

Overview and Insights from  
Recent Market Research  
*MRL Subcommittee Meeting*

December 20, 2024

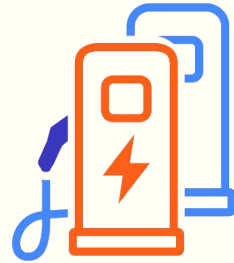


# Research and Insights to Fuel Our Work



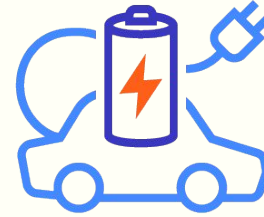
## Ava Community Energy

2x yearly survey to measure brand health (Existing territory + San Joaquin County)



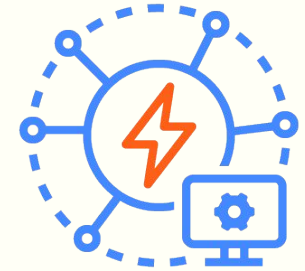
## DCFC

Qualitative and quantitative work to shape DCFC GTM



## Managed Charging

Pre-launch quant survey to measure brand awareness and sentiment conducted in September



## DERMs

Focus Groups to inform messaging and program design



# EV Charging Insights



# Managed Charging: Baseline Study

## Methodology

- Audience: EV and PHEV drivers in our territory
- Sample: 400 total online surveys divided into two demographically consistent sub-groups
  - Split A: will receive standard communications
  - Split B: will receive “heavy” communications
- Results in baseline reported in aggregate

## Key Findings

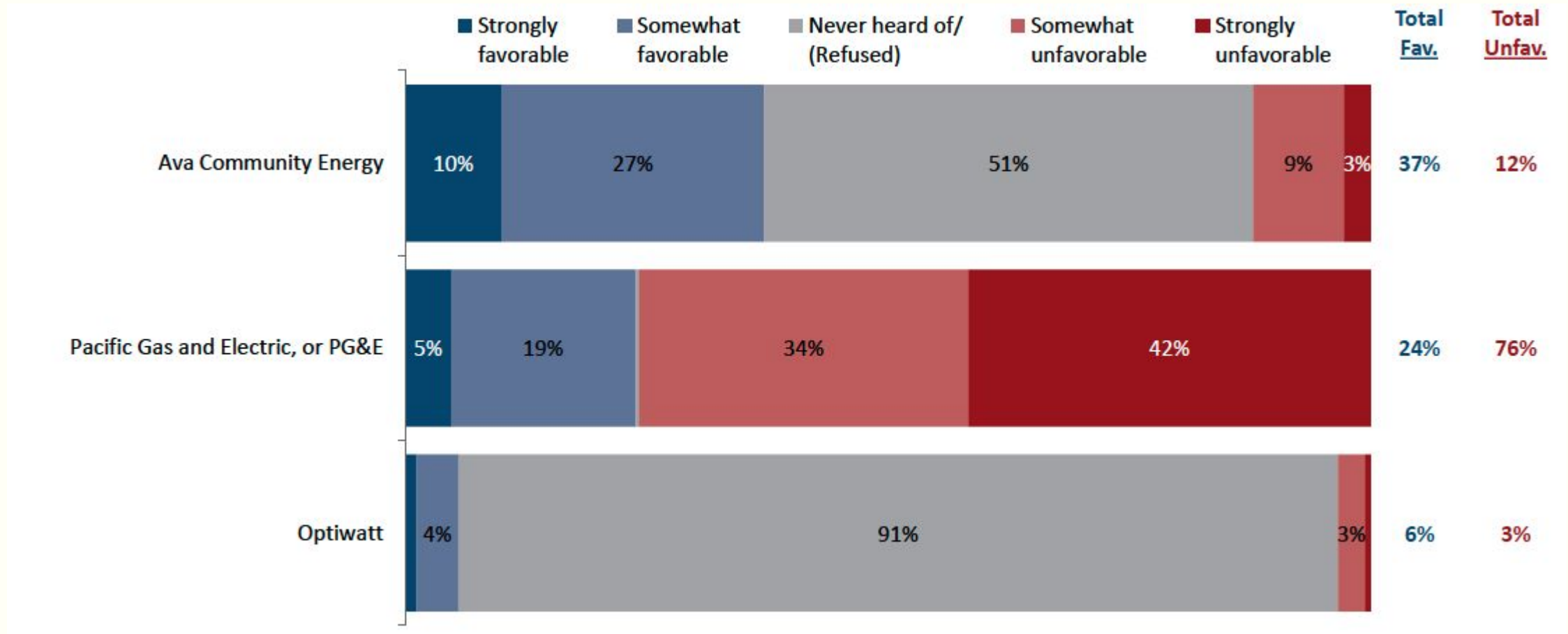
- Awareness of Ava is low, but those who are familiar hold broadly positive views of us
- After reading a short description, > ¾ of respondents expressed favorable opinions of CCAs; viewed Ava as a trustworthy provider of an essential service
- Few respondent had heard of managed charging before the survey; after learning more, 4 in 5 reported a favorable opinion of it
- Statements about cost savings, environmental benefits, and grid resiliency were most motivating
- Strong positive response to the MC program did not impact drivers’ perception of Ava





