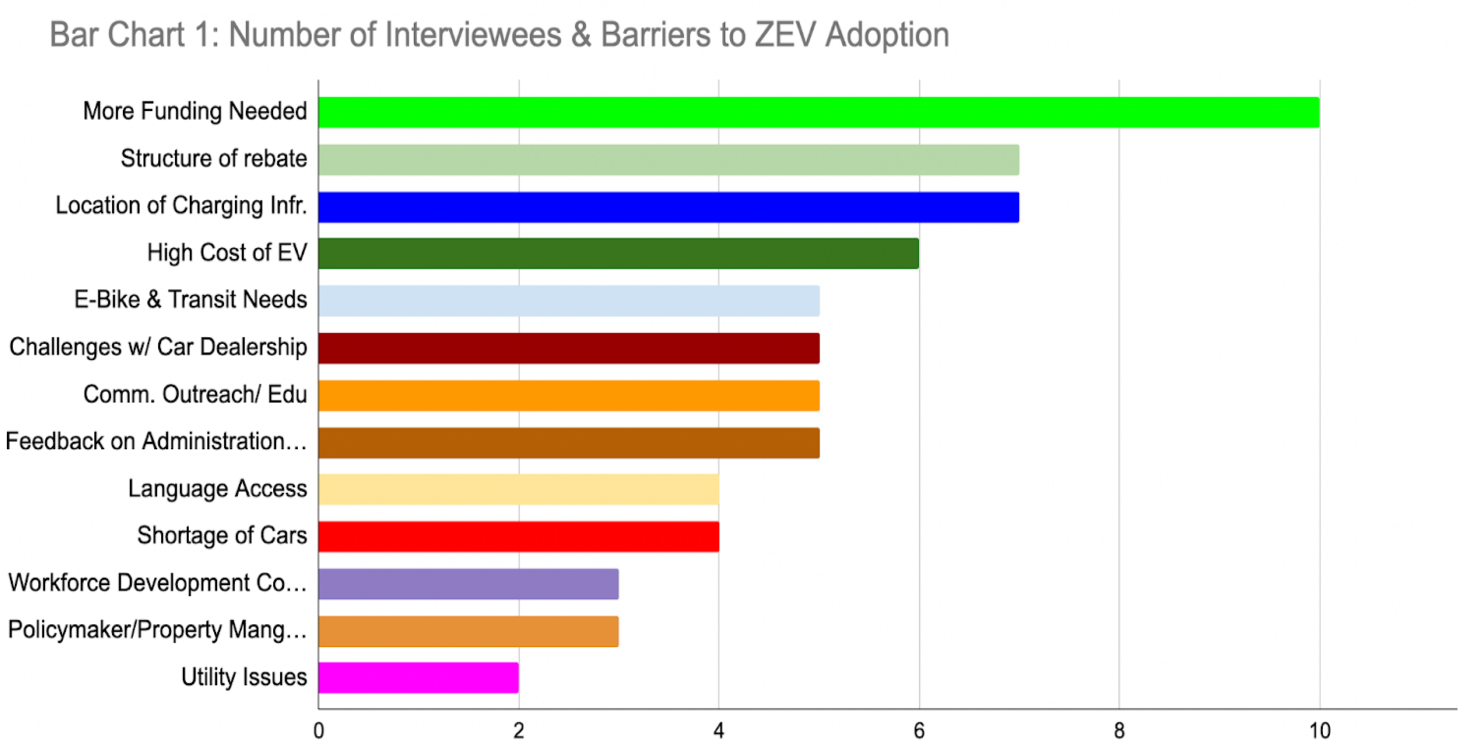
Summary of Expert Interviews on Zero-Emission Vehicle Implementation in California

ClimatePlan conducted 15 expert interviews to see how zero-emission vehicle (ZEV) policies were hitting the ground and how policies could be more equitable. Expert interviews were with community based organizations a part of the Access Clean CA network[1] and state advocacy organizations a part of the ClimatePlan network[2]. For the Access Clean CA network, staff also asked questions about how Access Clean CA was helpful and about best practices for community engagement. Access Clean CA as a resource and best practices for community engagement are tools to implement ZEV deployment equitably, and it is important to identify some of the barriers that still exist.

Summary of Barriers

Overall, zero-emission vehicles and charging infrastructure are not reaching all communities, despite the noticeable shifts to zero-emission vehicle state and federal policy. All interviewees highlighted a gap in equitable access to all aspects of the zero-emission vehicle transition. This includes access to zero-emission vehicles, access to charging infrastructure, access to low-cost electricity, and access to jobs when transitioning from oil to all-electric. Many communities also identified gaps in outreach and education and the need for more accountability from state agencies. Bar Chart 1 highlights thirteen high-level barriers across all aspects of ZEV policy.



