



## VELOZ SUMMIT SERIES

### Consumers, Dealerships and Incentives: Putting People in EVs

Wednesday, March 9, 2022 | 9 – 11:30 a.m. (PT) | Virtual

#### SUMMIT TRANSCRIPT

Josh Boone:

*Well, welcome and happy spring everyone. Thank you for joining us today. My name is Josh Boone and I'm the executive director of Veloz. Today's summit series titled Consumers, Dealerships and Incentives: Putting People in EVs aligns well with Veloz's vision to educate and break down barriers like upfront cost, charging infrastructure, and consumer education so we can move transportation electrification forward faster. For those of you that are new to Veloz, we're a 40 plus member nonprofit that connects the private and public sector organizations to accelerate and communicate the value of transportation electrification for all. Our members include state and local government, automakers, utilities, environmental NGOs, charging providers, and ride share companies and many others. We believe that we can move forward faster together and more efficiently when we work together. And the goal of today's summit is to drive dialogue around policy and education by bringing together industry experts and policy makers and others.*

Josh Boone:

*We invite you to learn more about our mission and our theory of change at [veloz.org](https://veloz.org) and visit our consumer EV education website at [electricforall.org](https://electricforall.org). As most of you know, California hit the milestone of 1 million EV sold, and these numbers are reflected in our quarterly EV market report, which was released a couple of weeks ago. Our EV market report is created in collaboration with our partners at the Energy Commission and the California Air Resources Board and is available at [veloz.org](https://veloz.org). Today's agenda brings together public and private sector organizations as part of our mission to highlight the tough subject around the consumer EV buying process while addressing the challenges facing dealers and incentive administrators. Veloz has a long history of consumer education around incentives, vehicle availability, EV charging 101 and more. And thanks to a new \$2.5 million grant funded from the California governor's office of business and economic development, Veloz is now positioned to run our larger and most far reaching consumer education campaign today. That campaign will kick off later this year so stay tuned for that.*

Josh Boone:



*And we are thrilled about the California governor, Gavin Newsom's proposal to provide \$6.1 billion in new ZEV and ZEV infrastructure funding for the 2022, 2023 state budget along with federal money coming forward to build out the nation's charging infrastructure network. Now before we get to the content, I have a few housekeeping notes. Today's summit is being recorded and will be available after the event. It is important to share what you learn, follow Veloz on Twitter, share key points and tag @LetsVeloz. And at the end of the day, we want you to walk away with some action items and new connections. So, let's just jump right in. It's my honor to welcome California governor Gavin Newsom's senior climate advisor, Lauren Sanchez to kick us off. She has over a decade of experience in tackling the climate crisis from government, academia, nonprofit roles, both at the global, national, and local levels. And when it comes to EVs, she has a huge proponent of increasing accessibility and affordability of EVs amongst California's priority populations. Welcome, Lauren.*

**Lauren Sanchez:**

*Thank you so much, Josh, for having me. I'm diving in. All right, great.*

**Josh Boone:**

*Go for it.*

**Lauren Sanchez:**

*Josh, I just want to start by thanking you and the entire Veloz team and everyone for joining this morning. What an important moment in our collective history to be convening today and talking about the electric vehicle revolution which is really our best shot at moving California's entire economy off of fossil fuels once and for all. As you all know, clean cars and action on ZEVs has been a cornerstone of the governor's climate agenda over the last three years. But I also like to remind folks that it's been a cornerstone of our public health agenda and our economic and opportunity agenda. The governor often recites numbers such as ZEVs being one of our top exports that we have over 30 manufacturers here in state, six times as many, clean economy jobs as fossil fuel jobs.*

**Lauren Sanchez:**

*And as Josh mentioned, hitting the important milestone of 1 million ZEVs on road. Brief anecdote, the governor actually visited the man, Michael Macias in Stockton who purchased the millionth ZEV to talk to him about our incentive programs and his decision to go electric and was really delighted to spend more time with Californians who are choosing to get into EVs. And as the governor said last night in the state of the*



*state, our policies here in California have really created this market and we will continue to drive it globally. We can only do so in partnership with everyone that's on the line today, and everyone who has helped us build this movement. And I just want to open with an immense amount of gratitude for all of you and an offer of continued partnership going forward. We were proud to lead the world back in 2019 in phasing out sales of the internal combustion engine by 2035, a goal that other states and nations, and even our automaker partners have now replicated, increasingly exciting partnership with our federal government after spending a few years fighting tooth and nail against the Trump administration.*

**Lauren Sanchez:**

*I think we're all really excited and looking forward to developments like the restoration of California's waiver so we can take this agenda even further, faster together. And as Josh teased, we're incredibly proud of the agreement we found with the legislature last year to spend \$4 billion on this agenda. That included market changing investments, cleaning up drainage trucks and transits, school buses, and accelerating equitable electrification of passenger vehicles, E-bikes and rail, coupled with infrastructure and incentives for in-state manufacturing, but recognizing the great opportunity that this agenda presents and also the imperative that Californians are facing in terms of the impacts of the climate crisis we feel day in and day out. The governor in January proposed to more than double that package and put forward a \$10 billion proposal that continues to focus on equity and communities that are most impacted by pollution, proposing targeted investments in disadvantaged and low income communities and increasing benefits of clean transportation while more than doubling the amount of money targeted for heavy duty market acceleration specifically.*

**Lauren Sanchez:**

*But Josh, one of the questions we often get and us folks here in government spend a lot of time asking are, are these programs and our incentives actually working. And yes, they emphatically are. Our programs have significantly advanced interest in EVs together with partnership with all of our colleagues at Veloz, helped develop new technologies and critically are helping to ensure access to EVs for all Californians. We're deeply focused on equity throughout program design and are excited that our incentive programs are even more focused on community needs. So, I wanted to maybe give a tour of some of our light duty key programs to help Californians get into clean cars especially facing incredibly high gas prices at the pump today. This is just a start. I would absolutely point you all to the ZEV market development strategy for how the state is thinking about building out the entire ecosystem, as it relates to market development and incentives*



and including the clean fuel reward program that supports EVs through the CEC and PUC to do even more.

**Lauren Sanchez:**

*But some of our big consumer programs include the Clean Vehicle Rebate Program, Clean Cars 4 All, and the Clean Vehicle Assistance Program. The Clean Vehicle Rebate Program, as you all know, provides statewide rebates for purchase or lease of new eligible plug-in hybrid electric, battery electric or fuel cell vehicles. Over 450,000 vehicles rebated through CVRP since 2010. So that accounts for nearly 43% of light duty ZEVs sold in the state. And based on CVRP participant surveys, 97% stated that the rebate was important to them in making the decision to acquire a ZEV. We continue to ask our participants of these programs for great feedback so that we continue to evolve them moving forward. The Clean Vehicle Assistance Program provides low interest rate loans, vehicle purchase grants, and vehicle charging incentives for income qualified Californians. And Josh, I want to spend a moment on this one because over 80% of participants have a household income at or below the federal poverty limit.*

**Lauren Sanchez:**

*So when we think about a future of 100% ZEVs on road, we know that they need to become more accessible and affordable for all Californians, which brings me to Clean Cars 4 All, an incentive program administered in close partnership with our local air districts that provides vouchers to income qualified participants towards the purchase, lease of a new or used ZEV hybrid vehicle in exchange for scrapping an older, higher polluting vehicle. Incentives are also available in the form of transit pass vouchers and E-bikes. I would be remiss if I didn't emphasize the governor's continued focus on not only making sure we're turning our vehicle fleet to as clean as possible, but also making sure that we are providing more mobility options for all Californians, but although I like tout a lot of our leadership on this agenda and creative things we're thinking about on programs, I think a lot could be done to improve our incentive programs and rest assured our entire state government working on ZEVs is working to improve our programs all the time, especially focusing on how to design programs that work for everyone and can support lower income Californians.*

**Lauren Sanchez:**

*One key priority which the governor's budget really helps to address is ensuring consistent continuous funding to avoid the stopping and starting of programs. We know that wait lists, aren't great. I'm sure a number of you have been on them, but we'd like to see continuous funding where we can, and the governor's budget really tries to propose*



*multi-year funding to make sure that we're not starting and stopping programs as we go forward. Other kind of continued priorities for improving these programs, and we'll just make a note here, we'd love to continue to hear from all of you on how the state could be doing better, but one key priority is targeted and increased funding for our underserved communities. We've heard from community groups that incentives currently aren't enough to help those with lowest incomes get into ZEVs. So that means that we need to increase support for them across the board. We also need to make sure that incentives are available at the point of purchase or as close to point of purchase as possible.*

**Lauren Sanchez:**

*While this is offered for some of California's climate incentive programs across the board, we're still working to think about how to streamline this and make it as at transaction as possible. And then, I think we have heard a lot of this in terms of the \$38 billion climate budget that the governor's proposed, which is how can we streamline application processes that allow car buyers to apply for multiple incentive programs at once. The millionth ZEV purchaser, Michael in Stockton, was able to do this but I can only imagine the frustration and having to go to different state agencies to line up incentives, and even to take this further a streamlined application for a community or for a fleet or a business or a household where you're able to match needs to all of our incentive programs across the board, not just for ZEVs. And then of course, as Veloz has spent a lot of time on partnership with community-based organizations to help with targeted EV outreach, consumer awareness and whatever else the state needs to do in partnership to make sure that we're addressing each Community's needs.*

**Lauren Sanchez:**

*As someone who has tried to navigate these and has tried incentive programs and has tried to help family members navigate these incentive programs who want to support our action on climate and clean air, we do acknowledge that the incentive programs can be a little confusing. And so that's why we're spending a lot of time working on getting those, the programs improved, but also on getting the word out, which I think Josh is a great pivot to a continued ask from our team, which is all of you are our best ambassadors on this agenda. If you could continue to partner with us and with everyone in this ecosystem and in this movement to make sure that we are getting information into Californians as quickly and effectively as possible, it will help us move the entire agenda forward.*

**Lauren Sanchez:**



*I guess I would point to and acknowledge with gratitude, the recent Super Bowl halftime ads, which of course as you all know, were dominated by electric vehicle ads, really showing the shift in industry consumer perception and mainstream nature of these vehicles going forward. But double down on something I opened with, I think the quest for us in partnership with you all is to look at the moment that we're in the crisis that is unfolding in Ukraine, the recent move to ban Russian oil imports into the United States and acknowledge that this is an incredible opportunity for us to, again, communicate to Californians and people across the nation, the benefits of going electric and removing or mitigating our dependency on fossil fuels. So would just ask many of us in the climate movement have talked about needing a war time mobilization in terms of clean technologies.*

**Lauren Sanchez:**

*And I do think that, that's exactly what we need on ZEVs in this moment right now to protect Californians from prices at the pump, protect us from dirty air and ultimately make sure that our fleets are becoming as clean as quickly as possible. I would also ask humbly that continuing to work with our partners in the legislature and hearing from all of you how important the \$10 billion package is not only to, of course, us and government trying to meet our clean air mandates and our executive order goals, but also to really help the revolution and the transformation that we need for communities knowing how important this incentive funding and the \$10 billion budget proposal is both for consumers and for manufacturers. And we know how important also the continued push for federal funding on this agenda will be.*

**Lauren Sanchez:**

*We've watched, I think with a lot of patience and optimism around build back better and federal EV tax credit, but as my boss, the governor, likes to say, we know can't wait for Washington, California's moving forward, hoping to find agreement on that \$10 billion and make sure that our incentive programs are reaching the most and impacting Californians across the state. With that, thank you so much for having me, Josh. I am so grateful for everyone who's on the line and really hoping to partner with you all in these next chapters together.*

**Josh Boone:**

*Wonderful. Well, thank you so much, Lauren. We truly appreciate your climate leadership and support of transportation electrification. Your optimistic, positive, and strong leadership is always valued. And I would just say that here at Veloz, we structure our work around the top three EV barriers, which are upfront cost, that's where incentives*



come into play. Challenges around charging infrastructure and last but not least, education and awareness. So, we're just thrilled that you and the governor's office are thinking a lot about how to improve California's already wonderful and varied incentives, and especially for our most vulnerable populations, it's going to take all of us. So, thank you for your time today and we'll talk to you soon.