# Energy Provider Favorable Ratings

*While a majority of EV drivers aren't able to form an opinion of Ava, those who have generally view Ava favorably. PG&E carries significant unfavorable sentiments among drivers, and very few have heard of Optiwatt today.*

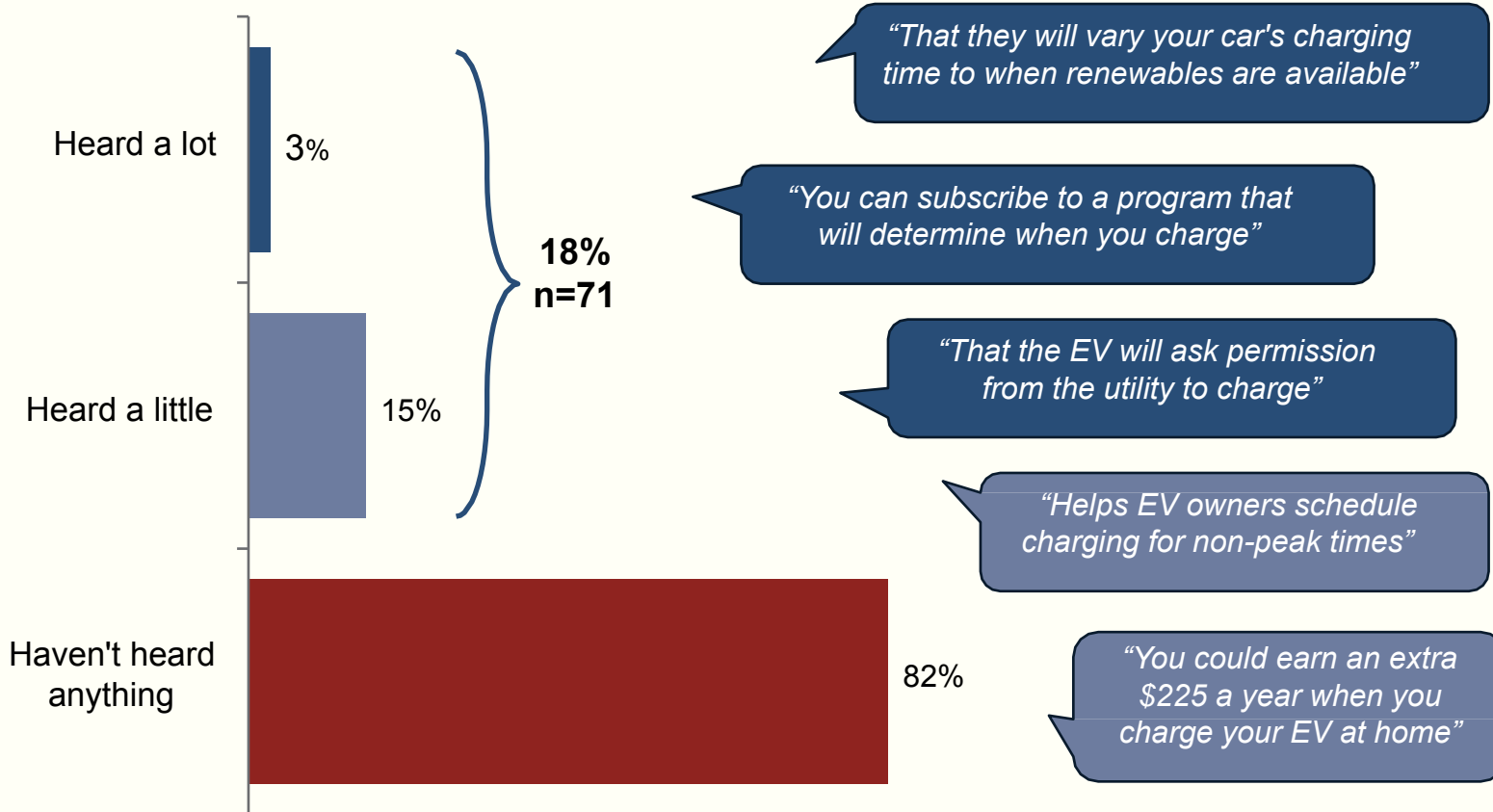


Q3-10. Next you will see a list of several organizations. Please indicate if you have a favorable or unfavorable opinion of each one.

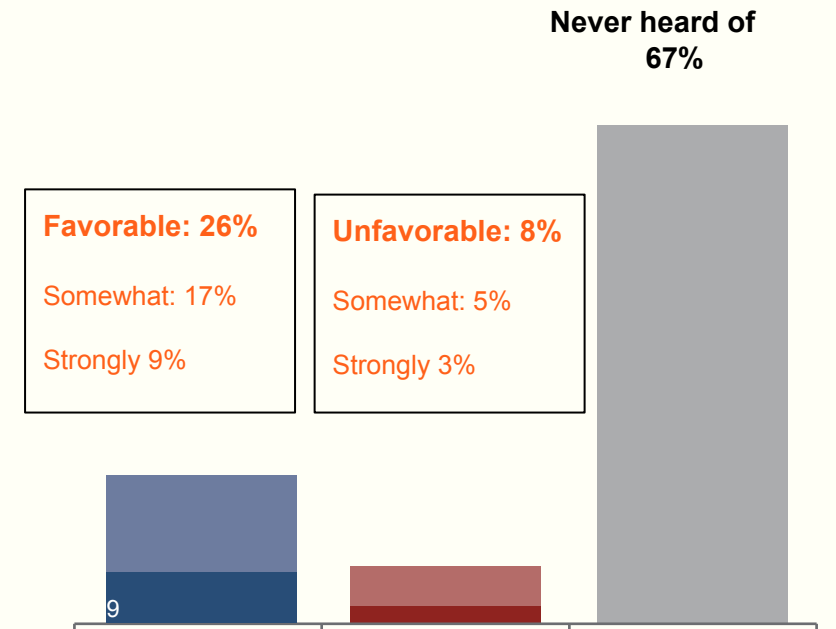
# Managed Charging Awareness

*Few have heard of managed charging for electric vehicles.*

**Thinking about electric vehicle charging, have you heard or seen anything recently about “managed charging” of electric vehicles in [your] county?**



**What is your opinion of “managed charging” for electric vehicles?**



# DCFC Research Objectives

- Learn about EV and EV charging knowledge and attitudes in our service territory, with a special focus on residents of MFH
- Understand perceptions of existing public charging options
- Discover what aspects of the public charging experience are most important to customers, and if there are differences among different customer types
- Validate network name



