**“EV POLICY: WORKING UNDER A NEW ADMINISTRATION”**

Thursday, February 27, 2024 | 11 a.m. – 12:15 p.m. (PT) / 2 p.m. – 3:15 p.m. (ET) | Virtual

**OPENING REMARKS**

* Josh D. Boone, Veloz, Executive Director

**Josh D. Boone, Veloz:** Well, good afternoon to those of you that are joining us on the East Coast, good morning to those of you that are joining us on the West Coast, and happy day to all of you in between. Welcome, everyone, to today's Digital Dialogue. I'm thrilled that over 500 people have registered to participate in our conversation, which is titled EV Policy: Working Under a New Administration. We have audience members from all over our national EV ecosystem, which includes automakers, utilities, NGOs, governments, CBOs, rideshare companies, autonomous zero-emission vehicle companies, and many, many, many more. My name is Josh Boone, and I am Veloz's executive director.

The Veloz team is excited to bring you a group of action-oriented leaders today from across the nation to discuss the future of EV policy, next steps, and more. The US government has already spent $19 billion via the bipartisan infrastructure law, which includes charging infrastructure, purchasing electric buses through transit agencies, enhancing equitable access to charging, expanding e-micromobility and more. These policies have successfully advanced clean transportation efforts across the United States. But what will the EV landscape look like with the new federal administration, and how can we continue this positive momentum? We're aiming to answer some of these questions today with this dynamic group of executives.

But first, let's have an overview of the current EV landscape. That brings us to our guest speaker this morning, Nick Nigro. Nick, good to see you. Welcome. It's been a pleasure getting to know you over the years and to see the positive impact of your work and you personally. You are the founder of Atlas Public Policy, a company that works with government, industry, and nonprofit organizations across the country on critical areas, including vehicle electrification, clean economy manufacturing, and investments. Atlas takes a data-driven approach to policy making, enabling both government and business to make strategic impactful decisions that serve the public interest. Today, Nick joins us to talk through the impacts of EV-centric policies at the national level. We're so excited to have you here, Nick, and we'll let you take it from here. So welcome.

**GUEST SPEAKER: NICK NIGRO**

* Nick Nigro, Atlas Public Policy, Founder

**Nick Nigro, Atlas Public Policy:** Thanks a lot, Josh, and it's really great to be here. I've been a big fan of Veloz since you all started, and Josh and I are good friends who've known each other for over a decade. So wonderful to be here, especially with this all-star panel and excited to kick things off.

I've got a few slides to share to help color my talk today to you all ahead of the conversation. I'm really going to focus on what's at stake essentially in Washington where I sit over the next several months with regards to electric vehicle policy. We can jump to the next slide. We can actually skip the About slide for Atlas because Josh did such a fabulous job introducing my company. The one thing I'll say before I get into the other content is we're about to hit our 10-year anniversary in April. It's been a wonderful ride with the company so far, and we have a bright future ahead of us.

What is at stake? First and foremost, this is a slide that I've been showing to a number of folks over the last several months because I don't think it's really registered too much in the consciousness of a lot of folks in the American public, in particular, but even in our own community, the EV policy community. That is, the race for the future of transportation and energy jobs is well underway, and frankly, the United States is losing pretty badly.

The chart on the right here is the annual motor vehicle production of China and the United States. What you can see is, for the last many years, China has been effectively eating our lunch when it comes to motor vehicle production. We've been shrinking essentially our market share while China's market share has been growing substantially, reaching almost a third of global vehicle production in 2023. It's a big deal. There's a lot at stake. While this doesn't show you the number of EVs being manufactured, it's important to recognize transportation is always done in the context of all vehicles. EVs, of course, China is far ahead of us there, too, but they're in front of us in all vehicles. You can go to the next slide.

When President Biden took office, there was clearly a motivation, not just with his administration but even the previous administration, Trump version 1 I'll call it, to help re-industrialize the American manufacturing sector. With the infrastructure law and the Inflation Reduction Act, what we saw was an unprecedented amount of investments in manufacturing, particularly this chart showing you construction spending to give you some context for how meaningful these laws have been in spurring investments to build things in the US.

I titled this slide Industrial Policy because that's really what we're looking at. When I came to Washington 15 years ago, market-based mechanisms were the way to go, pricing carbon, making polluters pay, that sort of thing. That has not succeeded essentially at the federal level. Of course, the states that we're joined with today, some of them has some great market-based programs in place to talk about. But at the national level, industrial policy is what won the day and largely continues to win the day today, to date, I should say. That's going to have a meaningful impact on what we need to be looking at in terms of what's at risk. Because of all these investments, many of them have not been realized yet. We have a lot of factories that are on construction, some that are just getting started, and demand is not quite there yet to get some of these factories up to full capacity. We can go to the next slide.

So enter President Trump, Trump 2.O. I mentioned earlier Trump 1.O certainly wanted to help re-industrialize the US. The degree to which that was effective is up for debate. But what is clear is that is a priority of his current administration. Exactly how he's going to try to do that is going to differ pretty substantially from President Biden based on what we've seen so far the last few months here in Washington. But the goals are largely similar, and I don't think we should lose sight of that. You can go on to the next slide.