**Josh Boone:**

*I would now like to introduce Alfred Artis, the program director here at Veloz. He is leading the charge on efforts like this summit today. And I want to thank him for developing our agenda which is content rich. We're going to talk about incentives. We're going to talk about dealerships. We're going to talk about all of that. So welcome, Alfred.*

**Alfred Artis:**

*Thank you, Josh, for the kind introduction. I'm excited about our agenda today, and we have organized today's summit around three sessions. Each session will start with a subject matter expert who will spotlight the topic. And then after that spotlight, I will invite other experts to join in, in what we hope is a lively, valuable, and solutions-oriented discussion. To kick off our first topic, I'm thrilled to introduce Dr. Quinta Warren. Dr. Warren is the associate director of sustainability policy at Consumer Reports. She will be talking about consumer EV perceptions and what the market for EVs looks like right now and in the future. So, Dr. Warren, please take it away.*

**Dr. Quinta Warren:**

*So, I want to thank you guys. Thank you to Veloz for the privilege of speaking with your members and the audience today. Hello all. As you just heard, my name is Dr. Quinta Warren and I am the associate director of sustainability policy at Consumer Reports. Today, I'll be speaking on the consumer benefits of electric vehicles. So, consumer reports is an independent nonprofit member organization that represents 6 million consumers across the United States. CR works side by side with consumers for truth, transparency and fairness in the marketplace. CR works on many issues, but our goal with respect to transportation is affordable, clean, and safe mobility choices for all consumers. To do this, we conduct testing and rating of vehicles. We also survey consumers and we conduct other research to get data that helps to clarify what consumers need. And in the advocacy part of our work, our target has been to reduce air pollution with specific targets at reducing greenhouse gases by 60% by 2030, as well as getting to 50% of new vehicle sales to be EVs by 2030.*

**Dr. Quinta Warren:**





*Now our studies show that consumer benefits of owning EVs are tied to the fact that EVs have lower operation and maintenance costs than comparable internal combustion engine vehicles. And this comes from 50% less spending on repair and maintenance. It comes from 60% less spending on fuel and overall this results in \$6,000 to \$10,000 savings over the lifetime of the vehicle where a lifetime means 15 years and 200,000 miles. CR surveys show that there's high owner satisfaction with electric vehicles. A nationally representative survey conducted by CR in 2021 showed that owners of green and eco-friendly cars are more satisfied with their vehicles. Five of the top 10 vehicles tested by CR with the highest owner satisfaction are electric vehicles and 17 out of 18 electric vehicles currently on the market and tested by CR have received above average consumer satisfaction ratings. So, the vehicle that I'm showing here is the Mustang Mach-E, which was CR's top pick for this year and happens to be in the top four for owner satisfaction.*

**Dr. Quinta Warren:**

*A nationally representative survey conducted by CR in 2020 showed that 71% of consumers have some interest in buying an EV at some point with over 30% of them considering an EV for their next vehicle. The survey also showed that 78% of millennials are interested in owning an EV. Now, this is important because millennials are a growing portion of the market. And this generational shift in spending patterns will drive a growth in EV sales. As this plot of EV market share from 2015 to 2021 shows, EV market share is growing. In fact, EV sales more than doubled from 2% to 4.5% last year, according to the IEA, and they're poised to repeat that strong growth again this year. Bloomberg New Energy Finance is projecting that sales will double in volume in 2022. Now the doubling in market share from 2020 to 2021 is due to roll outs of more new models, roll out of models in more popular segments, and greater volumes of popular vehicles.*

**Dr. Quinta Warren:**

*Now, what do consumers need in order for more of them to buy EVs? One of the key things that consumers want is more vehicle options. As we saw in the previous slide, this factor alone drove much of the gains in EV market share last year. New vehicles in new market segments are really opening up the EV market beyond the initial phase, which was mostly small cars and luxury vehicles. Pickup trucks and a lot of new SUVs are now hitting the market, and these are vehicles that consumers want the most. Beyond more vehicle choices, consumers need more affordable, lower price options. So rapidly declining battery costs are making EVs more affordable, but they're still not affordable for a lot of consumers. Fortunately, there are some incentives available to help defray the costs of purchasing EVs, such as the federal tax credit of up to \$7,500.*





Dr. Quinta Warren:

*However, incentives need to be easy to take advantage of, right? With minimal red tape, they need to be preferably available at the time of purchase. Otherwise, there are some consumers who will still be excluded. I should mention here that at CR we are launching an EV incentives finder on our website in exactly one week, which will be part of our suite of car buying tools available to consumers. Range in charging speed anxiety are often cited by consumers as deterrents to their purchasing EVs. However, the average range is now about 250 miles per charge, and this is more than adequate for most drivers. Charging speeds are also continuing to increase, which reduces the time that drivers spend charging on road trips. In fact, fast charging is adding about 200 miles in only approximately 20 minutes. Charging infrastructure needs to be built up more to encourage more consumers to own EVs, right?*

Dr. Quinta Warren:

*While most EV drivers will charge at home or at work, public charging infrastructure is key for people without off street parking and for longer trips. More charging stations are needed, and they need to be reliable. They need to be accessible. They need to be in safe locations. The infrastructure investment jobs act has \$5 million allocated for EV charging infrastructure. CR has and will continue to weigh in on how best the money can be spent to benefit the consumer. Equity provisions are also important to ensure that all communities can participate in buying EVs. Some of these provisions include more affordable options, EV charging infrastructure in all communities, and incentives, which we talked about earlier. Incentives should be available upfront or else some consumers will still be excluded and we need strong equity provisions to be incorporated into future rules and regulations like ACC2.*

Dr. Quinta Warren:

*Finally, informing consumers is key to them buying EVs. A nationally representative survey conducted by CR found that interest in EVs grows as consumers get more direct experience with them. Consumers who have direct experience with EVs, including driving one, being a passenger in one, or even just knowing someone who has one. These people are three times more likely to want to buy an EV for their next vehicle than consumers who have no direct experience. So, a basic level of experience is not to generate interest. For instance, a 16-year-old learning to drive in an EV has this level of experience. So, dealers have an important role to play in consumer education by helping them to understand what it's like to own an EV, right? Test drives can be especially important. And dealers can encourage people to take test drives. They can tell consumers what it's*



like to own an EV. They can stock EVs on their lots, and they can provide information on incentives for consumers who are looking to purchase EVs.

Dr. Quinta Warren:

As earlier mentioned, CR's website has buying tools and incentives information. We have articles with information on EVs, and we have readings that help consumers to make informed choices on the vehicles they will purchase. So, to summarize, there are clear benefits to the consumer from owning EVs. EV owners save \$6,000 to \$10,000 over the lifetime of the vehicle compared to people who own comparable internal combustion engine vehicles. Consumers need reliable and accessible infrastructure, incentives and vehicle options. Car companies need to make great EVs that consumers will want to purchase. And finally, consumer education is needed so that consumers know what it's like to own an EV. So, they know the benefits of owning an EV, the incentives that are available to them to make that happen. Dealers and automakers can help to inform consumers about these things. So, that is the end of my presentation. I thank you for your attention.

Alfred Artis:

Oh, thank you for that informative session, Dr. Warren. Let's get to it. So, my first question for you is, are consumers familiar with incentives such as rebates and tax credits and how must those systems be improved to best serve the end user, which is the consumer?

Dr. Quinta Warren:

Yeah, there's a need for incentives to be easier, consumers to understand, and access. Incentives should be targeted to consumers who need them most so that EV access is expanded. The benefits of vehicle purchase incentives are not proportionally allocated cost, income and minority populations. I'll give you an example. The federal income tax credit is a credit against federal taxes owed, and it's only worth \$7,500 to consumers who have a federal tax bill at the end of the year. That's \$7,500 or more.

Alfred Artis:

Oh, so wait. If you don't have a \$7,500 tax liability, you don't get the tax credit?

Dr. Quinta Warren:

That's right. So, to give you another example within that, if a household owes \$4,500 in federal income tax, if they purchase an eligible EV, that household only receives a \$4,500 income tax credit, right? So, the \$3,000 unused portion of the full credit is lost, cannot be applied against the following year's taxes. Exactly. And then, as you can imagine, credits



are even fewer or less available for families that have lower incomes, right? Because these families tend to have lower tax bills. And this is unfortunate because these are the households that actually need the incentives the most. And the same is true for most state income tax credits. The other points are, I alluded to them earlier, on the hood incentives and rebates are better than after purchase because some consumers just can't afford the upfront cost of purchasing an EV.

Alfred Artis:

Would you mind explaining what on the hood means for some of our listeners?

Dr. Quinta Warren:

Yes, of course. On the hood means available at time of purchase, right? So, not at the backend or when you're filing in your taxes or a mail in rebate where you have to pay upfront and then try to get some of that money back. That's what I mean.

Alfred Artis:

So, it'd be more like a coupon?

Dr. Quinta Warren:

A rebate or a tax credit, right? Yeah. On the hood would be at time of purchase after the fact could be, like I said, tax credits, which means you have to wait until you file your taxes before you even find out whether you qualify or how much would be available to you. Yeah. So, this ties back to my earlier point that incentives need to be easier to understand, and we need less red tape around people using and accessing them. Consumers need to be informed on the different incentives that are available to them, how they can access them. And as I mentioned, dealers and automakers have a huge part to play here because if I go to buy an ICE vehicle, I can go to an automaker website or a dealer website and they'll very clearly state what incentives are available and they can do the same thing for electric vehicles.

Alfred Artis:

Well, that's good to know. Well, let's talk consumers in charging, especially public charging. What kinds of policies would create confidence for consumers at the public charging pump?

Dr. Quinta Warren:

Yeah. So federal infrastructure funding should go a long way towards bolstering national EV charging network, but it's not sufficient on its own. We need to ensure that the



*network itself is reliable, affordable, accessible, and safe, right? So reliable meaning that chargers actually work when drivers show up to use them. Accessible meaning that they are present not just in some communities, but in all communities and consumers don't have to travel far to get to chargers when they need to charge. And then safe, meaning that chargers are placed in locations that are safe. For example, locations that are well lit, not isolated so that drivers are not put in harm's way while they're charging. So, consumers don't just want chargers. They want consistent, dependable chargers that they can rely on daily. I should say that we also need significant efforts to ensure equity, right? Such that all Americans have access to charging where they park their cars at night or while they're at work.*

**Dr. Quinta Warren:**

*For example, charging stations are needed in multifamily units, they are needed in rural communities, which tend to have inadequate charging infrastructure, especially compared to the rest of the country. Yeah, the bipartisan infrastructure bill contains funding for charging infrastructure in underserved communities. So, states are working to deploy this funding. It's actually imperative that they work with stakeholders in target communities to better understand their needs and how funding can be best used to meet those needs. So, CR weighed in on the request for information that the joint office of energy and transportation, that's the one that's headed by the department of energy and the department of transportation. So, they put out this RFI on how best to use the \$5 billion allocated for charging infrastructure and we continue to weigh in as those plans continue to be developed.*

**Alfred Artis:**

*Fantastic. Well thank you for providing a voice for consumers. Now is California on the right track regarding regulation to promote electric vehicles?*

**Dr. Quinta Warren:**

*California is on the right track. Yeah. ACC2 is driving rapid transition to electrification. I will say though, it needs to do more to ensure that the transition is equitable and inclusive of all communities because while ACC2 does contain equity provisions, that would allow OEMs to earn credits for producing more affordable models. These equity provisions are optional, right? So, it's not clear that the rule contains sufficient incentive for the manufacture of lower cost EVs. It's also important to ensure that frontline communities are not only included, but actually at the forefront of the regulation, right? So, equity needs to drive every decision, not just be a part of it.*