## Methodology

### Quantitative Survey



#### How did we carry out our research?

- A 50-question survey
- Among n=184 EV Drivers and n=148 Potential EV Drivers

#### Who did we recruit?

- Respondents needed to be:
  - 18+ years old and US-based in Alameda County, San Joaquin County, or Contra Costa County
  - **EV Drivers**



- All must own or lease an EV
- All to potentially use public EV chargers / all not solely rely on home charging method

- **Potential EV Drivers**



- All must be interested in buying or leasing an EV in the next 18 months
- All to potentially use public EV chargers / all not solely rely on home charging method

Fieldwork conducted October 1<sup>st</sup> – October 21<sup>st</sup>, 2024

### Qualitative Focus Groups



#### How did we carry out our research?

- 4 x 90-min in-depth focus groups; conducted via Zoom
- Among n=9 EV Drivers and n=10 Potential EV Drivers

#### Who did we recruit?

- Respondents needed to be:
  - 18+ years old and US-based in Alameda County or San Joaquin County
  - **EV Drivers**



- All must own or lease an EV
- All to use public EV chargers

- **Potential EV Drivers**



- All must be interested in buying or leasing an EV in the next 18 months
- All to use potentially public EV chargers

Fieldwork conducted October 29<sup>th</sup> and October 30<sup>th</sup>, 2024



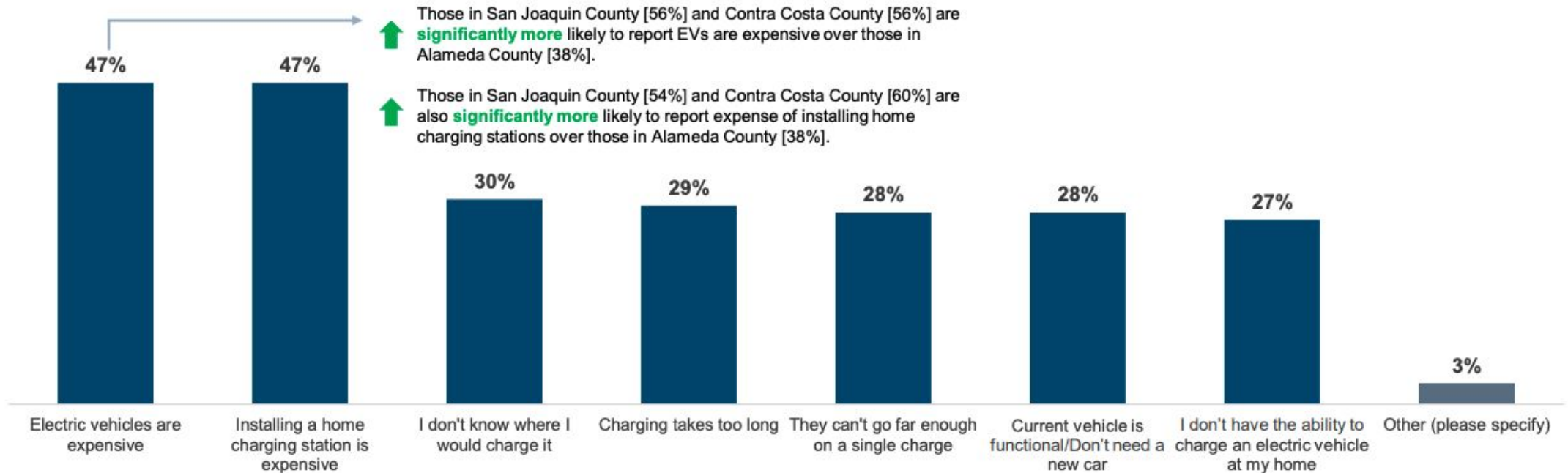
# Cost is a key factor

The high upfront cost of EVs, along with the expense of installing home charging stations, remain significant barriers for many potential drivers considering the switch



## REASON WHY POTENTIAL EV DRIVERS HAVEN'T PURCHASED AN EV

% out of Potential EV Drivers



Q12. POTENTIAL EV: REASON TO PURCHASE: Which of the following are reasons you do not currently own a fully electric vehicle? Please select up to three. Base: n=148 Potential EV Drivers

↑ Sig. higher at 95% C.I.