If you look at what was in the flurry of executive orders that were released in the first few days of the Trump administration, two key themes jumped out at me anyway when I was reading them. One is choice, and that word was used frequently, especially when talking about energy policy, transportation policy, etc. The goal there was to increase consumer choice. From an EV perspective, I think we have to look at that as electric vehicles have to win on the lot. Right now, you can go to a dealer around the country or online and see lots of makes and models available for a variety of different utilities in this space right now. Many have tax credits. Many are quite affordable, especially relative to where they were before. But the market is relatively growing slowly compared to where it was a few years ago. That's largely because EVs aren't winning on the lot essentially against their combustion counterparts. So to win with the Trump administration, that's really where EVs are going to have to improve their game, so to speak.

The other key theme that jumped out at me anyway is that Made in the USA is a key priority for President Trump and his administration. This term, which I'm not a huge fan of, called friendshoring has become very popular in the vernacular here in DC and, of course, onshoring as well. You can see, just within the first few months, President Trump has put together a number of tactics to try to onshore more manufacturing and other product development here in the US. He's taking a very different tact than President Biden did through tariffs and potentially other means. But the goal is very similar, and I don't think we should lose sight of that.

Another area of potential opportunity that I saw in the executive orders was around critical minerals. As we all know, these critical minerals are essential for the battery supply chain, which is currently dominated by China, very similar to the manufacturing domination I showed you at the outset of this presentation, but frankly even more so when it comes to batteries. That's a priority both of the Biden administration and the Trump folks.

The other thing that I think we want to be thinking about when it comes to opportunities is really doing a better job as a community telling the success of the vehicle manufacturing renaissance, as I like to call it. There are lots of very positive stories that I know the speakers that we have here today can share with you all, but we have even many more going on right now as more factories are being built, communities are being rebuilt in some cases or being built up for the first time in others. This is very much a once-in-a-generation opportunity for us to rebuild a manufacturing base, and we don't want to lose. We can go to the next slide.

Just in summary, what's at stake? Unless you've been living under a rock, you know that Congress is currently debating tax reform this year. There's lots underway here in DC. We just got some preliminary numbers made available in terms of budget numbers, but there's a long way to go. So we don't know exactly what tax credits that were put in place with the Inflation Reduction Act are going to stick. I think it's largely up to folks like this audience to help tell the story of why these tax credits matter, not just to jobs and competitiveness, but also to manufacturing and, of course, climate change, which doesn't get as much attention as it should, but it's also obviously a key driver, particularly for states that have market-based programs in place. So any repeal or considerable reform of these tax incentives is going to introduce a lot of risks to our ability to compete with China. As I mentioned, we've fallen behind in the last several years. While I arguably would say we've been catching up in the last few years, if we don't keep up with that momentum, we may never catch them.

The other thing is the EV supply chain may repeat mistakes of the past. What I mean by that is creating dependencies on countries who don't share our values, potentially resulting in a lot of environmental damage or human damage that we don't want to subscribe to. Part of the Inflation Reduction Act with onshoring and friendshoring was about trying to build a supply chain that's much more sustainable and reflects the values of, frankly, a lot of the people on this call today, and as I mentioned, climate change. We're not going to be able to hit climate goals if we pull these incentives away because this is essential right now to being able to build a clean economy here in the US. We don't have a market-based policy at the national level at this time. This is what we got. Okay, Josh, that's what I got. Back over to you.

**Josh D. Boone, Veloz:** Yeah, great. Thanks so much, Nick, for sharing your insights and what you see is at stake when it comes to the EV transformation and opportunities going forward. I just want to note Veloz, we did our own 11-state poll back in the fall to try to understand attitudes and perceptions of Americans post-election. One of the things we ask was, where do people feel the country ranks in terms of EV leadership? The results were that folks feel like America's in the lead, but of course, our data and your data indicates that we're not there. We're second, third, fourth in line. So in our view, we think there's a huge opportunity with the new administration to demonstrate global economic leadership around EVs and what that means for the country and energy security and economic development and success, and then just the opportunity to onshore or reshore jobs. So really good stuff. Well, we're grateful for your work and your leadership, Nick. Keep it up. I'd like to now invite my colleague and co-moderator, Rosa Davies, to join us here on the virtual stage. Welcome, Rosa.

**“EV POLICY: WORKING UNDER A NEW ADMINISTRATION” SPEAKERS**

* Rosa Davies, Veloz, Business Development Director
* Liane Randolph, California Air Resources Board, Chair
* Tim Echols, Georgia Public Service Commission, Vice Chair
* Doreen M. Harris, New York State Energy Research and Development Authority, President & CEO
* Nancy Skinner, California Energy Commission, Commissioner

**Rosa Davies, Veloz:** Hi, there. Thanks, Josh, and thank you, Nick, for your presentation. For our audience, my name is Rosa Davies, and I'm Veloz Business Development director. I have the pleasure of being your co-moderator for today, and in a moment, I'll introduce each speaker who will be joining me on stage for today's conversation. But before we do panel introductions, just a quick note for our audience Q&A section at the end of our dialogue. Please place your questions in the Q&A box at the bottom of your screen. Don't forget to include who your question is towards as well as your name and affiliation. Our audience Q&A will take place closer to the top of the hour.