Dr. Quinta Warren:

*So, the state needs to engage with these communities to understand, as I mentioned earlier, how funding can best benefit them rather than imposing solutions on them, work with them. And this goes for the proposed standards as well as the grants when they become available, right? The state should let these communities know when the resources are upcoming and available to them, help inform them on how they can participate, how they can actually be a part of getting some of that money and spending it in their communities, growing their communities.*

Alfred Artis:

*Awesome. Well that actually sets us up excellently for my next question. From an equity standpoint, what policies or programs are doing the best to bring the EV transition to communities that need it most?*

Dr. Quinta Warren:

*Yeah. Great question. So, first of all, why is equity important? It's important because many of the lowest income US households spent nearly one fifth of their income on gasoline and that's three times more than the average US household does. So, they were spending a greater percentage of their income on gasoline. Additionally, there were disparities right in the impact of air pollution with private communities facing higher exposure and thus greater harm. So, there are a few programs that I want to talk about. The California Energy Commission has done a good job of prioritizing infrastructure in environmental justice communities in the allocation of the clean transportation program investment plans, right? 51% of the project funds are being awarded to projects within disadvantaged or low-income communities. So, CR weighed in on making equity requirements mandatory by codifying the 50% investments in low income and disadvantaged communities in that statute. Another example is California's Clean Cars 4 All program, which is a great model for moving low income households away from ICE vehicles and into cleaner, lower emission vehicles.*

Alfred Artis:

*What is the Clean Cars 4 All program? Is it some scrappage program?*

Dr. Quinta Warren:

*So, it's proposing funding to expand. I'm sorry. Could you repeat your question?*

Alfred Artis:

*Oh yes. Well, what is the Clean Cars 4 All program? Is it a scrappage program?*



Dr. Quinta Warren:

*Scrappage? It's a program that provides clean cars for communities that are clean cars for communities that are disproportionately impacted by air pollution and are also priority communities, in the sense that they're generally lower income. It's been working well, and the administration is proposing funding to expand the Clean Cars For All program statewide. The beauty of that is that it'll allow funding to reach more underserved community in California. It's working so well that demand for the program is outpacing supply, and certainly California should consider measures to ensure that the cars that are distributed by this program are durable and reliable. Lower income consumers have fewer market choices, right? They often rely on the secondary market. So, it's important that reliable, durable ZEV make it to the marketplace as soon as possible. So, programs such as ACC II that have strong warranty durability and battery labeling requirements are important to make sure that cars in the secondary market are reliable. And finally, CARB has the clean mobility options program, right? That's done a really good job of increasing accessibility to ZEV options in low income communities, allocating 90% of project vouchers to eligible under resourced communities. So, some good programs out there.*

Alfred Artis:

*That's very good to here, it's very exciting. So, some states worry that they will lose road funding during the transition to EVs because consumers won't pay the gas tax. Now our special taxes on EVs beneficial for EV adoption and do they actually help make up for lost gas tax revenue?*

Dr. Quinta Warren:

*Well, let me begin by saying that it's only fair that EV drivers should contribute to construction and upkeep of roads because they drive on roads. And the fact of the matter is that they already contribute, right? However, we need to be careful in crafting these policies to ensure that they're equitable and they're not unfairly, well, punitive towards EV owners. So in 2019, CR carried out a study on the rising trend of these, let's call them, punitive fees on electric vehicles and one of the key findings was that EV owners in some states could end up being forced to pay two, three or even four times the amount that owners of new ICE vehicles pay in gas taxes.*

Dr. Quinta Warren:

*The study also found that existing and proposed EV fees would generate only an average of 0.04% of current state highway funding and even at those punitive rates, would only increase to 0.3% by 2025. So, these punitive fees are discouraging consumers*





*from buying EVs, but they're not really making a dent in declining tax revenues for the states. So, I should mention here that the tax revenues are declining due to inflation, due to the fact that gas mileage is improving and due to the fact that gas taxes have been stagnant for a while in many states.*

**Alfred Artis:**

*So, are you telling me, very simply, that if a consumer wants to buy an EV, they might have to pay a special punitive fee simply for purchasing an EV and that fee does not at all make up for gas tax revenue?*

**Dr. Quinta Warren:**

*That's exactly what I'm saying, I know. The good news is that at the time that this was becoming a trend, Consumer Reports pushed back, ourselves and other advocates and were able to stem the tide somewhat. But this is still an issue in some states, EV drivers are already paying taxes, they're paying taxes on electricity that they're using, they're paying registration fees, they're paying tolls, they're contributing to many other sources of revenue that are earmarked for highway funding. So, there's no reason to ask them to pay more than their fair share.*

**Alfred Artis:**

*Absolutely. Especially if they're paying three times more than a traditional ICE vehicle driver. I mean, wow, then they're subsidizing the roads for those of us that drive gas. I, of course, don't. So finally, what should automakers and dealers be doing to help consumers?*

**Dr. Quinta Warren:**

*Dealers and automakers can help inform consumers, right, about the benefits of EVs. Think about what's happening in the world today, so this week, as a result of what's happening in the world, the national average price for a gallon of gasoline broke records, right? Topping a nearly 14 year high. So, what is the impact on consumers? They will spend more fueling their cars, fueling their trucks. EVs are great for consumers in terms of cost savings on the order of, as I've mentioned, 6,000 to \$10,000 over the lifetime of an EV, right, when compared to a comparable ICE vehicle. And this is even after taking into account the higher initial price of just purchasing an EV. Nevertheless, that initial cost of buying an EV is prohibitive for some consumers.*

**Dr. Quinta Warren:**



*Now incentives information can come from deals and automakers, as I mentioned, this information can be made available on companies, websites as well as at the dealership. As I said, dealers are already providing similar information for internal combustion engine vehicles, so it's not a stretch to add EVs to that. Another way that I mentioned earlier is providing direct experience with EVs through test drives, for instance. EVs are fun to drive, so dealers and automakers are in a really good position, actually they're in the best position, to provide consumers with direct experience in driving EVs. EVs are convenient in the sense that for people who can charge at home, people don't need to go to a gas station, right, like gasoline vehicle owners would. Automakers and dealers should deliver vehicles in volume at affordable price points and vehicle classes that consumers want. So, while progress is being made on these fronts, it's being made slowly, so we at Consumer Reports are looking forward to a time in the near future where consumers have sufficient choices of EVs so that they can save money while also cutting down on air pollution.*

**Alfred Artis:**

*Well, thank you so much for that and thank you so much for that very interesting discussion and presentation. I want to thank you for sharing your time with us, and now if you wouldn't mind, please feel free to turn off your camera and mute yourself as a wonderful way of welcoming our next speaker. So, we will now turn to our next session titled Dealers and EVs, that's right, one leads right into the other. I would like to invite Les Swizer, who is staff council at the California New Car Dealers Association to join me. The California New Car Dealers Association is a Veloz member and we are happy to have Les give a spotlight presentation on just how dealerships are preparing for the transition to selling EVs. Les, please take it away.*

**Les Swizer:**

*Of course, it's never a Zoom meeting unless somebody is on mute still. Are you able to see me and my slides okay?*

**Alfred Artis:**

*Yes, we are. It looks great.*

**Les Swizer:**

*Excellent, thanks so much. Just want to say hello, thank you for having me here, it is a pleasure to be here today and discuss dealer excitement buzz around EVs. My name's Les Swizer, as mentioned before, and I'm staff council of California New Car Dealers Association, or CNCDA. CNCDA represents nearly 1,300 new car and truck dealers*



*throughout California. Our members are primarily engaged in the retail sale and lease of new vehicles and also engage in automotive service, repairs and parts sales. Today I'm going to discuss available incentives, as already has been discussed, so I'll try not to repeat too much, but I'd like to present it in a way that discusses how dealers have worked with these particular EV incentives. But before we get started, I just want to share a little bit of history to kick us off.*

**Les Swizer:**

*So, credit of being the first franchise car dealer in the US goes to William Metzger, Metzger built and opened the first independent automotive deal dealership in Detroit, Michigan, in 1896. The first automobile he sold was actually an electric vehicle, it was known as the Waverly. He sold this for a whopping \$1,000, which equates to about 33,000 today. By the turn of the century, Metzger had moved on to selling steamers and then powered cars built by various companies.*

**Les Swizer:**

*So, as we've all about various incentives, I'm sure those participating and observing today are relatively familiar with the myriad monetary incentives available to purchase EVs and EVSE, or electric vehicle supply equipment. I'd like to discuss a brief background of a few key programs here in California, and the general experience dealers have had introducing and aiding their customers in applying them. I'll also discuss some local incentives available for installation of EVSE, and for simply surrendering old gas guzzlers. There's no doubt that the collaborative effort of various government agencies have moved the needles tremendously to stimulate interest in adoption of EVs. And as was mentioned earlier, California just celebrated its 1 millionth EV sale, which was a Volkswagen ID.4.*

**Les Swizer:**

*So, to discuss the California Clean Vehicle Rebate Project, this project's administered by the Center for Sustainable Energy on behalf of the California Resources Board. CVRP offers rebates anywhere from 1,000 to 7,000 for the purchase or lease of a new eligible zero emission vehicles and this includes electric, plugin hybrid electric and fuel cell vehicles. CNCDA worked hand in hand with the multi-agency effort, we served as a bridge between agencies and the dealers to help drive consumer adoption and consumer awareness of the program. We continue to collaborate California Air Resources Board, Center For Sustainable Energy and other such agencies to ensure dealers and their customers are aware of the program parameters and offerings and to offer stakeholder input on the benefits and the pitfalls of the program. As was mentioned*



earlier, since its inception 2010, this program has approved over 450,000 rebates totaling over \$1 billion.

Les Swizer:

*Of course, nothing is perfect. There was some difficulty with this program, from a dealer point of view, as to the consistent changes it's gone through. Given dealers are the face offering the rebate can be discouraging when a program's confusing or funding is uncertain. The CVRP terms and conditions are updated every six months to accommodate operational process changes, and dealers want and are required by law to be transparent with customers about vehicle pricing and rebates. So, having a moving target as to income caps and vehicle eligibility makes it difficult for dealers to maintain confidence if the information, they're relaying to their customers is accurate. Funding ran out temporarily on this program largely due to the effectiveness of dealers in getting customers to enroll and a wait list developed. And though, there's now funding available, there's some uncertainty as to whether many customers on the CVRP wait list will even receive a rebate given the program changes.*

Les Swizer:

*Bottom line, incentives are a great driver to throttle EV adoption, but to bolster confidence in incentive programs, it's important for the parameters and the funding to maintain consistency and longevity. The California Clean Fuel Rewards Program is statewide electric vehicle time of sale or lease incentive program and it's funded by CARBs low carbon fuel standard. This program's administered by Southern California Edison Company on behalf of all participating electric distribution utilities. The program's distinct because it can be included in the financing, which makes it very easy for dealers to apply and it gives an immediate gratification to the customer, this is another program where CNCDA work closely with the administering agency to get word out to the consumers. The program initially offered an on the hood rebate, and we learned more about on the hood earlier, an instant rebate, it gets put into the financing, its put into the contract right away, the customer feels it immediately.*

Les Swizer:

*And this is for the purchase of eligible battery electric or plugin hybrid vehicle dealers loved this program because it enabled them to move more EVs by offering instant savings. Between the launch and December 31st, 2021, nearly 200,000 customers received this reward, 21% of those customers were in underserved communities and 72% of those replacing their household vehicle replaced an ICE vehicle and most were purchasing an EV for the first time. Dealer participation was nearly saturated, just under 1200 California*



*new car dealers participated in this program. Now for reference, CNCDA's membership base of new car dealers is nearly 1300, which is pretty much all of them in the state.*

