjpeterson@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	M-25-142
222	Wess	Pfaff	wes.pfaff@mrenergy.com			null null, null United States	Electronic Service		No	M-25-142
223	Ryan	Pierce	ryan.m.pierce@xcelenergy.com	Xcel Energy		null null, null United States	Electronic Service		No	M-25-142
224	Morgan	Pitz	morgan.pitz@us-solar.com	US Solar		100 N 6th St #410B Minneapolis MN, 55403 United States	Electronic Service		No	M-25-142
225	Hannah	Polikov	hpolikov@aee.net	Advanced Energy Economy Institute		1000 Vermont Ave, Third Floor Washington DC, 20005 United States	Electronic Service		No	M-25-142
226	Crystal	Pomerleau	crystal.r.pomerleau@xcelenergy.com	Xcel		null null, null United States	Electronic Service		No	M-25-142
227	Kristel	Porter	kristel@mnrenewablenow.org	MN Renewable Now		null null, null United States	Electronic Service		No	M-25-142
228	Paula	Prahl	paula.prahl@dominiuminc.com	Dominium		2905 Northwest Blvd Ste 150 Plymouth MN, 55441 United States	Electronic Service		No	M-25-142
229	Kevin	Pranis	kpranis@liunagroc.com	Laborers' District Council of MN and ND		81 E Little Canada Road St. Paul MN, 55117 United States	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
230	David G.	Prazak	dprazak@otpc.com	Otter Tail Power Company		P.O. Box 496 215 South Cascade Street Fergus Falls MN, 56538-0496 United States	Electronic Service		No	M-25-142
231	Matt	Privratsky	matt@nokomisenergy.com	Nokomis Energy		2639 Nicollet Ave Suite 200 Minneapolis MN, 55408 United States	Electronic Service		No	M-25-142
232	Elizabeth	Psihos	elizabeth.psihos@idealenergies.com			null null, null United States	Electronic Service		No	M-25-142
233	Bridget	Rathsack	bridget.rathsack@burnsvillemn.gov	City of Burnsville, MN		100 Civic Center Parkway Burnsville MN, 55337 United States	Electronic Service		No	M-25-142
234	Peter	Reese	preese@sundialsolarenergy.com	Sundial Energy, LLC		3363 Republic Ave Saint Louis Park MN, 55426 United States	Electronic Service		No	M-25-142
235	Generic Notice	Regulatory	regulatory_filing_coordinators@otpc.com	Otter Tail Power Company		215 S. Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	M-25-142
236	John C.	Reinhardt		Laura A. Reinhardt		3552 26th Ave S Minneapolis MN, 55406 United States	Paper Service		No	M-25-142
237	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	M-25-142
238	Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy		26 E Exchange St, Ste 206 St. Paul MN, 55101-1667 United States	Electronic Service		No	M-25-142
239	Micah	Revell	micah.revell@stinson.com	Stinson LLP		50 South Sixth St Ste 2600 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
240	Michael	Riewer	mriewer@otpc.com	Otter Tail Power Company		PO Box 4496 Fergus Falls MN, 56538-0496 United States	Electronic Service		No	M-25-142
241	Jonathan	Roberts	jroberts@soltage.com	Soltage		66 York St 5th Floor Jersey City NJ, 07302 United States	Electronic Service		No	M-25-142
242	Noah	Roberts	nroberts@cleanpower.org	Energy Storage Association		1155 15th St NW, Ste 500 Washington DC, 20005 United States	Electronic Service		No	M-25-142
243	Kristi	Robinson	krobinson@star-energy.com	STAR Energy Services, LLC		1401 South Broadway Pelican Rapids MN,	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						56572 United States				
244	Daniel	Rogers	dan@nokomispartners.com			2639 Nicollet Ave Ste 200 Minneapolis MN, 55408 United States	Electronic Service		No	M-25-142
245	Michael	Ruiz	michael.ruiz@xcelenergy.com	Xcel Energy		null null, null United States	Electronic Service		No	M-25-142
246	Nathaniel	Runke	nrunke@local49.org			611 28th St. NW Rochester MN, 55901 United States	Electronic Service		No	M-25-142
247	Darla	Ruschen	d.ruschen@bcrea.coop	Brown County Rural Electrical Association		PO Box 529 24386 State Highway 4 Sleepy Eye MN, 56085 United States	Electronic Service		No	M-25-142