Now let's get started and meet our panelists. Come on stage, Liane Randolph, chair of the California Air Resources Board; Tim Echols, vice chair, Georgia Public Service Commission; Doreen Harris, president and CEO of the New York State Energy Research and Development Authority; and last but not least, Nancy Skinner, commissioner, California Energy Commission.

Hello, everybody. Thank you for being here. Let's start with our first question out to Liane. CARB is world renowned for its leadership on EVs and many associated regulations. Veloz supports electrification of all transportation types, but we focus on the light-duty vehicles. Given the new federal administration's executive orders and funding pauses, what is your vision for CARB's role going forward, and what are these waivers and how will they impact EV adoption if revoked? Just talk to us a little bit about California's plan to move EV adoption forward in the current context.

**Liane Randolph, CARB:** Sure. I'll start with a very quick primer on California's regulatory authority. The Clean Air Act provides that California can adopt vehicle emission standards that are equivalent to US EPA or more strict than US EPA. The reason for that is because California's clean air efforts predated the Clean Air Act and US EPA. So when the act was passed, there was an understanding that, given the air quality challenges in the state of California, that we needed to be able to continue making progress on cleaning the air for our residents. That is why over the years we have vigorously defended our ability to do that because we still suffer from poor air quality in many parts of the state. We still have areas that are not in attainment for federal standards. So as we think about the criteria pollutants and tackling those issues as well as greenhouse gas emissions, it's critical that we be able to make the right policy choices that create that progress.

Transportation is the largest source of greenhouse gas emissions in California, so we need this authority to meet our goals. The way the authority works is it's rule by rule. So we adopt a rule, and then we get authorization to implement that rule from US EPA. We have authorization to implement Advanced Clean Cars 1 and 2, we have authorization to implement Advanced Clean Trucks, but we have an administration that is now saying that they want to revoke those waivers and those abilities for us to implement those rules.

As we think about where we are in the market, it's important to note that the market is well ahead of what we anticipated the adoption would be when the original Advanced Clean Cars rules were adopted. So Advanced Clean Cars 2 start with model year 2026. As you look at the previous model years, adoption is way above what we anticipated, which to me tells me that the quality and the product offerings for light-duty zero-emissions vehicles have really driven market adoption way beyond the regulatory framework. So I think we really need to lean into that. We really need to continue to work with the private sector, with the OEMs, with the infrastructure providers to really ensure that that market continues to grow and continues to build no matter what happens at the federal level.

We, of course, will do everything we can to protect our authority and to stand up for not only our rules, but the US EPA light-duty standards that the Biden administration adopted. Assuming that they follow the law, they will need to go through a full administrative procedure to repeal those rules. That gives us and advocates around the country the opportunity to say, "Hey, this is not just important for California. It's important for the entire country." So that's our focus right now is being there to defend what we have legally and administratively, but also thinking about, how do we work with industry to continue to make progress?

**Josh D. Boone, Veloz:** Wonderful. Well, thanks, Liane. I think everyone knows Veloz is about EVs. That means we're on a little road trip, so we're moving from the West Coast here virtually to the South. I think our next question is for you, my friend, Tim, Commissioner Echols in Georgia. Georgia has been able to attract EV manufacturing to its state like Rivian and Hyundai. Do you think the pushes and pulls of federal policy, especially when it comes to EV adoption, will affect the state's ability to attract further development in EV space? How can Georgia keep EVs moving forward? I know you're personally a big EV fan, so would love to understand your perspective here.

**Tim Echols, Georgia PSC:** [inaudible 00:19:34] my eighth EV, and I have a Nissan Leaf in my parking garage below here. I'm at the Capitol right now in my office. I think EV adoption, whether it's through sales, the car I have now I purchased, or the leases that I've done on three other EVs, is the most important factor. For example, Hyundai's massive car factory here in Georgia, it began as an EV-only factory. But as EVs have slipped over the last year, they now are not only making EVs but hybrids and even ICE models of their cars. Kia does the same thing at their Georgia factory.

I think probably a more important factor of this is, what kind of land parcels can we offer these companies that are interested in coming in? What is their energy cost? That seems to be a big deal to them. More importantly, the availability of the workforce? They're not necessarily asking, "How many people are driving an EV, and are you guys living this?" which you might think would be an important factor, but these other three things seem to be more important.

As to the second question, I think we need to keep used EVs in the state if possible. The family looking for a car for their teenager, the family that needs a second cheap car, or folks that are looking for free access to, say, our toll road here on Interstate 85, a used EV or any car with a plug would work for that. I don't know that all of us who are EV enthusiasts on this call, we don't need to forget about what started us in this, maybe a hybrid, possibly a Prius for many of us. We learned about regenerative braking and battery efficiency and the importance of disciplined driving. Let's encourage people to get a car with a plug, knowing that people progress through the technology as they gain confidence, and that if they get a car with a plug or if they get solar, there's a good chance they're going to come to us on a full battery electric car.