*This bar chart illustrates how many interviewees mentioned the barrier and the high-level barriers. *Note: it does not represent all barriers; at least two interviewees had to mention the barrier to be represented in the bar chart.*

[1] Community based organizations apart of the Access Clean CA network are organizations that conduct outreach and implement ZEV policy on the ground.

[2] The statewide advocacy organizations in the ClimatePlan Network have been advocating for different equitable ZEV policy for years.

From these interviews, ClimatePlan concludes that there needs to be

- More stable and consistent funding for zero-emission vehicle incentives.
- An increase in technical assistance for communities; and an increase in funding and resource allocation from state agencies to provide technical assistance and capacity building.
- Better coordination and streamlining with funding incentives and agency planning.
- Better criteria to target investments towards communities in need.
- Better requirements on community engagement for charging infrastructure citation.
- More policies to protect communities from malicious landlords, dealerships, and utilities.
- More regulations for affordable zero-emission vehicle manufacturing.
- Investment in outreach that sustains relationships with communities, so they are at the forefront of decision-making.
- More best-practice and resource sharing for smaller cities and other local agencies.

These conclusions help to inform the recommendations and larger report on zero-emission vehicle implementation in California.

Barrier Deep-Dive

This section will dive into each barrier to ZEV adoption and highlight some general stories and solutions. The barriers are into four aspects of zero-emission vehicle policy: 1) Access to Vehicles and Incentive Funding, 2) Access to Charging Infrastructure, 3) Access to Low Cost Electricity, 4) and Outreach and Education Needs and Accountability.

Barriers to Accessing Vehicles and Incentive Funding

There are ten overarching barriers that prevent communities from getting zero-emission vehicles and accessing incentive funding.

- **Lack of funding:** This was the most prominent barrier; the lack of funding was a theme in ten interviews. Three interviewees talked about the lack of funding for the programs in general and two mentioned a lack of funding for capacity building. Funding for capacity building can ensure proper outreach can be conducted and case managers can keep up to date in daily operations.

- **Structure of current rebate programs**: Seven interviewees highlighted that the structure of the rebate programs still creates barriers for their communities. Many highlighted that their communities could not afford to pay for the car upfront and then wait to get reimbursed. Other criteria that created challenges include
    - The first come-first serve model: Two interviewees named this distribution method specifically, calling out that it is inequitable. They recommended that rebate programs be based on the immediate need for transportation.
    - Battery limit criteria: One interviewee highlighted how this limits the electric vehicles eligible for rebates. This makes it hard to find a used-electric vehicle that could be more affordable.
    - Limited e-bike options: One interviewee identified that the South Coast Air Quality Management District's "Replace your Ride" does not offer an e-bike option. For this interviewee, an e-bike option was important because it met the community's transportation needs.

- **High cost of electric vehicles:** Five interviewees mentioned the high cost of ZEVs and how it was a barrier for them.

- **Wait times:** Seven interviewees shared this concern. They pointed out that the application and funding wait time periods do not match the urgency for the immediate need for transportation.

- **Challenges related to car dealerships:** This challenge was highlighted in five interviews. Two interviewees highlighted the lack of dealerships close to their communities. Two interviewees recounted their communities' bad experiences with their local dealerships. For example, one interviewee described dealerships rejecting customers with grants. This interviewee proposed that program administrations or the agency responsible could find strategic ways to allow private dealers to accept the grants.

- **Lack of cars and diversity of cars:** Four interviewees spoke of car shortages, which caused increased wait times to the program, and made it hard to find an affordable car. One interviewee also highlighted that there was a lack of electric vehicle light-duty trucks. They explained that trucks were important for agricultural workers.

- **Lack of integration of walking, biking, and transit options with ZEV infrastructure investments:** Two interviewees highlighted that it was important to invest in walking and biking infrastructure for their community. It is important that ZEV investment is coupled with general infrastructure improvements to create options for communities to walk, bike, or take transit. One interviewee mentioned that their communities were interested in being able to take transit, so it is important to provide incentives to use transit options. But, there would also need to be investment in more frequent services.

- **Challenges with how rebate money counts as income for welfare programs:** Three interviewees identified that when communities receive the rebate, it counts as income and affects their welfare benefits.

- **Limited statewide applicable programs**: Two interviewees identified how challenging it was to navigate the different criteria and eligibility requirements for each program.

- **Vehicle design and standards:** One interviewee highlighted two things related to vehicle design and standards. The interviewee shared that the disabled communities identified the need to make ZEV and charging infrastructure accessible for them. For example, new ZEV buses should be accessible for wheelchair users at the start. The interviewee also highlighted that as ZEVs are being integrated, gas and diesel cars are likely to get stricter smog requirements. There needs to be policy that ensures that this does not unjustly impact low-income and DAC communities.