**Les Swizer:**

*Again, nothing's without some downside. Due in large part to the rapidity with which dealers spread the word, funding dwindled. A bit suddenly and unexpectedly the credits cut in half and dealers were alerted less than two months before the changes take effect. Again, the changes in these programs raised concern for dealers as they're the face in voice telling the consumer how incentivizing it is to buy an electric vehicle. When these wait listed customers don't get their rebate or customers expecting \$1,500 in credit get only 750, it's the dealer that earns the bad rep. Consumers are more likely to bring their grievances over these programs to the dealer, not the state agency that implements them. So, consistency, longevity and certainty with the parameters and funding of these programs is so important. It's great to hear Ms. Sanchez talk about that earlier.*

**Les Swizer:**

*Clean Cars 4 All, this has been mentioned earlier. So, several local air quality management districts offer an incentive for low income consumers to retire their older vehicle and replace it with a cleaner eligible vehicle. These programs are especially impactful for low income individuals because they include incentives for more affordable used vehicles which opens the market wide. These programs are also funds limited, however, and not all districts are able to continue to offer them. As of the making of this slide, the Bay Area Air Quality Management District is still offering up to \$9,500 in incentives to trade from an older, more polluting vehicle to a newer, more efficient vehicle.*

**Les Swizer:**

*In addition to the federal, state and regional incentives, there are myriad local programs that are fantastic for consumers to get EV adoption going. San Diego, for example, offers rebate now, which is a pre-approval process on the CVRP to ensure rebate is available to the consumer at the time of purchase, it instills more confidence in utilizing the incentive. Multiple local utilities offer rebates, discounts to install EVSE and dealers know firsthand the expense and complicated process to have vehicle charging equipment installed.*

**Les Swizer:**

*There needs to be more focus on affordable and accessible charging for all incomes and those in multi-unit housing. CNCDA applauds the governor's focus on funding for more level two charging infrastructure and we also want to mention that VW's efforts have*



been commendable as well, including offering assistance to dealers to install more chargers, which makes it easier for us to sell these EVs. Some local districts will offer cash to dispose of older, more polluting vehicles, some offer vouchers towards the purchase of eligible ZEVs and PZEVs and these local programs can be invaluable to motivate residents to make the move to EV. Help with charter installation sometimes is the last piece of the EV puzzle for some consumers, and dealers are invaluable in this area because most dealers are fixtures in their local communities and are aware of the more nuanced credits and opportunities. We do have opportunities to learn more about what's available out there and we are definitely doing our best to get there.

**Les Swizer:**

As interest in EVs was in its nascent stages, dealers found that EVs didn't garner much interest, the average consumer and often these vehicles set unsold on the lot costing the dealer money every day they didn't get sold. Dealers want to sell what consumers want to buy, and for a long time, the truck and SUV loving segment of consumers did not have a meaningful EV choice without giving up the utility of their beloved large vehicles. And all that's begun to change, existing and up and coming EVs from legacy auto makers are driving years long wait lists, the Ford F-150 Lightning, the Ford Mach-E, there's a Chevy Silverado EV coming out and Hummer and SUV and pickup is available. The upcoming Jeep EV is exciting, Audi e-Tron, the Toyota RAV4 Prime, while it's not an EV, it was incredibly high demand. Nissan's on that announced the Titan electric truck is on the way and Toyota, which is a pioneer in clean vehicle technology, has announced to move towards EVs.

**Les Swizer:**

These are the brands that consumers know and trust with dealer networks offering a touch point between the manufacturer and the ultimate consumer to ensure warranty, recall and repair work is done. Dealers are chomping at the bit to get these cars and trucks so that sell them, consumers are more and more excited about these new vehicles and consumer excitement equals dealer excitement. Dealers are all in on EVs, make no mistake, and now with EV offerings of classic models that Americans fell in love with, we get the chance to fall in love with the car all over again. I thank you again for giving me the opportunity to on behalf of our dealer members. This is my contact info, feel free to reach out, happy to answer any questions or just chat about cars. Thank you.

**Alfred Artis:**

Well, thank you Les. Now, introducing Adam Sykes, who is the VP of government affairs and corporate communications for BMW Group Regions Americas. What a title. Thank





*you, Adam and BMW for being the Veloz members. And please welcome, Elaine Borseth, president of the Electric Vehicle Association, whose vast experience working with hundreds of individual EV buyers around the country will help shed light on the consumer perspective as consumers and dealers meet to make some magic happen. So, folks let's jump right in. Our first question is for Adam, are there any places where automakers and dealerships can work together to promote EVs?*

**Adam Sykes:**

*Yeah, thanks Alfred, thanks for having us join today. Absolutely, I mean, there's a huge amount we can do and are doing in this space. I would pick up on maybe just a handful of topics out of the many that are there. One is obviously creating awareness for the vehicles and have the right vehicles; this was pointed out in one of the previous presentations. And I think we'll see with the vehicles, there's an awful lot coming through at the moment, and we're going to see a vast expansion across the industry which will offer different body styles, different price points, different segments. So, you'll have huge coverage and you'll have the right choice for the consumers for whatever their different needs are that they can pick an electric alternative for their needs.*

**Adam Sykes:**

*So that's the first point, and then awareness obviously is to make sure that people see that's there. As you may have seen, we had a big advert in the super bowl with the i4, which is coming to market later on this month. And I think making sure that we choose those platforms that's going to have the biggest reach and the biggest awareness will have an impact as well. And simply put, have the right cars and put as many as possible of them on the road so that they get seen, so that people see them being used and realize that this is something that they can lean into and engage with. So that's getting it out there and then equipping the dealers to make sure that they're able to go ahead and explain those and to be able to provide them, service them in as equally a professional way as they do today with combustion engines.*

**Alfred Artis:**

*Well, that's great to hear. Elaine, this question is for you. What are consumers most concerned about?*

**Elaine Borseth:**

*Really the things that consumers are concerned about and the things that I think dealers need to really be aware of is, number one range, everybody's worried about range anxiety. And now that cars have over 200, over 300 miles of range, that's really not an*



*issue. But range, I think charging is a huge thing, people want to know where am I going to charge? There's so much misinformation out there, and that's where the EV Association, that's what we're all about. We educate and we advocate because I can't tell you how many times that I've heard things like, "Well it costs \$4,000 to put a charging station in your home." And people don't realize they might be able to just plug into regular 110 household outlet, and especially now with more and more people working from home and people really not putting more than 20 or 30 or 40 miles on their car in a day, a 110 outlet is probably enough to get them every single day.*

**Elaine Borseth:**

*But if they have a dryer outlet, that works and even to install a home charger is not that expensive depending on your situation. But people are concerned about charging and especially if they don't have access to home charging. If they do live in an apartment or even a condo or something like that, where there isn't charging, that's a huge concern.*

**Alfred Artis:**

*Excellent. Let's narrow the focus a little bit to how are EV consumers... What are they concerned about relative to the EV buying process? When you talked to, what, thousands of individual people who've each purchased an EV, you know so many different stories when it comes to all of the consumers trying to purchase an EV at a dealership or through other means, do you have any concerns that you would like to share based off of all of that relevant experience that you have?*

**Elaine Borseth:**

*Definitely. One of the biggest things, and especially for rural communities, even we have a member who is doing an amazing job of getting EVs and EV charging into his neighborhood in Trotwood Ohio, it's a predominantly African American community. And he said when he first started looking for an EV in the 30-mile radius, not a single dealer had an EV for sale. Same thing with another one of our chapters, Waco, Texas, she went around all the dealers, knocking on doors. "When are you getting an EV in?" And they're like, "Nobody wants them." But they're starting to come around, but that is a concern when dealers don't have them and I understand now we have supply chain issues, that's a whole other animal, but we need to get the EVs into dealerships.*

**Elaine Borseth:**

*For instance, I just talked to a director level at a utility yesterday who went out to test drive an EV, called ahead, they said, "Yes, it's here." She got there; it wasn't there. They're like, "Well, let's put you in this other one." When they went to put her in the other one, it*



*had zero state of charge so she couldn't test drive an EV. So those types of things are very, very frustrating, obviously, for consumers and I think dealers are starting to get on board, but they think they need to step it up a little bit. And then just the education, a lot of times the sales reps don't know about the incentives, they don't know about utility rates, they don't know that it's a lot cheaper to run your car on electricity versus gasoline, that type of thing. So, these are things that consumers are really worried about when they go to try to shop for an EV.*

**Alfred Artis:**

*Well, that's good to hear. That's terrible news, but this gives me my next question to Les. So, Les, based off what we've just heard, how can dealership staff and salespeople be better prepared to sell electric vehicles?*

**Les Swizer:**

*And it's a great question. I can't speak for dealers nationwide; I can speak for California dealers and I can say that this was an issue in the past. Yeah. There's no doubt that we saw study after study come out regarding salesperson education and California dealers heard the call. Many dealers have invested in training, worked with organizations like Plug In America, trying to get their salespeople up to speed on how these work, how exciting they are. I took a ride in a Mach-E, it was the first time I'd ever been in an electric vehicle at the LA Auto Show and let me tell you, it was fun, man, these are fun cars. So, dealers are getting more and more excited about it as consumers get more and more excited about it, and I think the times of going to the dealer in California, anyhow, and finding no one who knows about EVs or finding EVs at a zero state of charge, it's fading fast.*

**Les Swizer:**

*Obviously, the supply chain issue, as you mentioned, is keeping less cars on the lots which is a challenge. But like I said, dealers, they want to sell what people want to buy and it seems that it's very clear the tide is changing, and people want to buy EVs. I think the more that we invest in our sales people, in our staff and trying to work to get them up to speed on the hottest products that are coming out in the EV ecosystem, that's what's really going to make a difference in the consumer experience at the dealership. And we're seeing it here in California, we're seeing a big shift.*

**Alfred Artis:**

*Well, that actually brings me to my next question for Adam. Adam, how are automakers working with dealers and the dealers that they work with in order to take care of some of*



these consumer concerns, make sure that vehicles are arriving in a full state of charge? I mean, are automakers doing anything to make sure that this pain point of purchasing an EV can be smoothed out?

Adam Sykes:

*Sure. I mean, I would say there's a suite of different activities that are going on. First and foremost, it is getting the dealers trained and equipped to be able to go ahead and deliver the service that the consumers expect. And first of all, they're all professionals, they're all guys who want to sell, so if you give them the right cars, that's the absolute best starting point because that's going to get them engaged. And to the points that were made before, if you do have the right vehicles in the right segment where there's high demand generally, so in our case, we're bringing out an i4, which is in the sedan segment, and iX is about the same size as the X%. Those are segments that are very popular, then you're going to have natural demand and it gives them things to work with and sell.*

Adam Sykes:

*So that's the one side, but then it's putting in the right things for them to be able to train staff who can go ahead and explain things, train staff who can work in the shop and make sure that they're able to repair, have the right tooling in place and have the right charging in place to be able to have the vehicles charged when people come in.*

Adam Sykes:

*And I think to that point, those are all investments that have to be made with the new technology, and I can't speak for others, as far as how they've done it, but it's a question of making it easy for the dealer so they can engage and then engage the consumers. And in our case, what we did is we set up a fund, we have done that nationwide, it was set up with the dealers and it is administered with the dealers as well. So it's not just an OEM topic, we have them fully engaged and we have provided the funding for them to be able to do that, charging, tooling, training so that it's not hitting their bottom line in investment and they can engage and run with it. And that is what's making the difference, so the engagement on the one side will help engage the consumers when they come in.*

Alfred Artis:

*Is this a project that's unique to BMW?*

Adam Sykes:



*I certainly think we're probably one of the more advanced in this space. I imagine that others are doing similar programs, maybe in a slightly different variation, but we've really leaned in strong on this one with the dealers together to make sure that they have what they need and taking their advice on board as to what they're going to need to be able to go ahead and do the best they can with the consumer as well. And then maybe in terms of listening to the consumers, it's a question of just being in open ears and as we see volumes come up, it's taking what we learn from the consumers.*