**Josh D. Boone, Veloz:** Yeah, that's a really good point. There's a lot of talk about plug-in hybrids, or PHEVs. I think giving people the opportunity of choice is important. I think it's also important really to educate people on how to use PHEVs to actually get the full emissions benefits from them. So we want to make sure that if they're getting PHEVs increasingly, the range is moving closer to 30 to 40 to 50 miles of all-electric range. We want to make sure folks are plugging them in and using the all-electric range and offsetting any tailpipe emissions. That's a really good point. I'm going to have a driver in three years. So, yes, I'm hoping that my household, our oldest will be running around in a used EV. Yeah, good point, Tim. Thanks.

**Rosa Davies, Veloz:** Yeah, thanks, Tim. Doreen, over to you. New York is investing in EV adoption and EV charging stations being developed in communities. What incentives are helping build out these EV charging stations for light, medium, and heavy-duty vehicles? What would you say are the top two to three challenges that need to be solved to keep that momentum going in the current landscape?

**Doreen M. Harris, NYSERDA:** Thanks for the question, Rosa. We're obviously thrilled to be part of this discussion with Veloz, and generally, the interest here in New York State has never been higher in EV adoption. It's a bit of a unique landscape in the state, first because of course the population center being New York City creates both opportunities and challenges with respect to EV charging. But generally, unlike California, transportation is not the largest source of emissions in our state. It's actually the building sector, because we obviously have a rather efficient transportation system in the form of the MTA in the first instance.

However, all that to say, we have a number of different agencies that are all working together to advance EV adoption at a greater scale across our state. NYSERDA is the state's energy office. We deploy a number of different planning functions on behalf of the state, but also programmatic functions including our Charge Ready NY program, which is essentially providing up to $2,500 per plug to advance various forms of charging infrastructure and has seen extraordinarily strong participation.

But from other perspectives, we have our utility regulator, the Department of Public Service. One major thing they do is implement the Make-Ready Program, which is intended to really get after the broader needs, the infrastructure needs necessary to advance charging deployment in EVs writ large. At the same time, we have our sister agency, the New York Power Authority, with whom we've worked very closely to get those NEVI funds to use also to really address the corridors across our state, and we're among the first really to do so. I also drive an EV, and I use our state's network quite regularly, the EVolve NY network, to charge while on the road. I want to highlight the fact that it is a multifaceted effort, including our environmental regulator who has been involved obviously in some of the Advanced Clean Cars and Trucks regulations that were previously discussed coming out of California.

So all that to say, it's necessary for us to all coordinate because it is a complex ecosystem with many actors working together. It's also challenging for the very reasons you asked, the challenges themselves. The upfront costs, I think, are an area that remain a challenge and perhaps a barrier to adoption. That's why we have the Make-Ready Program. Meaning, if we're going to electrify everything, let's make the ecosystem, i.e., the infrastructure, ready for that work.

We also work with our utility regulator on the topic of demand charges. That has emerged ever more so as a real challenge for those who are trying to expand the adoption of charging infrastructure in their workplace, or in the case of schools, we'll talk more about schools in a bit, but that's remaining a need to have EV-friendly rates to allow for charging in a timely manner.

We also, I'd say, face some challenges with respect to local roadblocks. Sometimes, obviously, we have local permitting needs with advancing various EV charging stations. We've helped through the development of Model Permitting processes and forms to really help local municipalities better understand how to permit the charging infrastructure necessary to get from here to there. So progress, but certainly as with any aspect of the energy transition, by making the progress, you're sort of testing the systems that exist and pushing on the changes necessary to facilitate the adoption that we know is possible.

**Rosa Davies, Veloz:** All right, Doreen, I believe in you. I believe we'll get over these challenges on upfront costs and demand charges and those local roadblocks. So thank you.

**Josh D. Boone, Veloz:** Great. Well, in our time together, we've gone from California to Georgia to New York. We're going back to California to you, Nancy. Congratulations on your new role at the California Energy Commission. You've been working on transportation electrification issues for a long time in the state legislature. We've followed your work. We've supported your work. As the new California Energy Commissioner, what are your top two EV goals?

**Nancy Skinner, CEC:** Well, like a true former politician, I'll answer it with more goals than just two. Yes, I was very honored to have Governor Newsom appoint me to the Commission and, being the newest commissioner, also having the Transportation and Fuels Division under my assignments. That's the division that does the analysis for the state on our EV infrastructure needs. It collects data and does that kind of analysis and projection. It also administers many of the funding programs that we use to support our EV infrastructure and our ZEV infrastructure overall. I know we're talking primarily about EVs, and certainly, California California's goals are very strongly in the space of zero-emission vehicles. Though both from market trends and from our own variations on our policy, we have definitely stressed electric vehicles, but certainly our overarching is zero-emission.

But I would say in terms of those goals for EVs, it's improving the reliability of the public chargers. We don't need that EV owner who goes and tells all their friends who don't yet have EVs, if they say, "Hey, every time I go to a public place to get a charge, it's broken," that does not advance our goals. So improving that reliability.