248	Delaney	Russell	delaney@mnipl.org	Just Solar Coalition		4407 E Lake Street Minneapolis MN, 55407 United States	Electronic Service		No	M-25-142
249	Kwadwo	Safo	ksafo@dakotaelectric.com	Dakota Electric Association		null null, null United States	Electronic Service		No	M-25-142
250	Robert K.	Sahr	bsahr@eastriver.coop	East River Electric Power Cooperative		P.O. Box 227 Madison SD, 57042 United States	Electronic Service		No	M-25-142
251	Ian	SantosMeeker	ians@ips-solar.com	IPS Solar		null null, null United States	Electronic Service		No	M-25-142
252	Joseph L	Sathe	jsathe@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
253	Kenric	Scheevel	kjs@dairynet.com	Dairyland Power Cooperative		3200 East Ave S PO Box 817 La Crosse WI, 54602 United States	Electronic Service		No	M-25-142
254	Dean	Schiro	dean.e.schiro@xcelenergy.com	Xcel Energy		null null, null United States	Electronic Service		No	M-25-142
255	Jacob J.	Schlesinger	jschlesinger@keyesfox.com	Keyes & Fox LLP		1580 Lincoln St Ste 880 Denver CO, 80203 United States	Electronic Service		No	M-25-142
256	Jeff	Schoenecker	jschoenecker@dakotaelectric.com	Dakota Electric Association		4300 220th Street W Farmington MN, 55024 United States	Electronic Service		No	M-25-142
257	Peter	Scholtz	peter.scholtz@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota Street St. Paul MN, 55101-2131 United States	Electronic Service		No	M-25-142
258	Kay	Schraeder	kschraeder@minnkota.com	Minnkota Power		5301 32nd Ave S Grand Forks ND, 58201 United States	Electronic Service		No	M-25-142
259	Matthew	Schuerger	matthew.schuerger@state.mn.us		Public Utilities Commission	121 7th Place East Suite 350 St. Paul MN,	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						55101 United States				
260	Ronald J.	Schwartau	rschwartau@noblesce.com	Nobles Electric Cooperative		22636 U.S. Hwy. 59 Worthington MN, 56187 United States	Electronic Service		No	M-25-142
261	Rob	Scott Hovland	rob.scott-hovland@mrenergy.com	Missouri River Energy Services		3724 W Avera Dr PO Box 88920 Sioux Falls SD, 57109-8920 United States	Electronic Service		No	M-25-142
262	Emma	Searson	esearson@solarunitedneighbors.org	Solar United Neighbors		646 S Barrington Ave Apt 101 Los Angeles CA, 90049 United States	Electronic Service		No	M-25-142
263	Dean	Sedgwick	sedgwick@itascapower.com	Itasca Power Company		PO Box 455 Spring Lake MN, 56680 United States	Electronic Service		No	M-25-142
264	Maria	Seidler	maria.seidler@dom.com	Dominion Energy Technology		120 Tredegar Street Richmond VA, 23219 United States	Electronic Service		No	M-25-142
265	David	Shaffer	david.shaffer@novelenergy.biz	Novel Energy Solutions		2303 Wycliff St Ste 300 St. Paul MN, 55114 United States	Electronic Service		No	M-25-142
266	Patricia	Sharkey	psharkey@environmentallawcounsel.com	Midwest Cogeneration Association.		180 N LaSalle St Ste 3700 Chicago IL, 60601 United States	Electronic Service		No	M-25-142
267	Christopher L.	Sherman	csherman@sherman-associates.com	Solar Holdings LLC		233 Park Ave S Ste 201 Minneapolis MN, 55415 United States	Electronic Service		No	M-25-142
268	Doug	Shoemaker	dougs@charter.net	Minnesota Renewable Energy		2928 5th Ave S Minneapolis MN, 55408 United States	Electronic Service		No	M-25-142
269	Felicia	Skaggs	fskaggs@meeker.coop	Meeker Cooperative Light & Power		1725 US Highway 12 E Suite 100 Litchfield MN, 55355 United States	Electronic Service		No	M-25-142
270	Glen	Skarbakka	glen@s-pllc.com	Skarbakka PLLC		5411 Bartlett Blvd Mound MN, 55364 United States	Electronic Service		No	M-25-142
271	Anne	Smart	anne.smart@chargepoint.com	ChargePoint, Inc.		254 E Hacienda Ave Campbell CA, 95008 United States	Electronic Service		No	M-25-142
272	Joshua	Smith	joshua.smith@sierraclub.org			85 Second St FL 2 San Francisco CA, 94105 United States	Electronic Service		No	M-25-142
273	Ken	Smith	ken.smith@ever-greenenergy.com	Ever Green Energy		305 Saint Peter St Saint Paul MN, 55102 United States	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