- **Barriers that Access Clean CA needs to address:** Some interviewees shared that Access Clean CA should provide more information on where people are in the program. It is challenging for outreach partners to sustain program interest if they can't provide helpful updates. Another interviewee shared that navigating the benefits finder was challenging for Spanish-speakers. The translation needs improvement, and certain aspects need to be more localized.

These ten barriers demonstrate the need for 1) better coordination with ZEV incentives and EV charging infrastructure, 2) more stable and consistent funding, 3) better criteria to target investments, 4) increased regulations on ZEV manufacturing and car dealerships, and 5) increased funding and resources allocated to staff capacity. Increasing state funding and time would be important for the community-based organizations and case managers because then the state could engage in answering questions.

Barriers to Accessing Charging Infrastructure

There were four barriers in terms of accessing charging infrastructure.

- **Lack of charging infrastructure in communities and in places where they feel safe & spend time in:** Five interviewees stressed there were not enough charging stations in their communities. If there were chargers, they were not cited in places that communities spend time in. For example, one interviewee pointed out that charging infrastructure at malls were not being used by their communities because they didn't go to those communities to shop.
- **Challenges with installing charging infrastructure in MUD:** Three interviewees identified the landlord/ property manager as one of the main barriers. One interviewee explained that many affordable housing property owners have the misconception that their communities don't want ZEV infrastructure. Moreover, while there is a policy that requires landlords to accept a tenant's "reasonable request" for ZEV infrastructure, landlords also have a lot of discretion in terms of what a 'reasonable request' means. So, the power dynamics between landlords and tenants affect policy adoption.
- **Limited coordination between charging infrastructure rebates and vehicle rebates:** For most charging infrastructure programs that provide rebates; community members can't receive a charger without having a zero-emission vehicle first.
- **Lack of Charging infrastructure maintenance.** One interviewee pointed to a recent study, which found that many charging stations were not working. Creating policies around maintenance will ensure that communities have access to charging.

These four barriers to accessing EV charging infrastructure demonstrates the need for better community engagement, better coordination between EV incentives, more outreach and education to property owners, and better tenant protections for those who are interested in installing EV infrastructure.

Barriers Accessing Low Cost Electricity

Only two interviewees mentioned barriers related to accessing low cost electricity. The main barriers they highlighted were the lack of trust and the high costs of EV charging.

- **Lack of trust with utilities**: One interviewee shared how some communities have terrible relationships with their energy utility. It is not fair to expect them to be more dependent on an entity that has been malicious to them.
- **Challenges with utility billing structure:** One interviewee highlighted how the utility billing structure adds to the complexity of installing charging infrastructure at multi-family dwelling units. Some apartment complexes are not separately metered, and landlords don't want to pay for extra electricity charges.

While only mentioned by two interviewees, this shows that there needs to be better protection for communities, so they have access to cheap electricity. There also needs to be more strategies to address the challenges of installing charging infrastructure at multi-family dwelling units.

Outreach and Education Needs and Accountability

Overall, outreach and education need to be sustained to ensure resources are being shared and communities are able to get their concerns addressed. Outreach and education should focus on addressing community needs, informing small cities and property owners of the benefits of electric vehicles, and educating communities on job opportunities and providing access to training. Outreach and education is also a tool to increase accountability for state and local agencies, which interviewees share is needed.

- **Address community concerns and needs:** One interviewee highlighted that state outreach and ZEV policy has been focused on greenhouse gas emission reductions. However, when communities are considering buying a ZEV, their reasoning is not focused on reducing greenhouse gases. They are considering other things like, where their families need to go, the location of charging infrastructure, and how heat wave and energy conservation mandates will affect how long they are able to charge.

- **Inform smaller cities and property owners of affordable housing on the benefits of EV**: One interviewee shared smaller cities don't have the resources to plan or fund ZEV infrastructure. As mentioned above (under charging infrastructure), many property owners of affordable housing lack insight into their own residents' opinion. Outreach should target property owners to get them tools to understand the benefits.
- **Educate communities on job opportunities and provide access to training**: Two interviewees stressed the importance of informing and training communities to install and maintain EV charging infrastructure. EV car maintenance requires different skill sets and knowledge than an auto mechanic. It is important for state agencies to offer affordable training courses and certifications.
- **Increase accountability, coordination, and action:** many interviewees expressed they would want to see more accountability, coordination, and action from state and local agencies. They shared they want to see solutions being implemented now, rather than in 2030 or 2050. They also highlighted that the ZEV policy should not be implemented in a silo. There should be other considerations like building broadband infrastructure when digging up parking spaces for ZEV charging stations.