The other thing we found is that, we are not the only ones who found this but this is data I think pretty much nationwide, that you are much more likely to be a EV adopter if you have charging at your residence, regardless of what type of residence, just at your residence. So what can we do to get more charging literally at residence? Yes, close to residence is good, but literally at your residence. So what do we do? Are there some lessons, for example, from New York that we might apply?

Then sending the right market signals, partnering with our private sector partners in this whole ecosystem of EVs so that we stay on track with propelling the adoption of EVs and the business case for charging and all of it. Because as we've already pointed out, multiple speakers already have, and I find this very ironic that we have a White House occupant who seemingly is so opposed to EVs, and yet standing next to him is the proprietor and the founder of the most successful EV company in our country. We can all have our different views on how is that happening. But certainly, we want to make sure that all of our partners in the EV ecosystem stay on these goals, and what do we do to keep that alignment and keep making that progress? So I'd say those are my top goals.

**Josh D. Boone, Veloz:** That's great. So reliability of the public charging infrastructure network, ensuring that we lift up the availability of charging where folks sleep because we know that that's a huge advantage of EV ownership, and then just ongoing partnership to keep advancing our goals. That's wonderful, and we're excited to be here to support you in that effort. I'll give it back to you, Rosa. You're on mute.

**Rosa Davies, Veloz:** Thanks. Yeah, I've heard that before. The best place to have a charger is where you're already parked, so I think that makes it a better use case. Doreen, back to you. New York has adopted CARB's ZEV vehicle standards. How is the market in New York for passenger vehicles, electric school buses, and medium/heavy-duty trucks evolving?

**Doreen M. Harris, NYSERDA:** This is really where, and I think this is generally true of the energy transition, is that we need many actors to be coming together around shared goals so that the market can respond. Obviously, following California's lead in adopting the Advanced Clean Cars 2 and Advanced Clean Truck rules, that's what we're intending to do is to say that we're setting a marker. The industry can and will respond. That is one of the reasons you set a goal in the first instance is for the industry response needed to reach the scale of the challenge.

We're by no means hitting the numbers that California is. But what I would say is we see the market momentum commensurate with really where we need to be heading, and that's been very, very encouraging as a state. With respect to EV sales, we're at about 10%. That's all-electric side of the shop, not the plug-in hybrids. But I think when you look at it on a percentage basis, the market growth is quite impressive and, as I said, consistent with where we need to be going.

We also have been spending a lot of time actually in the medium and heavy-duty space, notably in the electric school bus sector. In the sense first because we have actually a rather significant sum of money through a bond act that was passed a number of years ago by our voters through which NYSERDA is deploying a half a billion dollars to help school districts begin their transition and to help them execute on fleet electrification plans that will help them plan for the longer term as well. So we've made quick use of our funds but also the EPA funds that had been available and are still available for the deployment of electric buses. So that is an opportunity for us. There's 700 school districts in the state of New York, and we're working with over half of them right now really addressing, I'd say, what remains uncertainty in some cases around how these buses perform, particularly in cold climates, and what specific routes are best for these school districts to start with as they move through their own transition journey. So that's a big deal for us.

But also, we do have an increasing expansion of medium and heavy-duty trucks and buses. I'd say a large portion of those are electric pickup trucks, but we do see short haul electrification occurring ever more so. That's part of NYSERDA's job. We are an innovation shop. That's what we were born to be 50 years ago when we were formed. Really, this is where we have advanced a number of pilots across our state really to begin the process of demonstrating what is possible. So certainly more work to do, but really seeing the market momentum coming both from the push and the pull side, all necessary to effectuate the transition.

**Rosa Davies, Veloz:** Thanks, Doreen. Love that phrase, the innovation shops. That sounds really cool. All right, Tim, over to you. You work in the regulator space, and regulators work with utilities and rate making amongst other aspects like infrastructure investments. Let's assume that there is going to continue to be record growth in states like Georgia. How will rates be impacted as data centers and electric vehicles increase in substantial numbers?

**Tim Echols, Georgia PSC:** Unfortunately, bills are high in just about every state. I've just returned from the NARUC conference in Washington, DC, and it is a theme. Large loads, if we're not careful, can put further upward pressure on rates. Our commission about a month ago changed the terms and conditions for large loads over 100 megawatts. We are requiring a higher minimum bill longer term from five years to 15 years. Then we're requiring these new data centers or any large load over 100 megawatts to give us a letter of credit or a bond. If they get a better chip or they decide they're going to downsize, they're going to be on the hook for that energy that we're moving heaven and earth to bring to them right now. So that has had an impact of removing some people from the line, if you will.

My friends at Forum Mobility, who work in your state, told me that electrifying just the LA and Long Beach drayage truck fleet would take, in their estimation, five gigawatts of power. So with this unprecedented load growth ahead for these large loads with data centers and others, I think regulators like me are going to need to use every tool in our toolbox to lower these utility bills. If not, I think consumers are going to suffer, and then we're probably going to lose our job.

**Rosa Davies, Veloz:** Yeah, that's a good thing too to watch out for. Over to you, Josh.

**Josh D. Boone, Veloz:** Well, thank you, Tim and Rosa. The next question is for you my friend, Liane. California is the birthplace of EV adoption and innovation in the United States. What is the role of private companies that rely on California's clean air and transportation electrification goals in the current federal climate, and how can California government support them to meet the continued upward trend in charging utilization, for example?