274	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.		76 W Kellogg Blvd St. Paul MN, 55102 United States	Electronic Service		No	M-25-142
275	Trevor	Smith	trevor.smith@avantenergy.com	Avant Energy, Inc.		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
276	Rafi	Sohail	rafi.sohail@centerpointenergy.com	CenterPoint Energy		800 LaSalle Avenue P.O. Box 59038 Minneapolis MN, 55459-0038 United States	Electronic Service		No	M-25-142
277	Beth	Soholt	bsoholt@cleangridalliance.org	Clean Grid Alliance		570 Asbury Street Suite 201 St. Paul MN, 55104 United States	Electronic Service		No	M-25-142
278	Marcia	Solie	m.solie@bcrea.coop	Brown County Rural Electrical Association		24386 State Hwy. 4, PO Box 529 Sleepy Eye MN, 56085 United States	Electronic Service		No	M-25-142
279	Braden	Solum	braden.solum@idealenergies.com	iDEAL Energies		5810 Nicollet Ave Minneapolis MN, 55419 United States	Electronic Service		No	M-25-142
280	Karl	Sonneman	karl17@hbci.com	Law Office of Karl W. Sonneman		111 Riverfront Suite 202 Winona MN, 55987 United States	Electronic Service		No	M-25-142
281	Brandon	Stamp	brandon.j.stamp@xcelenergy.com	Xcel Energy		401 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	M-25-142
282	Sky	Stanfield	stanfield@smwlaw.com	Shute, Mihaly & Weinberger		396 Hayes Street San Francisco CA, 94102 United States	Electronic Service		No	M-25-142
283	Russ	Stark	russ.stark@ci.stpaul.mn.us	City of St. Paul		Mayor's Office 15 W. Kellogg Blvd., Suite 390 Saint Paul MN, 55102 United States	Electronic Service		No	M-25-142
284	Byron E.	Starns	byron.starns@stinson.com	STINSON LLP		50 S 6th St Ste 2600 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
285	Kristin	Stastny	kstastny@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
286	Lindsey	Stegall	lindsey.stegall@evgo.com	EVgo Services, LLC		11835 W Olympic Blvd Ste 900E Los Angeles CA, 90064 United States	Electronic Service		No	M-25-142
287	Cary	Stephenson	cstephenson@otpc.com	Otter Tail Power Company		215 South Cascade Street	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Fergus Falls MN, 56537 United States				
288	Chad	Stevenson	chad.stevenson@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	445 Minnesota St. Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	M-25-142
289	Tammy	Sundbom	tsundbom@mnpower.com	Minnesota Power		null null, null United States	Electronic Service		No	M-25-142
290	Sherry	Swanson	sswanson@noblesce.com	Nobles Cooperative Electric		22636 US Highway 59 PO Box 788 Worthington MN, 56187 United States	Electronic Service		No	M-25-142
291	Boratha	Tan	btan@votesolar.org	Vote Solar		null null, null United States	Electronic Service		No	M-25-142
292	Bryant	Tauer	btauer@whe.org	Wright-Hennepin		6800 Electric Dr Rockford MN, 55373 United States	Electronic Service		No	M-25-142
293	Dean	Taylor	dtaylor@pluginamerica.org	Plug In America		6380 Wilshire Blvd, Suite 1000 Los Angeles CA, 90048 United States	Electronic Service		No	M-25-142
294	Whitney	Terrill	whitney@mnipl.org	Minnesota Interfaith Power & Light		null null, null United States	Electronic Service		No	M-25-142
295	Daniel	Tikk	daniel.tikk@state.mn.us		Department of Commerce	85 7th Place East Suite 280 Saint Paul MN, 55101 United States	Electronic Service		No	M-25-142
296	Kate	Tohme	ktohme@newleafenergy.com	New Leaf Energy		null null, null United States	Electronic Service		No	M-25-142
297	Stuart	Tommerdahl	stommerdahl@otpc.com	Otter Tail Power Company		215 S Cascade St PO Box 496 Fergus Falls MN, 56537 United States	Electronic Service		No	M-25-142
298	Taige	Tople	taige.d.tople@xcelenergy.com	Northern States Power Company dba Xcel Energy-Elec		414 Nicollet Mall 401 7th Floor Minneapolis MN, 55401 United States	Electronic Service		No	M-25-142
299	Jason	Topp	jason.topp@lumen.com	Qwest Communications Company, LLC.		200 S 5th St Ste 2200 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