↓ Sig. lower at 95% C.I.



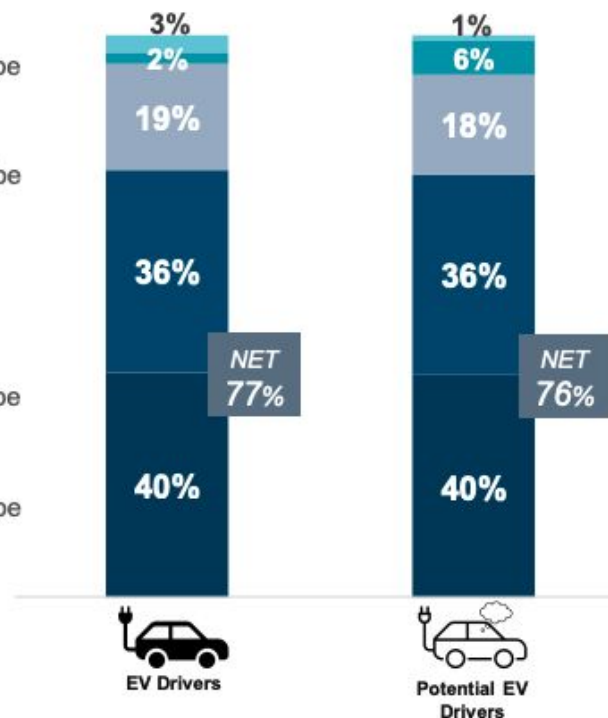
# As a NFP, we are expected to be less expensive

Both EV drivers and potential EV drivers would expect Ava Community Energy public charging stations to be more cost effective than other public charging stations

## AVA PRICE EXPECTATIONS

% out of EV Drivers & Potential EV Drivers

- I would expect Ava Community Energy public charging stations to be much more expensive than other public charging stations
- I would expect Ava Community Energy public charging stations to be somewhat more expensive than other public charging stations
- I am neutral on this
- I would expect Ava Community Energy public charging stations to be somewhat more cost effective than other public charging stations
- I would expect Ava Community Energy public charging stations to be much more cost effective than other public charging stations



Those who believe Ava should be **more cost-effective** than other public charging stations feel this way because they see it as a public entity leveraging existing infrastructure and renewable energy, potentially lowering costs:

*"Because they are operating in conjunction with a public power entity. It would be like a partnership with the community, rather than a private company."*

*"They just have to worry about generating the energy and it is transferred through already existing infrastructure."*

*"Because of the fact that it is using renewable energy."*

Q46. AVA PRICE EXPECTATIONS: Ava Community Energy is the Community Choice Energy service (often referred to as a CCA or CCE) for Alameda County and parts of San Joaquin County. Now having this background knowledge about Ava Community Energy, how would you describe your expectations of pricing if they were to introduce public electric vehicle charging stations? Total Base: n=277 (n=154 EV Drivers and n=123 Potential EV Drivers)

Q47. AVA PRICE EXPECTATIONS OE: Why do you feel this way when it comes to pricing of Ava Community Energy public charging stations? Total Base: n=226 (n=101 EV Drivers and n=125 Potential EV Drivers)





# Public DCFC Feature Expectations



Well-lit charging facilities is also essential for potential EV drivers, however, there's also a top priority for estimated pricing upfront