**Liane Randolph, CARB:** I think Doreen put it best when she talked about that ecosystem, creating the ecosystem for all of these pieces to come together. So we have done that through our regulatory work on the vehicle side. We have done that with the work we've done with our sister agencies, the CEC and the CPUC, to get the infrastructure deployed. So I think now it's up to us to really, given the challenges at the federal level, figure out what additional state levers we can pull to support the industry in the transition.

There are any number of ways that we can do that in California. We can continue to rely on our successful market programs that have created the revenue that can support this work. That includes our Cap-and-Trade Program and our greenhouse gas reduction funds that come from that program. It includes our Low Carbon Fuel Standard, which provides funds for infrastructure to support zero-emission vehicles, and it also provides funds to support vehicles themselves. We are prioritizing medium and heavy-duty vehicles in that work. So as we continue to complete the updates to that regulation, that will help support adoption in California.

We also partner with our local Air Districts around the work that they're doing. As I mentioned, we work very closely with the Public Utilities Commission to think about ways that the electricity sector and the rate payers can help support the adoption of electric vehicles. We have various proceedings at the PUC that require utilities to support the deployment of electric vehicles. We see that as a huge opportunity to actually end up saving money for the rate payers in the long term. Because as the usage of electricity increases, that means there's more revenue to the utilities.

We also have the opportunity to use electric vehicles as a resource to think about how we can use them to help support high demand times of the year. The thing that's challenging about utility planning is that you have to plan for those peak hours at the hottest days of the year, the heaviest use. If we can use electric vehicles, home battery systems, other ways to manage that load, then all the actors in that vehicle ecosystem can help each other support reliability and reduce costs for everyone.

**Rosa Davies, Veloz:** Nancy, the next question's over to you. But first a little bit of backstory, which was going to lead into my question. You were behind AB 2514, which established California's large-scale battery storage program which reduced the state's reliance on fossil fuels. In turn, this led to California's utilities cleaning the grid. Then let's not forget SB 100, which set a goal of California using 100% renewable energy by 2045. These laws exist in part to direct the state towards cleaner air, increasing public health, and enrich the lives of Californians. So knowing that state legislation can be the key to continued transportation electrification, what do you see as the most important state policies that can help keep EV momentum across the nation, and how can we all work together in this effort?

**Nancy Skinner, CEC:** Thanks for that question. Yes, I'm very proud that... It was back in 2010 that I did the law AB 2514 to in fact have our Public Utilities Commission put an amount of utility-grade battery storage on the all-electricity purchasers that, when they entered a contract to purchase electricity, new generation, they would also include a certain amount of storage. Because we were beginning that path, we had not yet adopted a goal to have 100% of our electricity be renewable. We had adopted the goal of, well, I think we only had the 20% goal at that point, but we knew we were on a path. We knew we were on a path of going to renewable electricity.

Of course, given that most of our sources of renewable electricity generate only during certain times of the day, how do you make the grid stable? That was the idea of the utility-grade storage. There was none installed yet at the point that I did the law. But now California is the global leader in that. The market has completely changed. We see even long duration, the original while I was technology neutral and also ours sort of neutral, we're now seeing even developments in long duration storage, which is a great thing and will greatly help all of our electrification goals including our transportation electrification goals.

Now, meanwhile, my great colleague, Liane from our Air Resources Board, referenced, as load demand increases and we plan for peak, that the batteries in an EV have, I'm going to say, 10 times, I'm not exactly sure, but approximately 10 times the capacity of that battery pack that you buy to put on the side of your house. That battery pack you buy to put on the side of your house is there to be your backup for either outages or to help you deal with when the demand is greatest or when the prices are the highest for your electricity.

Well, your car could do that. Your car is battery storage on wheels. So to me, by unleashing that and people being able to see that this thing has more attributes than just getting me to my workplace or doing my errands or picking up my kids, it can also help me reduce my electricity bill because I could use it at the time when the rates are the highest. I could use it as my backup power, for example. Now, that's a little into the capacities there now, but that's a little into the future to really being practical for everybody, but it could certainly help us in terms of staying on course with our goals and getting that much more market adoption for EVs and others.

Your question really was about legislation. What more legislation might we need? I don't know if it's so much that we have... As far as I can tell right now, we don't have a lot of statutory barriers to some of these goals. Our barriers for things like unleashing that capacity and having people really be able to adopt it and having our utilities really engage is much more potentially regulatory and potentially just buy-in and working with our stakeholders.

Clearly, well, our governor has set this incredible executive order for having only zero-emission vehicles sold or EVs specifically sold as of model year 2035. It's not so much in my opinion at the moment that we need new statutes to help us get that. It's really much more both in our regulatory activities and others, again, setting those right market signals so that we keep the momentum to achieve it. For example, EV charging companies, that there's a business case for them, that they're no longer going to need, say, and who knows, we'll have to see over time, but that they don't need the public investment of dollars but that they are able to be revenue generating, and there's enough of them and such that we're at that place where, again, the state or federal dollars are not as essential to back them up.

