EV Adoption in Environmental Justice Communities

post by Barry Kresch

CT Roundtable for Climate and Jobs Panel

The CT Roundtable for Climate and Jobs recently hosted a virtual event entitled "Transportation Infrastructure and Electric Vehicles in Connecticut." I was one of two panelists, along with Jay Stange of Transport Hartford and the Center for Latino Progress.

In some ways, we were an odd pairing, since Jay's transportation concerns are more about biking, walking, transit, and multi-modal transport. He is a lot more focused on e-bikes than EVs.

But maybe we are not such a mismatch. In many respects, we share similar views. The EV Club supports actions that reduce greenhouse gas emissions along with pollutants such as nitrogen oxides and particulate matter. There is a need for affordable transit, not to mention our roads are undeniably choked with traffic. Some not specifically EV positions the club supports:

- Investment in mass transit and last-mile transport.
- Support for clean micro-mobility, such as e-bikes.
- Disappointment at the loss of free bus fare.
- Support for active transit hike and bike trails, protected bike lanes on city streets.
- Reversal of the destruction of neighborhoods and the fabric of urban life due to the heedless way interstate highways were built.

That said, I hope he and other representatives of "Environmental Justice" (EJ) communities come to value the importance of accelerating EV adoption for the financial benefits accruing to EV owners, the health benefits of zero-emission vehicles, and the economic activity that the EV industry is creating. It would be unfortunate if this constituency were left behind.

The Value of EVs in EJ Communities

According to this paper by the <u>University of Michigan</u>, "More than 90% of vehicle-owning households in the United States would see a reduction in the percentage of income spent on transportation energy—the gasoline or electricity that powers their cars, SUVs and pickups—if they switched to electric vehicles."

EV adoption improves air quality, and this improvement is especially beneficial to the EJ communities that sit at the nexus of our major highways, and which suffer disproportionately from asthma and other cardio-pulmonary conditions. Adoption by those living in the community and those who simply drive through the community are both needed.

There was a failed attempt late last year and again during this year's legislative session for CT to adopt the second phase of the California emissions standards, known as Advanced Clean Cars II, that were designed to accelerate EV adoption. According to an analysis by the American Lung Association, the proposed ACC II standards would have yielded

- \$11.5 billion in monetized health benefits
- avoided 1060 premature deaths
- avoided 22,900 asthma attacks
- avoided 120,000 lost workdays.

It has been a challenge politically to get EJ communities more involved in advocating for EVs, even though the transportation

sector is by far the largest emitter. As advocates were wrangling support for ACC II during the legislative session, the lack of enthusiasm in the EJ community was palpable. The Black and Puerto Rican Caucus in the legislature largely stayed non-committal, or at least felt that they had other, more urgent priorities. In the face of unified Republican opposition, the Democrats were not able to maintain enough of their majority to pass it on their own.

The arguments we hear in opposition to advocating for higher rates of EV adoption are mostly that EVs are too expensive and there are not enough places for people who do not have a private garage to charge. The first argument is diminishing faster than many realize. The second is still a challenge but certainly a solvable one.

EV Prices Are Coming Down

EV prices are coming down due to a mix of lower battery costs and vehicle oversupply. The oversupply may not last forever, but the trend will continue as battery technology continues to improve and production gets scaled. Sometimes the lower price comes in the form of a discount, even though the MSRP hasn't been changed. In addition, there are federal and state incentives that apply to a purchase or lease, as well as incentives for used vehicles. The federal and state incentives are stackable.

Let's look at one example, the new Equinox from Chevrolet. The base trim level begins at \$33,600. It is eligible for a \$7500 federal incentive as well as a \$4250 CHEAPR incentive from CT for EJ community residents. Given new authority from the legislature, the \$4250 may increase to as much \$6750. If that does happen, the cost would fall below \$20,000. This is for a new car. There are incentives for used EVs as well, in the amount of up to \$4000 (federal) and up to \$3000 (state). As always with incentives, rules apply. See the EV Club

Access to Charging

The second barrier, access to charging, is real, though it can be solved and there are lots of examples of how technology and policy can move this along.

This is primarily a level 2 charging problem, meaning that the need is for an adequate supply of 240-volt AC chargers. These chargers need to be situated in places where vehicles have a reasonable amount of dwell time to charge while they are parked. Level 2 charging is much less expensive and less of a stress on the grid than DC fast chargers.

- New multifamily buildings that have parking should be required to install EV spaces.
- New and existing apartments or condos can take advantage of generous incentives to install chargers. In EJ communities, there are adders that could enable most or even all of the cost to be covered.
- Chargers can be popped into streetlamps. There are some pilots in this country, but this is already in use in parts of Europe. It involves rewiring the streetlamp. If the lamp bulb is swapped out for an LED, then there is enough power to spare for the EV charger. Aside from streetlamps, there are other curbside options available.
- Banks of chargers can be situated in public parking areas.
- The Federal Department of Energy has an initiative promoting workplace charging for residents of these communities. The Club has booked a presenter from EVNoire for our conference in September who will discuss this.
- There are efforts to electrify "distributed fleets" (e.g. Uber and Lyft). The New York City Taxi and Limousine Commission is requiring these fleets to be

electrified as a condition of licensure. There is a program in California called the <u>Clean Miles Standard Program</u> that aims, using incentives and mandates, to have 90% of these fleets be electric by 2030. Many of these drivers live in working class communities. It will help speed acceptance of EVs. This may require at least supplemental use of DC Fast chargers as some of these vehicles spend a large part of the day in service.

EV adoption by municipal fleets is a great lead by example opportunity. At our conference in September, we will have an electric school bus and electric garbage truck, both from the City of New Haven. There will also be an electric police patrol car from the Town of Westport.

Finally, just building chargers isn't enough. Nothing works without an investment in public education and outreach.

We thank the CT Roundtable for Climate and Jobs for hosting this event and discussing this important topic. Click here to find the recording of this event.