300	Emma Marshall	Torres	emarshall-torres@convergentep.com			null null, null United States	Electronic Service		No	M-25-142
301	Zack	Townsend	zachary.townsend@brookfieldrenewable.com	Brookfield Renewable		200 Liberty St FL 14 New York NY, 10281 United States	Electronic Service		No	M-25-142
302	Pat	Treseler	pat.jcplaw@comcast.net	Paulson Law Office LTD		4445 W 77th Street Suite 224 Edina MN, 55435 United States	Electronic Service		No	M-25-142
303	Jeff	Triplett	triplettj@powersystem.org	MREA		10710 Town Square Dr	Electronic Service		No	M-25-142

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						NW St 201 Minneapolis MN, 55449 United States				
304	Adam	Tromblay	atromblay@noblesce.com	Nobles Cooperative Electric		22636 US Hwy. 59 P.O. Box 788 Worthington MN, 56187-0788 United States	Electronic Service		No	M-25-142
305	Lise	Trudeau	lise.trudeau@state.mn.us		Department of Commerce	85 7th Place East Suite 500 Saint Paul MN, 55101 United States	Electronic Service		No	M-25-142
306	Alan	Urban	alan.m.urban@xcelenergy.com	Xcel Energy		null null, null United States	Electronic Service		No	M-25-142
307	Matt	Van Arkel	mvanarkel@newleafenergy.com			55 Technology Drive Suite 102 Lowell MA, 01851 United States	Electronic Service		No	M-25-142
308	Gary	Van Winkle	gvanwinkle@mylegalaid.org	Mid-Minnesota Legal Aid		111 N Fifth St Ste 100 Minneapolis MN, 55403 United States	Electronic Service		No	M-25-142
309	John	Vaughn	nik@rreal.org	Rural Renewable Energy Alliance		3963 8th Street SW Backus MN, 55435 United States	Electronic Service		No	M-25-142
310	Ellen	Veazey	lveazey@solarunitedneighbors.org	Solar United Neighbors		1350 Connecticut Ave NW Ste 412 Washington DC, 20036 United States	Electronic Service		No	M-25-142
311	Sam	Villella	sdvillella@gmail.com			10534 Alamo Street NE Blaine MN, 55449 United States	Electronic Service		No	M-25-142
312	Curt	Volkmann	curt@newenergy-advisors.com	Fresh Energy		408 St Peter St Saint Paul MN, 55102 United States	Electronic Service		No	M-25-142
313	Wendy	Vorasane	wendy.vorasane@idealenergies.com			null null, null United States	Electronic Service		No	M-25-142
314	Robert J.V.	Vose	rvose@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	M-25-142
315	Stacy	Wahlund	swahlund@otpc.com	Otter Tail Power Company		215 S. Cascade St Fergus Falls MN, 56537 United States	Electronic Service		No	M-25-142
316	Sarah	Walinga	swalinga@solarcity.com	Energy Freedom Coalition		3055 Clearview Way San Mateo MN, 94402 United States	Electronic Service		No	M-25-142
317	Kevin	Walker	kwalker@beaconinterfaith.org	Beacon Interfaith Housing Collaborative		null null, null United States	Electronic Service		No	M-25-142

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330	Terry	Wolf	terry.wolf@mrenergy.com	Missouri River Energy Services		3724 W Avera Dr PO Box Sioux Falls SD, 57109-8920 United States	Electronic Service		No	M-25-142
331	Curtis	Zaun	curtis@cpzlaw.com			3254 Rice Street Little Canada MN, 55126 United States	Electronic Service		No	M-25-142
332	Brian	Zavesky	brianz@mrenergy.com	Missouri River Energy Services		3724 West Avera Drive P.O. Box 88920 Sioux Falls SD, 57108-8920 United States	Electronic Service		No	M-25-142
333	Christopher	Zibart	czibart@atcllc.com	American Transmission Company LLC		W234 N2000 Ridgeview Pkwy Court Waukesha WI, 53188-1022 United States	Electronic Service		No	M-25-142
334	Kurt	Zimmerman	kwz@ibew160.org	Local Union #160, IBEW		2909 Anthony Ln St Anthony Village MN, 55418-3238 United States	Electronic Service		No	M-25-142
335	Emily	Ziring	eziring@stlouispark.org	City of St. Louis Park		5005 Minnetonka Blvd St. Louis Park MN, 55416 United States	Electronic Service		No	M-25-142
336	Ari	Zwick	ari.zwick@state.mn.us		Department of Commerce	85 7th Place East Suite 280 Saint Paul MN, 55101 United States	Electronic Service		No	M-25-142