It didn't answer your question of what laws, if I were a lawmaker right now, for example, what laws I'd be introducing to help our different goals. But at the moment I think it's much more other work. We have the laws in place, and it is our being nimble and clever and smart in implementing them.

**Rosa Davies, Veloz:** I'm going to take the moment to say that you've set up Veloz and electric for all really well here because this is some of what we do, make people aware of the attributes to EVs. They're fun and functional. Then you get people behind an EV in one way or another. Then that's going to increase utilization, and that's going to unlock quite a lot.

**Nancy Skinner, CEC:** Well, and you didn't mention, I also authored, which is one reason why we don't need necessarily... we might need an additional statute for this, but I also authored SB 59, which gave our different regulatory agencies the ability to start making the case for using our EVs in what we call a bi-directional way, using those batteries for more than just moving you down the street and, in fact, using those batteries either as backup for our utility grid overall or backup for a house or other facility, and we're working on that now.

**Rosa Davies, Veloz:** Yep, you're right. I forgot to mention that one. Thanks for catching it.

**Josh D. Boone, Veloz:** Great. We'll move back to you, Liane. The California Air Resources Board is not in this fight alone to improve air quality in the state. Ports and other facilities have standards to be followed. How has CARB and Air Quality Management Districts, for example, going to be able to enforce air quality standards while facing some of the federal headwinds that we're talking about?

**Liane Randolph, CARB:** The role of our Air Districts is absolutely critical in this work. Particularly, as you know, if we are going to be dealing with these federal headwinds at that level of government, relying on the local Air Districts is going to be really important. We have 38 Air Districts in California. The critical non-attainment areas include obviously the Los Angeles Basin, the San Joaquin Valley, portions of the Bay Area, the Imperial Valley, San Diego area, all of those Air Districts are working really hard to try to meet the federal air quality standards.

Some of the ways that they have been doing that has been really groundbreaking. Several of our Air Districts have indirect source rules, where particular sectors that have indirect sources of criteria pollutants, such as warehouses that have trucks visiting them, have requirements to reduce those emissions as part of their operations. There's an opportunity to do much more of that. There's an opportunity for some of our large ports, like the Long Beach and LA Port complexes and the Port of Oakland, the port of San Diego, to use their authority to continue to adopt rules that help inset cleaner vehicles, but also to work with their tenants to provide operational opportunities that really elevate zero-emission vehicles. For instance, one strategy that has been used in other parts of the country and the world are what are called green gates, where you prioritize zero-emission trucks as they approach the port and give them some extra either financial or time, because time is money, opportunities to access the port complex.

So all of that work, I think, is going to become even more important as we deal with the federal administration. CARB has defended the ability and supported the ability of these Air Districts to adopt rules in court, and Air Districts have been successful. So that is a key partnership that will continue so that we can achieve both our air quality and our climate goals.

**“ACROSS THE PANEL” Q&A**

* Josh Boone, Veloz, Executive Director

**Rosa Davies, Veloz:** Liane, thank you for that answer there of making sure we're sticking to some goals. We are going to go into this across the panel segment now. Let's see. Before we get to audience questions, we are going to try a little something different today. For our panelists, we'd like to provide you all with the opportunity to ask each other questions instead of them coming from Josh and me. So we want to showcase the type of collaboration that happens within Veloz. So let's start with you, Doreen. I believe you have a question for Nancy.

**Doreen M. Harris, NYSERDA:** Yes, this is so cool. I'm excited to do this. Sorry, Nancy, I have to look at the list. I had mentioned, I think, foundationally how much collaboration really comes into all of this. Foundationally, I was interested to know how the CEC in general is able to continue to spread the influence of the standards it applies throughout the EV charging market. Meaning, how do you work beyond your borders given your remit? Specifically, what could we in New York or in any other state do to collaborate on the topic? This is specifically on the regulatory process that you're developing that you'd referred to.

**Nancy Skinner, CEC:** Well, thanks, Doreen. It's wonderful to get a question from a colleague in an agency very similar to the agency I'm now commissioner for. Well, clearly, because we have the largest market share of EVs in our state, and, as Liane has pointed out, we've really led the way here from various of our policies, that's why we have so many EVs on the road in California. Thus, the charging companies have more presence here. We have more chargers overall. We have more ports now than we have gasoline nozzles in the state of California.

We are working now on some regs for reliability, which would potentially mirror those regs that NEVI had for NEVI funds, and we'll see what happens with those NEVI federal funds. But the great thing about the NEVI rules and, say, the state of California rules being aligned is that then there's that level playing field for the charging companies. They can apply it, and you, New York, and others could apply it. So it would become an industry standard hopefully. That's a lot what we're looking at, and it's a lot why we interact with the charging companies in the development so that we are doing it in a way that achieves the goals we have but in ways they can meet it and in ways that can be applied across the country.

**Rosa Davies, Veloz:** Great. Then let's keep it going. Nancy, how about you ask Tim a question?

**Nancy Skinner, CEC:** Excellent. Tim, you're a great enthusiast, and you've described much. But Georgia's EV market share is now at about 8.2%. So what can Georgia do to increase its EV market share?