**Adam Sykes:**

*Now we've had past experience, we had a program with Mini in 2011 and 2012, which was giving them Minis, and they had to write down their experience with the car. And since then we've rolled out a number of vehicles and we have a million electrified vehicles on the road, and with each one in consumer hands, then you learn how it's being used. And you've got to take that learning and then put it both into the sales process, but also into engineering to make sure that you keep pushing the needle to make sure we're getting things right going forwards. And I think having that structured way from direct consumer experience, that's the most important thing to learn and to move it forward as well.*

**Alfred Artis:**

*Gotcha. Well, Elaine, with your direct consumer experience, have you heard anything from these past two answers that gives you confidence that the consumer experience will be getting better? It sounds like they're really doing their best.*

**Elaine Borseth:**

*Yeah, definitely. And it is exciting to hear, and we are definitely moving in the right direction, so that's awesome. And the nice thing is that EV owners make great advocates, so for dealerships to even do like an owner's night or an EV chapter night and have people there that potential buyers could even talk to about how much they love their EVs because people do.*

**Alfred Artis:**

*Great. Well, this brings me to my next question. Adam and Les, are there any barriers to collaboration between dealerships and automakers? We've seen in the news, sometimes, there can be disagreements, are there any ways to find solutions to those barriers if they exist?*

**Les Swizer:**



*Well, don't mind if I speak up real quick. I wouldn't say there's barriers to collaboration, I think that dealers and automaker are in communication regularly, and I found that many dealers consider their relationships with automakers to be a partnership, I've heard the same sentiments from automakers. But with any partnership, there's going to be moments where one business idea doesn't agree with the other, but it's always a collaborative environment, it's always working together. One does not work without the other, definitely it's a partnership and it has to be strong and communication is often very frequent. So, I don't think there's any barriers there, I think as long as we continue to maintain the partnership viewpoint, we'll continue to be successful moving the needle.*

**Adam Sykes:**

*I agree, collaboration is absolutely the right word. As with any partnership, as you said, there's always going to be a little bit of challenge, right? And there might be a difference of opinions on things, and we challenge each other, for sure. And this is a new space for everybody that is rapidly changing and so there's always going to be maybe slightly a difference of opinions on things, but that's healthy challenge. As long as it's healthy challenge and we work together and find solutions, which is why, [inaudible 01:07:26] as example, we have this program that I mentioned before, as long as we are looking to push each other on in a healthy way and find solutions on both sides, then that's going to deliver the best result for the consumers, for sure.*

**Alfred Artis:**

*Elaine, as the consumer advocate, do you believe that these solutions that they've proposed or ways of working together are going to deliver results for consumers?*

**Elaine Borseth:**

*I think they will. And I think now that EVs are so desirable and people are excited about them, it's like you mentioned that when you got into that Mach-E, they're so much fun to drive. And I think we're all going to be able to work together really well and I think they really are putting in the effort and the time to get things going.*

**Alfred Artis:**

*Well. That's fantastic. I actually have a question that isn't written down for all three of you, and it is about Ride and Drives. Do any of you have any positions on Ride and Drives? They are a way of getting individuals into a car, but they are not actively looking to purchase an electric vehicle. So, this is not a test drive at a dealership, a Ride and Drive's an event where folks are brought in the street to test out driving electric vehicle*





even if they're not in the market. Does the California New Car Dealers, followed by BMW and followed by EV Association, have opinions on these sorts of events?

**Les Swizer:**

*I think these are invaluable events, I think it's akin to a car show with ICE vehicles. I was a tech and in the service industry before I went to law school and joined the association, so I've been working on cars since I was knee high to a grasshopper. I'm very much a car guy and love vehicles, all kinds. So, the car show was always just so much fun and it's a similar idea, you get to see the vehicle, you get to put your hands on it, touch it, hear it, feel it in the acceleration. And I think these kinds of events are great because, like Elaine said, EV owners are some of the best advocates for EVs and connecting them with potential future consumer base, even if it's not today, if it's next week, next year, just introducing and really letting them feel the car, see the car, get to know the car and understand that it's not just Elon's technology. It's neat, and it's also here and it's real. And it's hopefully accessible to everybody very, very soon.*

**Adam Sykes:**

*I would say crucial. At the end of the day, this is a new technology and it's a different ride and drive. As a different ride and drive of the vehicle that you only experience properly if you go to a ride and drive event, you see where I would say design meets technology and tech in the sense of you having different drive train, and often, different tech in the car that goes with that cause it's the next generation of vehicles. And you only truly experience how that comes together. But in particular, how exciting it is to drive these vehicles and without exception, they are exciting to drive. And it's how you get people to do that in a more open environment so that they can engage. At the end of the day, it's about making it easy for consumers to engage with this technology, and that's the best way to do it.*

**Adam Sykes:**

*And you can do it at different levels. So, we have, what's called, the ultimate drive experience that tours the country, no salespeople there. It's just about going and experiencing cars, and we have the full suite of cars there. And in particular at the moment, obviously a focus on EVs, but also at the dealership level, we have, what's called a product genius. This isn't the salesperson. They are there just to talk product, just to explain the product to you without any requirement to buy, they have time, they're not on commission. They will talk you through it and take you out for a drive as well. And think having it at the national level, which funnels to the dealerships, at the dealership level, that's easy to engage, I think that's what's going to make a huge difference for sure.*



Elaine Borseth:

*Yeah. And I have to totally agree. The ride and drive, there's just nothing like it. And I think that lack of pressure where they're not being pushed to buy a vehicle that day. They're just being encouraged to test drive it. I personally have had over 500 people test drive my EV and it just never gets old, that reaction, the first time they hit the accelerator. And then when you talk to them, you're able to talk to them about not having to go to the gas station and the cost of fuel being so much lower and the virtually no maintenance and all of those things. I rarely have someone get out of the car that they're not ready to go buy an EV.*

Alfred Artis:

*Right. Awesome. Well, let's try policy now, Elaine, this will go to you first and then Adam, and Les after. What policies or funding could help dealerships address consumer concerns, or are there any policies that consumers would like to see enacted to ensure that they feel their needs are being met at the point of sale?*

Elaine Borseth:

*Yeah. You know, on policy, I think just getting something in place that does help dealerships educate the consumer, educate the dealership, educate the consumer, that's where we need to go. And I'm not a policy person. I'm not exactly sure how we achieve that, but it is very, very necessary. And I think we definitely need policies in place that as a lot of people before me today spoke about getting the incentives at the point of purchase, that's just key and getting incentives for used EVs and things like that we can get EVs for everybody.*

Alfred Artis:

*And from your consumer base, you would say that incentives, has that been a problem for your consumer base?*

Elaine Borseth:

*You know, definitely. With the federal tax credit, for instance, it was mentioned before, if you don't have \$7,500 in tax liability, you don't get \$7,500 in a tax credit, and some people purchase a car, not knowing that. They think they're getting a \$7,500 tax credit. And then when they only get a \$1,200 one, it's confusing and it's difficult. And it's definitely an issue, and the lower your income, typically the lower your tax liability. And so, it does affect lower income individuals more than upper end individuals, upper income.*



Alfred Artis:

*Okay. Well, thank you for that very informative take. Adam, and then Les.*

Adam Sykes:

*Thanks Alfred. So, I would say, look, the end of the day, this is about consumer engagement, as I said before, and this is not a topic that one individual party can solve. The auto manufacturers, we've got to bring exciting vehicles that have got a sensible range, but you need a charging infrastructure, and you need to make it accessible for different income groups as well. So, from a policy point of view, we need things that are going to help that.*

Adam Sykes:

*So, on the one hand, it's having the right incentives and not making that discriminatory so that we can get as many vehicles on the road as possible and build that momentum. And it's having the right charging and investment in charging is going to be critical too, to make sure that we have the right level of charging across all communities. So that there's broad access for anybody who purchases an electric vehicle to be able to go ahead and charge. Range is great, but on its own without the right charging solution is only part of the puzzle. So, it's getting those policies in place that are going to help everybody to get into EVs and build that groundswell and drive the momentum forwards.*

Alfred Artis:

*Fantastic. Well, Les again, funding or policies that would help dealerships sell EVs. And then after that question, we're going to do a quick wrap up where I just ask each of you to think of something that you would like to leave the audience with, a key piece of wisdom that you can distill down. So, prepare that while, Les, please begin. Elaine we'll do you after that, then Adam, and then Les again.*

Les Swizer:

*Thank you. You know, I think, and I mentioned it before, the big piece of the funding of the incentives and those kinds of programs is consistency. And again, I'm very happy to hear Ms. Sanchez talk about trying to push for more consistency in the funding, in the regularity, because those moving targets are very difficult. A salesperson at a dealership, their day moves fast, and it may not seem like it to the customers, but there's a lot going on. There's a lot of movement, and they're often handling multiple customers simultaneously. So, the easier these credits and funding are to apply, the easier it's going to be for dealers to get the awareness out about them.*



Les Swizer:

*I think that, I spoke with a gentleman who works with valley clean air now, Tom Knox. And one of the issues that we're running into with the charging infrastructure is the funding is there, but there's a bottleneck of qualified technicians to be able to install the items. So, it's got to be a collaborative effort. We need EV tech training for mechanics. We need EVSE tech training so that we have qualified electricians and individuals installing them. It's going to take, there's a saying it takes a village to raise a child. Well, I think it's going to take a village to bring EVs fully forward.*

Alfred Artis:

*Agreed. Well, thank you for that. Now we go into our nuggets of wisdom. Elaine, please kick us off.*

Elaine Borseth:

*Yeah. So, I think Dr. Warren kind of summed it up, that informing is key, and that's really what the EV association is all about. We educate and we advocate. And again, because there is so much misinformation out there and then just even confusion, like we discussed about the tax credits. So really educating the consumer, that's all we need to do to get them into an EV.*

Alfred Artis:

*Fantastic. Adam?*

Adam Sykes:

*First of all, I'd like to make a shout out to California, because I know that you guys are leading in this space in so many different ways. So, my first part will be to say, keep pushing, because that's what's going to help drive not only the state, but the nation and actually the international community in moving this forward. But what I would leave as my words of wisdom are: Be part of the family. In a family, everybody might have different perspectives on things, but when something's there to be tackled, everybody pulls together. We might challenge each other inside the family, but outwardly we all work together to tackle what we need to tackle. This is something we all need to do together. We've got to talk up the excitement. We've got to help each other out and in doing so, we will make a big change in the electric space, everybody together in the community.*

Alfred Artis:

*Great. Les?*



Les Swizer:

*How do I follow those two? You know, I'd like to echo that. It is a family, and many dealerships, I know dealerships that I've gotten to know the owners and the staff is they do look at things that way as a family. They're little families within a large family. And I think that collaboration, continued effort in education, advocacy, and variety of product automakers. I got to shout out to the automakers. They're doing a phenomenal job and making huge investments to try to put products out there that Americans are going to love. And I think it going to continue to move that direction. And between that and the partnership with dealerships pushing these vehicles out into the road, it's just going to be a natural and very organic progression. Just keep on keeping on.*

Alfred Artis:

*Awesome. Well, thank you all for that very informative panel. Josh.*

Josh Boone:

*Yeah. Thank you, Adam, Les and Elaine, for the lively discussion. I was listening in very closely. And thank you Alfred for facilitating. Next, we're going to take a short break, but before you go anywhere, I want to tell you what's coming up next. After the break, we're going to have a spotlight called *Are Incentives Working*, and that's going to be followed by round table discussion called *Improving Incentives for All*. And then we will close out the summit later this morning with a keynote from the honorable David Strickland, who is the vice president of global regulatory affairs and transportation technology policy at General Motors.*

Josh Boone:

*As a reminder, you can follow us on Twitter and share key points or issues and tag at lets below and use hashtag lets below summit. As a reminder, we're talking a lot about incentives and home charging and basic facts, educating Veloz has a very robust tool at [electricforall.org](http://electricforall.org), where you can look up all the makes and models. You can look up incentives by zip code, that's federal, state, and local, as well as look up information about charging, where chargers are located and so forth. So, take a quick break and we will be back to start our next spotlight right at 10:30.*

Josh Boone:

*Well, welcome back everybody. I'm excited to share that our next spotlight is titled *EV Incentives: Are They Working?* And I am delighted to welcome to Terea Macomber who is the clean mobility programs director at grid alternatives to discuss what's working in the*



world of EVs, what may not be working so well and where we have opportunities for improvement. So welcome Terea.