## AVA CHARGING FEATURES EXPECTATIONS

% out of Potential EV Drivers

More important

Less important

	MUST HAVE	NICE-TO-HAVE	NOT IMPORTANT
Estimated price upfront	70%	24%	6%
Well-lit charging facilities	70%	28%	2%
Cameras onsite for security purposes	63%	32%	6%
Clear signage and instructions for locating and using the chargers	62%	36%	2%
Notifications throughout charge and when charge is completed	57%	38%	5%
Ability to charge and pay via contactless payment (without an account)	54%	37%	9%
Bathrooms on-site	54%	41%	5%
Lower pricing than other options in the area	53%	45%	2%
Access to short how-to videos that explain how to use the charging stalls	50%	44%	7%
Availability of shade or covered overhang at charging site	49%	48%	3%
Availability of trash and recycling cans	43%	49%	8%
Ability to charge and pay via mobile app (with an account)	41%	50%	9%
Availability of free Wi-Fi	39%	50%	11%
Power sourced from renewable energy	38%	54%	7%
On-site attendants	37%	53%	10%
Notification after charge that shows charging stats and carbon impact	37%	46%	17%
Availability of community driven loyalty program	36%	52%	12%
Availability of individual loyalty program	35%	56%	9%
Availability of windshield washing equipment	33%	52%	15%
Ability to make a reservation for a charging spot in advance	32%	63%	5%
Availability of shops, restaurants, or pop-ups nearby	28%	62%	10%
Access to discounts at local businesses, partner apps for games, entertainment, etc.	27%	58%	15%
Vending machine on-site	26%	57%	17%

The top 'nice-to-haves' features for potential EV drivers are ability to make a reservation [63%], availability of shops, restaurants, or pop-ups nearby [62%], and access to discounts [58%].

The least important features, recorded as 'not important', for potential EV drivers are a notification after charge that shows charging stats and carbon impact [17%], vending machine on-site [17%], and availability of windshield washing equipment [15%].

[Link back to key findings](#)

Q48. AVA CHARGING EXPECTATIONS: If you designed the ultimate public electric vehicle charging experience for Ava Community Energy, what features or aspects would you prioritize? Base: n=123 Potential EV Drivers



# The Climate Beats Community, but Speed and Availability Beat Them Both



Respondents favor value prop 2 for its strong climate change message but recommend blending its environmental focus with the inclusive tone of value prop 3

Value proposition 1 was generally the least compelling, perceived as less focused and specific. Drivers prioritize sustainability and equity—and benefits like speed and accessibility—over the concept of community.



2. Enabling a Sustainable Future For All	3. Fast EV Charging For Everyone	1. Better Living For Our Community
<p><b>Environmental emphasis</b></p> <ul style="list-style-type: none"><li>Many respondents favor this statement for its clear focus on climate change and environmental impact, seeing it as relatable and meaningful.</li></ul> <p><i>"Because it's more of a group effort to fight climate change." – Potential EV Driver; Female, 48</i></p> <p><b>Calls for blending with value proposition 3</b></p> <ul style="list-style-type: none"><li>Numerous respondents suggest combining value proposition 2's climate message with value proposition 3's focus on equity and inclusivity, creating a message that's both impactful and accessible.</li></ul> <p><i>"2nd one + would like a hybrid between the 2nd and the 3rd. I like the climate change from 2 and equitable from 3." – EV Driver; Female, age 46</i></p> <p><i>"A combo of 2nd and 3rd. Have a meaningful message about clean energy and a promise." – EV Driver; Male, age 29</i></p>	<p><b>Inclusivity resonates</b></p> <ul style="list-style-type: none"><li>Respondents appreciate the equitable language, which conveys a "for everyone" approach, addressing concerns about underserved areas.</li></ul> <p><i>"Overall, I like that this statement is transparent and everyone can be part of the solution." – EV Driver; Male, age 54</i></p> <p><b>Conciseness and clarity</b></p> <ul style="list-style-type: none"><li>Some respondents prefer this value proposition's simple, straightforward messaging, suggesting it feels transparent and direct.</li></ul> <p><i>"2 captures a lot of good topics in terms of climate change and EVs and limited access to charging but the title that stands out would be 3 and I would prefer a less wordy paragraph like 3. If I had to pick it would be 3." – Potential EV Driver; Male, age 40</i></p>	<p><b>Lacks specificity</b></p> <ul style="list-style-type: none"><li>This value proposition is generally viewed as generic or lacking the clear environmental and community-oriented messages that resonate in value propositions 2 and 3.</li></ul> <p><i>"What's the price? How accessible are these chargers if they're not affordable?" – EV Driver; Female, age 32</i></p> <p><b>Slow to get to the point</b></p> <ul style="list-style-type: none"><li>Some respondents feel this value proposition took longer to reveal its relevance to EV charging, making it less engaging.</li></ul> <p><i>"1 being the least compelling. It just takes too long to get into 'oh this is about EV charging.'" – Potential EV Driver; Female, age 56</i></p>