Terea Macomber:

*Okay, perfect. Good morning to those on the Pacific side and good day to everyone else. My name is Terea Macomber. I use she/her pronouns. And as Josh said, I'm the mobility programs at grid alternatives. I like to start every presentation that I have the opportunity to give with this photo. This photo is a rendering of a slave ship hundreds of years ago, and this year marks the 403rd year of the start of the transatlantic slave trade. And I'm so excited that the federal government yesterday, congratulations to this country, for passing a federal lynching bill to make lynching illegal in this country.*

Terea Macomber:

*But I started my presentation with this photo to really remind us that clean mobility has been around for a very long time. And the transatlantic slave trade that transported 10 to 12 million people from their homes, enslaved people from their homes did so through one of the cleanest forms of transportation, which is in the form of sail ships. So, for me, as a black woman, I start my presentation like this to really note that I do, as well as my ancestors, have a very intimate relationship with clean transportation. And this is the perspective that I bring to all of my work and to the work that I'm doing, directing access clean California.*

Terea Macomber:

*So today I'm going to take you through access clean California, which is a statewide outreach project. And then I'll dive into a little bit of community perspectives and then I will pass it off to Alfred who I think is moderating our panel and bring in the other fabulous panelists with me. So, shooting for less than 10 minutes to give myself some time to transition.*

Terea Macomber:

*So, Access Clean California started in 2018 and we were given a huge task of piloting, what is a one stop shop? The one stop shop language comes from the SB350 barriers studies report that was done after SB350 was passed, and part A was done by the California energy commission. And in that report, common barriers were found around structural barriers, insufficient outreach, education and marketing, insecure program funding, and the fact that programs were siloed. So common recommendations were one stop shop for programs. How do we make it easy for folks to go to one place to learn what they may be eligible for? And then in part B of that barriers study, the California air*





resources board found similar barriers, community and physical barriers, similar to structural, lack of awareness, which is another way of saying insufficient outreach affordability, the need for incentive programs, and then the limited program funding and lack of long term investment in these programs. So again, the common recommendations were one stop shops for programs and can be comprehensive outreach plans that were coordinated.

**Terea Macomber:**

So, the one stop shop pilot project, as we're formally known as and now, we've been rebranded to Access Clean California, tried to operationalize what a one stop shop program would look like. And two key strategies. The first one, and the one that a lot of folks focus on, is the streamlined user centered application process, which I'll get into first. And then the second piece, which is actually the most important piece and where we really get to operationalize equity as well, is through this statewide coordinated outreach for all of these programs.

**Terea Macomber:**

So, starting with this streamlined user centered experience, we've built what we call a benefits finder. And this benefits finder provides easy access to all the programs in one location. And I say all of the programs, but this is as many programs that we've discovered to date. So, we have program partners, and those program partners are working with us closely to allow for folks to go through this benefits finder, answer some simple questions and then actually be kind of carried over to their program once they finish their time on our website. And then we have additional programs, which is more of that directory experience and folks just learn that, Hey, according to your zip code, these are other programs in your area that you may be eligible for. So maybe want to check those out after you get those foundational programs, after you apply for those foundational programs.

**Terea Macomber:**

We are a GRID alternative, so while we are funded through the California air resources board as a program, we wanted to make sure that we made it very clear that all of these incentive programs, all of these interdependent technologies, depend on energy. So, we all said to ensure that folks understood that solar was a possible option for them as well. And you see this list and you go on the website; you'll see a testimonial from Erica who is an amazing story. She got her car and then also was able to get solar a few months later. That was actually up sized to allow her to charge her car with the sun.



Terea Macomber:

*So, the benefits finder works pretty easily. We really wanted to ensure from the beginning of [this] that we designed a tool that was informed by the community. So, for those that do a lot of design work, we used a universal user center design process, similar to curb cuts. We understood that when curb cuts were designed, it was for folks that required more accessibility needs, but we knew that once those curb cuts were created, that folks in wheelchairs would be able to rely on sidewalks to be able to move themselves, but also folks with strollers and carts and folks that might be wearing heels like me sometimes. So, having curb cuts actually allowed for a lot of people to benefit. And this is exactly the approach we wanted to take with our benefits finder, make it really easy for you to ask some simple questions, understand what you may be eligible for in a really simple way, and then actually give you the opportunity to start your application for the programs that you may be eligible for.*

Terea Macomber:

*So, the second part of Access Clean California is where transparently most of our money goes. And this is to our statewide outreach partner network. This is the list of all of the partners that we're working with throughout the state of California. And we are really excited to have such a diverse and inclusive outreach partner network, because we wanted to ensure that it was very clear that one of the best ways to operationalize equity and get these incentives into the families and homes of people that need it most is working with folks that do this on a daily basis. Thinking about Blue Lake Rancheria, up in Northern California, that's been so innovative with ensuring that they're bringing solar battery storage as well as charging to their land. They were an incredible partner. Northern circle, Indian housing authority in the native American environmental protection coalition, also incredible tribal intermediary that give us a lot of feedback on how to bring this technology to rural parts of the state. And specifically, to these tribal reservations.*

Terea Macomber:

*Working with folks like the central California asthma coalition and their network of central valley-based CBOs. Again, doing this work anyway, doing it really well. Why wouldn't we want to partner with such as CCACs to ensure that these incentives and this benefits finder can be used in really effective and efficient ways. So statewide coordinated outreach has been a really great lever to ensure that there is coordination around how we define electric vehicles, how we define micro mobility, how we speak about charging and really giving an opportunity for all of these community-based*



organizations to have a little bit of capacity building. A lot of these organizations were taking it upon themselves to design their own flyers, to design their own FAQs.

Terea Macomber:

*And what we have with our coordinated outreach network is a resource hub and an outreach partner portal that allows them to access all of the materials of the program that we know of, and that they allow us to put in this database as well as specific materials that are in languages of their communities. We've translated materials into I think, 12 different languages now. And then we also do culturally competent materials. So, the black community doesn't speak a different language, but having the reflection in the materials that are given to them is a great way to ensure that folks feel like EVs and this equitable climate future is, they can be a part of it. I have 15 seconds. So, this is a visual representation of all those partners.*

Terea Macomber:

*So, my last slide here is last year when funding for a lot of programs ran out, we decided to do an open session with all of our outreach partners. And we asked what is needed for these incentives to be better? What is needed for these incentives to be more accessible? So, I'll put all of these up and I will identify two that I think are really important. I think the first one, program alignment and coordination is critical at this point. Qualifications, income verification processes, as well as the way that programs report on the effectiveness of their programs needs to be aligned statewide.*

Terea Macomber:

*I think the second really important piece of feedback that we received from communities and from our community-based organizations is ensuring that program and creation and design is informed by them. So sometimes incentive programs are funded and then they are designed in a room with staff, which is amazing, but the work groups come after things have already been decided. As soon as that incentive funding is available, there should be calls being made, work groups and webinars being planned to ensure that the communities that that incentive is supposed to serve are actually designing the way that program is going to be implemented. So, thank you so much for the time and looking forward to this panel with the rest of the panelists.*

Alfred Artis:

*Well, thank you for that very informative speech. It was very, very interesting, and I'm glad that we got a chance to hear about that. So now I will welcome to the round table. Vaasha Lutchman, senior manager of the center for sustainable energy, CSE, which*



administers California rebates and Arianne Erickson. The Karl N GoEV manager for Acterra. Now folks, California set the gold standard for EV incentives. And yet the process to receive these incentives can be complicated to ordinary consumers. So, for this first question, it will go to everyone and Terea, let's give you a quick break. Arianne and then Vaasha, and then Terea. In that order, here is my very first question. What is the easiest and most efficient way to put incentives into the hands of consumers?

Arianne Erickson:

*That's a great question. I have a lot of ideas about it. First of all, I think we should start by addressing the federal tax credit, which has been discussed. You know, there was a fantastic enhancement to the federal tax credit that was incorporated into the build back better bill, which as we know, did not pass. What really needs to happen on a federal level is that they have to salvage the enhancements to the federal tax credit and bring them forward and pass that measure. I think it'll be a game changer on the federal level. I really do. We talked about the federal tax credit not being fully refundable, so that lower income individuals right now can't take advantage of the full amount of the tax credit. If these enhancements can be passed, the federal tax credit will become fully refundable. So, if you don't have a tax liability, you will still get the maximum amount of rebate when you purchase a new electric vehicle.*

Arianne Erickson:

*It will also reopen the rebate to all manufacturers, even if they have exceeded their initial quota. There's also an element in the measure that will provide a rebate for used car purchases. And then finally the federal tax credit, if it is approved in its enhanced form will make the tax credit fully transferable, which means that consumers can actually get the rebate when they purchase their vehicle. The dealer will be able to provide that as a discount to the price when the person purchases the car. And that's huge. So, on the federal level, I believe that if this enhancement can be passed, it will be a game changer. I have more ideas on the local level, but I'll let Vaasha take a turn, go ahead Vaasha.*

Vaasha Lutchman:

*Great. Thanks for having me as well. So, I think by looking at this question, we first have to start by looking at who are we trying to serve with these incentives? Are we looking at Californians or are we trying to address inequities and focus on underserved populations? Because that's going to address or change the outcome to that question. But to answer your point, I think the most effective way to maximize incentive efficiency would be a preapproval incentive that consumers can bring to the dealership to use at*



*the point of sale during the sales contract, or they have a free choice to self-claim. Some customers decide to get that check after the fact. So, it really allows the consumer to have choice and mobility to make their own decisions.*

**Vaasha Lutchman:**

*And we see as an implementer on a statewide program for CVRP, which a few panelists have spoken about today, as well as regional programs and utility programs that we administer, most consumers make that final decision to buy a car within 15 to 30 days of when they started seriously looking. Of course, now there's a little bit different play with supply chain, but typically that's that time period. So, pre-approval voucher would get incentives in the hands of consumers and it would be more effective for dealers as well.*

**Alfred Artis:**

*Sounds fantastic. Terea.*

**Terea Macomber:**

*To what Vaasha said, which is like, who are we trying to reach? So, the easiest way is, I agree with Arianne and Vaasha, let's make it as accessible as possible, but who needs the access? And that's a question that's on my mind the most, I think we are beyond the early adoption phase. I think having super bowl commercials with EVs in them now, Hummer EVs as well. And just really building that market and building that understanding. I tell my team 2018 access in California and 2022 access in California, completely different landscape because so much has happened in the last four years. So if we're speaking about community members that are really hard to access and aren't even thinking of may have never even purchased a car in their lives, have either received a car from a friend or a family member, or they just handed down cars in their family, or maybe they don't even really drive cars in their family.*

**Terea Macomber:**

*We have to rely on community pillars. So that's sometimes a community-based organization. That's sometimes a labor union. That's sometimes the church that you've been going to for generations, for tribal communities, that might be their tribal office and ensuring that we're able to leverage their expertise and leverage their trust to really educate and bring these programs to their doorstep. It's not going to always happen through mass market campaigns and really fun commercials that cost millions of dollars on super bowl day. It's going to be that eye to eye interaction, human interactions, unfortunately that are limited through the pandemic right now to really ensure that the communities that need these technologies the most are able to engage with them.*



Alfred Artis:

*So, considering that there are so many ways to simplify the process, I guess my next question, and this will go first to Vaasha then Arianne and then Terea again, what are the barriers to simplifying the incentive process? Are they political? Is it a fear of fraud? What is happening that we are set up with these incentives that seem to be confusing based on what everyone has said at this summit?*

Vaasha Lutchman:

*Yeah, well, the incentives we have on the market today are really based on a series of legislative actions, so the funding that's in these incentives is what was appropriated at that specific time for different incentive programs. So, to answer your question, I think it's the series of how legislation works. So, for example, if a budgetary planning committee had 10 million dollars appropriated for an EV program, a legislative action may decide that they wanted to have a regional scrap and replace program. And so, they themselves, this entity would apply the eligibility rules for this program. And so, I think these are, if we look at the barriers to getting incentives, there is a lot of conflicting eligibility between programs, income levels. We've talked about federal poverty level, there's some incentive programs at 300% federal poverty level, some at 400%. And then when you look at vehicle eligibility as well, they're not consistent in each program. So that would be generally one of the solutions we can look at is aligning eligibility in both the vehicles and program rentals.*

Alfred Artis:

*Interesting. Are you saying that this is something the legislature then could fix? Is that where one of the bottlenecks is, or is this something on the administration side?*

Vaasha Lutchman:

*There are certainly avenues of opportunity in both legislation and on program implementers as well as the clients that they serve to improve the process.*

Alfred Artis:

*Gotcha. Well, Arianne.*

Arianne Erickson:

*Yes. I totally agree with Vaasha that for income qualifying residents, it's kind of a labyrinth when you are interested in purchasing an electric vehicle because there are so many grants that are available, but they all have different eligibility requirements, or they differ slightly. And what we want is for an individual to be able to submit one*



*application and all of their documentation one time and then have some central location actually screen the application and then actually give it to the grantee, the grantor entity, that's the best fit for the applicant. In terms of individuals who can afford to purchase a new EV, I actually think that the incentives here in California are rather straightforward. I don't necessarily think that there's much streamlining that needs to be done. There's basically for a Californian who wants to buy a new EV there's three rebates. There's the federal tax credit, there's the California rebate, and there's the clean fuel reward, which we talked about. So, there's three. So, it just goes back to awareness. And someone mentioned that it's fantastic that all the utilities and the community choice agencies and municipalities that they have on their websites the incentives finders and the EV finders and the FAQs. That's fantastic. And if a utility or a municipality doesn't have this on their website, they need to throw it there, get it on their website because that's awareness, that's information.*

**Arianne Erickson:**

*However, we also feel here at Acterra that being more proactive and more engaged with the residents that want to purchase EVs is a really critical component. So, as we talked about the ride and drive events and the EV expose, we also produce, and as do many other community-based organizations, EV 101 workshops. And there are one-and-a-half hour classes. COVID has moved everything online. It's very accessible. People can attend in their pajamas.*

**Arianne Erickson:**

*And I think they're invaluable for people that actually want a little bit more engagement, a little bit more personalization. So, I really encourage all of these entities that are providing this information to actually include those more proactive means of engaging with their consumers.*

**Arianne Erickson:**

*In EV 101 where workshops, there's enough newness to EVs that so much more information in addition to incentives can be provided in one sitting, such as, how EVs work and charging and range issues and the types of models that are available. And included in all that, you can include the incentives and the timeline for how people go about getting these incentives, because some, again, are on the spot. Some you apply for afterwards, and some doesn't happen until once you do your taxes. So, I'm a big promoter of these really proactive, more engaging methods of informing consumers about the incentives.*





Alfred Artis:

Terea?

Terea Macomber:

*Oh, I agree with Arianne and Vaasha as well. I always have to bring it back to history because my dad was a history teacher. I think in your questioning phase is it fear of fraud? And I think a lot of times it is. I think, if we go back to government programs and the stereotyping of the welfare mother in the '70s and the '80s and how social programs like SSI or SNAP had these ways of policing people, showing up at black women's houses and checking dresser drawers to ensure there weren't any male clothing in the drawers to ensure they weren't married. This is the foundation that these programs are coming off of.*

Terea Macomber:

*So, until we really think about, and as Dr. Warren said, until equity actually drives the design of the program, not just is added into the design of the program, we're not going to create programs that don't have this kind of a trust and, "Oh, these communities are fraudulent, and they're going to try to lie about their income."*

Terea Macomber:

*No one wants to... I don't like to do taxes. I don't like to share my income when I don't have to. So, think about what it's like to prove that you're poor, not just once, but over and over and over and over again, to get resources that you need, to get transportation to be able to take your child to the hospital, to school, to be able to get to work.*

Terea Macomber:

*So, going back to Arianne's point of how, do we make sure these programs are coordinated, inter-agency coordination, where any new program that's coming online and any program that is existing is looking at their neighbors and saying, "How do we align our incentives?" So, not only these programs are stackable so they can be used in accordance with each other, but people don't need to go through what is somewhat of a traumatizing experience to prove that they make less than \$13,000 a year. They're a family of five. That's not a good feeling and then doing it over and over again, to get resource they need.*

Alfred Artis:

*Wow, that is an excellent point. Well, this next question is for everyone, and it's to bring a little bit of hope to the topic. Is there a model that we've seen that works? Is there a*



*model? If there were someone in the audience who's a policymaker, what should they look to when designing a program that makes incentives easy for everyone across the income spectrum? If you are well-off or not, what is the ideal program that can be articulated for a simple policy maker? Vaasha, we'll start with you, and then we'll go to Arianne and Terea.*

**Vaasha Lutchman:**

*I think as I mentioned before, point of sale rebate where the consumer has a choice of applying it would be the most effective in the market. So, we see that with clean fuel rewards. It is provided at the point of sale, and that doesn't have to go into the income eligibility as well as vehicle eligibility. So, it's part of the process, and dealers are signed up.*

**Vaasha Lutchman:**

*I have been seeing a lot of questions here in the chat asking about dealership engagement, dealership having to be a part of these other programs and signing into being a part of the various programs and the alignment that needs to be there.*

**Vaasha Lutchman:**

*So, when we look at what's the most effective model and what could be the best state would be a preapproval, one single preapproval program that acts like a central pathway for consumers. And it really allows them to see upfront at the beginning of their car search what available incentives would be an option for them.*

**Vaasha Lutchman:**

*So, based on their income, location, and choices, they would be able to see, do they want to look at new or used EVs? Do they want to get financing assistance, or is that something they're interested in? Do they want to scrap and replace their current vehicle?*

**Vaasha Lutchman:**

*So, that way what ends up becoming is the consumers would get a voucher that they would provide at the dealership, and it would make the process just generally more effective for consumers to know all that information up front. And it would make the process easier on the dealership end as well, which is one of the constraints and a part of this experience is the dealer side to the equation.*

**Vaasha Lutchman:**



*And more importantly, if we do centralize incentives under one umbrella, it would ensure that consumers are not losing any incentives on the table, which is things that we see time and time again. And we also see consumers buying certain vehicles that may not be eligible in other programs, so they are unable to get those incentives.*

**Alfred Artis:**

*Well, thank you for that. Before I pass it over, I just want to quickly flag that Veloz does have an incentive tool like you've described. Now, granted it can't give you the incentive, but it can help you in your car search. So, if you are currently in the market for an electric vehicle and are confused by all of the incentives, please check out [electricforall.org](http://electricforall.org). Onward. Arianne.*

**Arianne Erickson:**

*Sure. Well, we're all trying to figure it out, so I don't know if there's a perfect program that exists right now. So, I just want to emphasize what Vaasha said, point of sale, point of sale, point of sale. And personal engagement, I think, is really important. I think it's important to have both a top down and a bottom up approach to building consumer awareness.*

**Arianne Erickson:**

*So, the Super Bowl ads, I think, are fantastic. I think it's great. We need to build excitement and momentum around the EV movement, but there also does have to be that grassroots approach, which is more personal and more engaging.*

**Arianne Erickson:**

*To apply for some of these income qualifying grants, because there are so many of them, it can be daunting. So, wherever possible, if programs can implement personal consultations, individuals to help them understand what their unique needs are, what their unique eligibility is, these programs, I think that would be amazing. It is time consuming, but I think it's important to help get some residents across those barriers.*

**Arianne Erickson:**

*Then we've also talked about dealerships really, really playing a big role in this whole process and really putting the rebates and incentives on the window stickers or on their websites. Some dealers right now do have the clean fuel reward listed on their websites for EVs, but some do not. I've seen no dealer websites that advertise the federal tax credit, and that could easily be put on. Tesla does it, so all the other dealers should be able to do it as well.*



Alfred Artis:

*Thank you for that. Terea, you'll be closing us out.*

Terea Macomber:

*Thank you. So, I'll do a shameless, Alfred, [accesscleanca.org](https://www.accesscleanca.org). The California is the acronym. It is an incredible space for those that aren't reflected in other incentive finders and may feel overwhelmed.*

Terea Macomber:

*We've really done a job with our benefit finder. And if you're working with one of our many outreach partners, you're able to take advantage of our income verification process now, which actually is connected to the program that I think is an incredible model which is the Driving Clean Assistance Program ran by Vivian Rahwanji of the Community Housing Development Corporation in the Bay Area of California.*

Terea Macomber:

*Thinking about Arianne's example of top down and bottom up, really focused on that bottom up. CHDC is a multifamily affordable housing developer. And thinking about that perspective that Vivian brings to each and every one of the applicants to her program, concierge service, yes. Going to a Mercedes dealership, yes. Concierge service, where they're really held through the process of understanding what they can afford, if financing is right for them, and then actually getting the car that they need.*

Terea Macomber:

*So, Access Clean California has an integration with them. So, if you go through a really user-centered focused income verification process, you're handed over to Vivian's team and then finish out the rest of that application and then are able to work with the dealership.*

Terea Macomber:

*And my last point and what Vivian's program models really well is building relationships directly with dealerships, so not just the dealerships that are large, but those smaller used car lots that people might see as a little greasy and maybe distrustful. But those are the relationships that can be the most effective because those people reflect the people that we're trying to get into electric vehicles.*

Terea Macomber:



*So, being able to go speak to someone that is similar in your life style, similar in your life is a really great leverage point to make sure that folks are able to have an inclusive experience when they go to a dealership as well as an effective one in getting a used vehicle, which is still the most accessible form of EVs for our communities.*

**Alfred Artis:**

*Thank you. Josh?*

**Josh Boone:**

*Thank you. Thank you, Alfred, for moderating the session and to Vaasha, Terea, and Arianne for your insights on how California may improve zero emission vehicle incentives and for giving some really practical, actionable things, I think, that our audience can take away. Thank you for all the hard work you're each doing to improve the incentive process and amplifying the benefits of zero emission vehicles. Thank you.*

**Josh Boone:**

*So, next we will hear from the honorable David Strickland. David is the vice president of Global Regulatory Affairs and Transportation Technology Policy at General Motors. David has had an illustrious career including serving as a 14th administrator of the National Highway Traffic Safety Administration under President Obama. And in December, Mr. Strickland joined Veloz's board of directors. It's great to see you, David. Thank you for joining us and welcome.*

**David Strickland:**

*Well, Josh, thank you, and thank you for the last panel. I found it very invigorating. I'm going to do two things before I jump to my slide deck.*

**David Strickland:**

*Your conversations about ease and efficiency of incentive applications is important. I'm not sure folks remember the Cash for Clunkers program back in 2009, 2010 which was a massive program to encourage able to trade in their less efficient ICE vehicles for more efficient ICE vehicles. And it was a massive program set up very quickly.*

**David Strickland:**

*But with focus and concentration and an ease of implementation, you can get a very successful program to, I think it was a \$4,500 incentive for Cash for Clunkers. And we managed to get that done with almost virtually zero waste, fraud, and abuse. So,*



everyone that was on the last panel I think was right on point. When you think about those other aspects, I think it's very executable.

David Strickland:

*Second and most importantly, I want to really thank Veloz for offering this opportunity to share my experiences and to share GM's vision for us getting consumers to table. We are very excited about this and having the opportunity to serve as a head of NHTSA and the CAFE program and my continued interest and involvement in being a part of GM's future for looking towards an all-electric light duty future by 2035, I really do appreciate the time of this opportunity.*

David Strickland:

*My first slide, please. Thank you. Okay. Really at this point, the thing that we are looking to do is to really think about what the vision is going to be. And I think that Mary really captures this in this specifically.*

David Strickland:

*A little more living history here, there was ongoing fights for CAFE starting when I began my career in the early 2000s. And I remember there was a pitch fight in the energy bill in 2002, where Senator Lott in the midst of the debate broke out this big demonstrative car and he called it the "purple people eater." And the issue was that CAFE creates unsafe vehicles.*

David Strickland:

*And it was Senator Kerry's provision, now he's Secretary Kerry, that was debatable. And he broke out this demonstrative exhibit, this big poster of a purple Mini Cooper. And we loss on the floor that day 68 to 32, and never thought that CAFE would get done.*

David Strickland:

*Then in 2007, the Congress passed the first legislatively created fuel economy increase [...] emissions gears in 2007. And that was offered by Senator Feinstein. It was called the 10 in 10 Bill. It also increased the current level of fuel economy back then in 2007 by 10 MPG over 10 years, and we thought that this was this massive achievement.*

David Strickland:

*And then let us fast forward to when I was NHTSA administrator, and we had the first harmonized national program with EPA DOT and out in California. And then it was Assistant Administrator Gina McCarthy, myself, and Mary Nichols that put together that*



*program. And that program was what we thought was an incredibly strict and very august 54.5 MPG by 2025, and look where we are now, and not only the envelope and the leadership of California, the opportunity that we at GM have taken up that we will be fully, fully light duty all electric by 2035 carries on that mission.*

**David Strickland:**

*And we always talked about, "How do we deal with compromises," that yes, there is the social mission and climate change and making sure that we leave this planet better for our children and for our children's children. But now with the offerings that I think us in, I will tip a nod to our competitors that are actually producing vehicles, that there really is truly no compromise here.*

**David Strickland:**

*And the fact that we have such consumer demand for our products and how do we get them into our hands and how do we make sure this happens equitably, is our investment at GM to make sure that this happens. Next slide, please.*

**David Strickland:**

*And here's sort of a snapshot of the investments we're going to be making here. \$35 billion we're going to be making through 2025 to get us to this space. Very proud of the \$50 million that we are investing to close equity gaps in EVs via our Climate Equity Fund, and also making sure that our sourcing is going to be 100% renewable.*

**David Strickland:**

*To give a little curtain raiser, I know that there was number who was talking about the very flashy Super Bowl ads, and we have to go well beyond that. Everyone is absolutely right. That is the teaser. That is the amuse-bouche, if you will, to get people excited about it. But we have to do the underpinning investments and the correlations and the connections that we have to get people into these vehicles.*

**David Strickland:**

*We are actually going to begin that part in one of our next announcements of an affordable EV. We will have a glimpse tomorrow on March 10th about the Chevy Blazer EV, so keep your eyes out for that. We're very excited. We're very excited about that. We've had over 110,000 Silverado EVs reserved so far, including reservations for more than 240 fleet operators. Living in the world of shameless plugs as a couple of folks mentioned on the last panel, the Silverado EV is right behind me. We are very proud of this vehicle and very excited that we have so much consumer demand.*





David Strickland:

*We have more than 25,000 production reservations for our BrightDrop cargo vans, and we are using all of this data to accelerate our production and to once again improve our battery technology. So, here is our snapshot about the numbers of what we're doing to invest, and we're very excited about that. Next slide, please.*

David Strickland:

*And part of this is teaching people and our dealers about the vehicles, about the opportunities, and how we can make that we get these into as many people's hands as possible. We have a series of short videos in the Bolt EV Academy which helps educate current and future Bolt EV owners about Living Electric. We have a microsite which also talks about basics of charging and installation services, and the Everybody In Campaign which talks about all the flexibility of our Ultium program, which is our battery foundation which will support the production of our over 30 different types of EVs.*

David Strickland:

*I'm going to take a moment here to talk about one thing that we at GM are very focused upon, is making sure that there is availability and equity for consumers here, that dealer premiums on, extreme dealer premiums on our electric vehicles will not be tolerated. We are working very hard with our dealers to be able to make sure in terms of supporting the demand at the end of the day, if we get the product out there in mass quantity, you create the competitive environment so you're not creating that negative incentive.*

David Strickland:

*So, we have a lot of work to do on the production side, but we are working with our dealer partners or 4,000 of them to make sure that our EVs will not be leveraged in that way and they will be sticking to MSRP. And that's part of, once again, not only the consumer education and support, but dealer education as well. Next slide, please.*

David Strickland:

*Here's a brief overview of terms of how we're looking at our Ultium platform in terms of supporting all the aspects of how to get into an EV and how to manage the care and the charging and the utilization of our EVs. We have to have an incredibly robust charging network, and we have to have products that are making sure that we actually are creating a sticky, wanted product that people want to purchase and drive and continue to drive for reasons that surround that to making sure that the consumer experience is very positive. And we do that also through the utilization of other technologies, such as the vehicle app. Next slide, please.*



David Strickland:

*I believe there's an animation here that you might have to click in the bottom in order to make it execute. But one of the things that we are really excited about is that we have up to 40,000 destination chargers to help making sure that there is no concern or range anxiety, or people have an opportunity to charge.*

David Strickland:

*And one of the biggest things that we're doing here is leveraging our dealer network. We have over 4,000 dealers across the country, and 90% of Americans live within 10 miles of a General Motors dealership. These charging points, while they are GM dealers, they are available to everyone. So, there isn't a discrimination issue. These dealers want to have people come charge, take a look at the product, take a look at our lines, and hopefully have a conquest sale.*

David Strickland:

*So, it's actually a virtuous circle there, but we're very happy for not only leveraging our network, but also leveraging other sources of charging networks as we'll see further in the presentation. Next slide please.*

David Strickland:

*And once again, here is an application that we have that also not only talks about our dealer network, but frankly, all of the leveraging and all of the other charging networks all in one place so that we have one-stop shopping and information for all of our consumers that are driving GM electric vehicles. We think it's a really well thought through application, and we're very excited to be able to provide this user experience to our customers. Next slide, please,*

David Strickland:

*Once again, as part of that integration of the network is the ability to charge at home. We have a partnership with Qmerit in terms of making sure that we have a thoughtful and easily available charger installation at the home to making sure that you'll always have a place to charge at night when you come home and in addition to hopefully to leverage that with the broader network were working nationwide. Next slide, please.*

David Strickland:

*What we think about, here's the elements that we have listed out here. The one thing I want to, once again, we have a little teaser here from our Super Bowl ad, for the Dr. Evil*



*ad. So, here is the Easter egg here of all of the current lineup or the soon-to-be-coming lineup for here at General Motors, in addition to an additional 25 vehicles there.*

**David Strickland:**

*But we have to have competitive prices, as we just talked about, making sure that we don't have situations where the market is driving prices beyond where people can get them. We need to have a technology and batteries that provide more range. We need to have vehicles that are across the price spectrum from affordable EVs to upmarket EVs. We have to make sure that customers feel comfortable and they feel that they are supported.*

**David Strickland:**

*And also, we have to have the investment in the charging infrastructure. I know California's leading the way. Everybody's walking the talk in California and looking forward to working with other states, the other 177 states, other states across the country to make sure that we truly have a network that is broad and nationwide to the point where nobody even thinks about their being an infrastructure issue in terms of wherever they are with their vehicle, they can get a charge. Next slide, please.*

**David Strickland:**

*And part of that is the policy. We have to make sure that, as we talked about it in the prior panel, that there are predictable incentives, that we are constantly promoting the charging infrastructure, that we are working hard to promote broad EV access. And it's an everyday thing. It's at the federal level. It's at the state and local level. It's at every aspect of making sure that, not only do we have the product in terms of the vehicles, but we also have everything that a consumer needs to make sure that they're feeling that they are not deprived in making these decisions. Next slide, please.*

**David Strickland:**

*The biggest part of it in my opinion is I think that we will get there with the infrastructure. I think that there is, at the end of the day, it's going to be a large investment, and it's going to be very difficult. I'm not going to act like it's going to be easy. But the most important part of us to be successful is making sure we leave no one behind, that right now with electric vehicles by the very nature of the technologies have a higher price point than ICE vehicles.*

**David Strickland:**



*And we have to recognize that in order for us to be able to reach our goals and to attack this climate challenge, we have to make these vehicles available to everybody. It means that we have built the broadest number of vehicles. We are a full-line manufacturer, and our commitment to a fully electric future means that we have to stay a full-line manufacturer. We have to have a variety of price points. We have to have a variety of utilization models.*

**David Strickland:**

*We have to have it all, going from the most basic entry-level vehicle all the way through the Cruise Origin, which is our partnership with Cruise in making a robo-taxi service that is fully autonomous without the thought of anything, making sure that on that point, the ability for disability communities, things of that nature, talking about different types of vehicles will also be led with electricity are available.*

**David Strickland:**

*Make sure that in terms of infrastructure, that we have charging everywhere, that we don't have charging deserts. We're not leaving rural communities behind. We're not leaving communities of lesser means behind. And we have to make sure also that the people that are making these vehicles come along with us. We are fully supportive of our labor workforce to be coming along in our future transitioning from internal combustion engines to making electric vehicles, and we are looking so forward to making sure that happens.*

**David Strickland:**

*Finally, as I mentioned earlier in my presentation, our Climate Equity Fund, where we've invested \$50 million into community organizations, closing equity gaps in the transition to EVs, and making sure that we invest and other sustainable technologies. Next slide, please.*

**David Strickland:**

*With that, I will close. I know that you guys have had a long day. I really, really want to thank Josh and the team for giving General Motors and myself this opportunity to just share our plans for the future, our ability to support consumers, our ability to support the fight in climate change, and our support in Veloz in making sure that we reach out and touch everybody who is going to be coming along with us in this very virtuous and very necessary fight. Thank you so much.*

**Josh Boone:**



*Well, thank you, David, for joining us today and for sharing generously your time, your insights, and leadership. I can't say enough about how excited I am to have you on the GM leadership team.*

**Josh Boone:**

*You've got a whole suite of commitments that you walked through this morning, but let me just call out four that I heard, one, pretty exciting that you guys are committed to at least \$35 billion in EVs over the next five years plus; two, that you're fully committed to light duty vehicle electrification by 2035; three, that you're working on dealing with the extreme premiums and won't tolerate that at the dealerships; and then broadly just GM's commitment to equity, ensuring that there's broad EV model availability at a variety of utilities and price points, and that you all are committed to making sure that infrastructure is built out in a robust way.*

**Josh Boone:**

*And I have to say, I'm pretty excited about your mention of the Chevy Blazer EV. Apparently, that's coming imminently, maybe as soon as tomorrow, so we'll keep our eyes peeled for that. So, thank you. Thank you so much.*

**Josh Boone:**

*Before we close today, I just want to thank each of you for participating, and I hope you gained some new insights and our collective efforts here at Veloz to advance zero-emission vehicles. Thank you to our 40-plus members for supporting today's events and our community partners for sharing today's summit.*

**Josh Boone:**

*I want to encourage you to hold your calendar. Right now, put it on your electronic calendar, our next Veloz summit is scheduled for Wednesday, July 27th. Again, that is Wednesday, July 27th. As to whether that summit will be held in person or virtual is yet to be determined, but we encourage you to hold that date and time. And if you have an interest in speaking, please reach out to Alfred our program director or myself.*

**Josh Boone:**

*Just quickly, there were some other trends I heard today. From Lauren Sanchez, we need consistent and continuous incentive funding. A lot of comments around the value of point of sale incentives. We should have equity driving our efforts. EV interest grows with direct experience and engagement, and we really need, not only just a tops down approach, but a grassroots approach as well.*



Josh Boone:

*So, before we close out here, I just want to invite you to take a look at our EV market report. It's something we had on our slide reel, but you can also find it on [veloz.org](http://veloz.org). We will drop the link in the chat. But beyond just the high-level dashboard, there's a variety of other charts that you might find useful. Again, thank you so much, and happy spring.*