# DERMS





# Methodology

- Four virtual focus groups were conducted on October 16<sup>th</sup> & 17<sup>th</sup> , 2024 via Zoom
- Each group lasted 90 minutes and was conducted with Ava customers
  - Group 1: 10 solar customers who also own a battery
  - Group 2: 9 solar customers who would consider purchasing a battery
  - Group 3: 8 non-solar customers
  - Group 4: 10 solar owners (mixed battery and non-battery)
- Participants were offered \$150 for their time

# Summary of Findings



DERMS program can be an incentive to drive adoption of home batteries with a solar panel system



Program messaging must highlight approximate size of rebates and ability of customers to retain some control of their energy



Being independent of the electrical grid is a key driver for adding a home battery. DERMS program must be perceived as preserving this independence for the customer.

## Key Finding Categories:

- Managing energy consumption
- Motivations for installing solar + batteries
- DERMs Programs
- Brand awareness and trust

## Moving to solar, especially with a battery, drives many homeowners to electrify their home appliances

*"I have a gas dryer, a gas water heater, and a gas stove. And so I was also thinking if I converted those to electric at any time in the near future, that would be another reason, because it's going to be the lack of gas and fear of a fire or a broken that would limit my possibilities. I don't think I use that much electricity. I was thinking I might have an electric powered car someday..." (Lyn)*

## Homeowners without solar tend to look first to their hot water heater as the most effective way to improve their overall energy efficiency

*"The hot water heater for me. Well, I just have always been told that that takes up a lot of the energy, in addition the refrigerator." (Deneen)*

*I had PG&E come out and have a look at where most of my usage was coming from, which I mentioned earlier, it was around the hot water. So I have the tankless water heater and you can set the timer on it for when you want hot water to be available on demand, that's helpful." (Neelam)*



# Control Over the System

**Giving up control of their system is a significant concern for homeowners. Specifically, they are worried about not having electricity when they need it.**

- Most want to set a limit to the amount of battery that can be used

*"I set my battery, it can go down to like 14% or something, and I see that it does go all the way down because evidently they're pulling, I get no kind of notification, but they're pulling energy from my battery." (Mark, Solar w/ Battery)*

*Yeah, I mean it's basically to the point that if I buy a battery for backup purposes, I want to have the backup still in place. Otherwise what's the point? So that means I can, within reason based on my usage parameters and the size of the battery and all that, determine how much of the battery is, let's say, reserved for personal use or so. I mean, obviously if the grid is totally down then they can't draw anything through the grid from the battery. But for those situations where that's not the case, where the grid is still up and running, I still want to be able to have the backup in place for that and otherwise I would be fine with giving somebody control over the remainder of the battery if the conditions are clearly laid out beforehand." (Johannes, Solar w/o Battery)*

- Being able to opt-out is equally important

*"I think I'd also want to make sure that that option really is in the app for me to access so that if there was a power outage suddenly in my neighborhood, I could change that switch so that the next day I could have power that evening." (Heather, Solar w/ Battery)*

*"Adding maybe a control on top of that, that if there is a certain circumstance that I just don't want even them to take any of my energy, I'd be able to hit that button and say no, for that period of time, like a day or two days or whatever it might be" (Neelam, No Solar)*

*"And I think that's the key part of when you say have a third party manage it, are you allowing them to take power when they need it and you don't, or do you have some control over that? In other words, could you have it set that way? But then if you hear there's going to be a power outage, you turn that off." (David, Solar w/o Battery)*







  
**Ava** Community  
Energy