**Tim Echols, Georgia PSC:** A lot of folks on this call are pioneers. Many of us on this call together, I think through the years, I've been driving an EV since 2013, we've been willing to endure bad chargers, low range, general inconvenience to drive. But the mainstream out there today, they need the easy button: chargers everywhere, lots of them, dealer inventory, education, used EVs that they can get because they can't afford a $60,000 car. That means doing more utility Make-Ready here at the commission, and we have done a lot, I've championed that, it's been an important priority for me, as has been what we call community chargers owned by Georgia Power. That's a DC fast charger with two Level 2s in charging deserts in our state with a CHAdeMO option so that older LEAF drivers and Soul drivers from Kia can still get a charge.

But I think the most important thing that the Georgia legislature could do across the street at the Capitol would be to bring back the $5,000 state tax credit, but I'm not optimistic that this is going to happen in the next four years. In the meantime, we've got to keep winning hearts and minds, one meeting, one person at a time.

**Rosa Davies, Veloz:** That's right, one at a time. I believe the next question is out to Liane.

**Tim Echols, Georgia PSC:** I'm asking Liane a question here. Liane, I was recently with a congressman last week at an event that Albert Gore did in our state. This congressman was giving lip service to EV adoption, but he doesn't own an EV. How important is it for policy leaders like us to use and learn about the technology? Why does it help if officials like us make better policy if we've been driving an EV?

**Liane Randolph, CARB:** Yeah, that's a great question. This is another good example where the private industry can really step up and help. One of my favorite things to do are to do Ride and Drive events. We do it in a lot of different contexts in California. We will go to communities with our Clean Cars 4 All program, which helps put folks in cleaner cars, low-income residents in cleaner cars and show them what the opportunities are, show them the cars that are available that qualify for the price limit for the program and having that touch point. Also just bringing cars in front of the State Capitol, lined up on the street in front of the State Capitol and giving legislators an opportunity to go check them out and drive them around. I've been to a few Ride and Drives at racetracks where some of the zero-emission medium and heavy-duty trucks are available. I've been able to drive an 18 wheeler zero-emission truck and plenty of zero-emission box trucks and vans. So showing people what's out there and what's actually on the market, I think help gives them comfort that these vehicles are real.

I also think it's very important for those of us who are deep in this policy space to be able to share our personal experiences driving vehicles and particularly using the infrastructure. I see the transition you talked about, Tim, where it used to be we had this really low-range EV, and it would take forever for it to charge, and the chargers were few and far between. Just in the last four or five, six years, the choices have just multiplied, and it's really, really changed the experience, and being able to articulate this is not your uncle's EV. These cars are really pretty remarkable now, and the infrastructure is really growing.

It helps us as policymakers think about some of the reliability issues that Nancy was talking about, how we fix those. We understand what it's like to have that nail-biting moment as you're approaching the charger. Am I going to make it? Is there going to be a line? Is the charger going to be working? All of that is improving so much and so fast. But making sure that we have the experiences that we can share with our colleagues and then work with manufacturers to bring them in to show off their product.

**Tim Echols, Georgia PSC:** On the next call, I'll have to tell you all about the EV bus race that I participated in, but not today.

**Liane Randolph, CARB:** I love that.

**Josh D. Boone, Veloz:** Did you drive the bus, Tim?

**Tim Echols, Georgia PSC:** I won. I won.

**Josh D. Boone, Veloz:** Congratulations.

**Rosa Davies, Veloz:** Then I believe our last question goes out from you, Liane.

**Liane Randolph, CARB:** This is a question for Doreen. Obviously, New York and California have had a long history of working together on clean air and climate policy and exchanging a lot of information. So my question is about how NYSERDA is working with utility regulators and investor-owned utilities to be able to bring all the incredible research and intellectual capacity you all have and the data you're able to provide and to work with them to think about what are the right policy levers and progress that they need to be thinking about.

**Doreen M. Harris, NYSERDA:** Well, thanks for that. Yes, it is the case that one of our major opportunities and challenges really is in working with utilities to advance the energy transition in all respects. Our job in part, one of our roles, as I said, is the energy innovator for the state. I think this is where we can help test and pilot and make known what it really means to execute on some of the asks that we're actually having of the utilities across our state.

I'd say a really good example of this from the perspective of NYSERDA as the energy office, the utilities and the regulator, is the ways in which our R&D department actually made a pretty concerted effort around managed charging and vehicle-to-grid interactions in which we literally developed a full R&D solicitation with the regulator and the utilities to find projects that, as we were just describing, demonstrate the integration of EV charging with distributed energy resources to develop new vehicle-to-grid products and business models and then to improve the reliability of managed charging technologies.

Those projects are just getting off the ground, but this is really where we can find more impact. This is about scale. We're not going to be able to just grant our way from here to there. We've really got to deploy and really begin to get the market scale necessary to get from here to there. So I think transportation is just a great example of the reality of the energy transition. We're asking entities that are usually responsible for [inaudible 01:04:52] to care about electric vehicle infrastructure, so we've got to get all parties together to address these challenges. So more to come, but a success story nevertheless. Thank you.

**Rosa Davies, Veloz:** Well, thank you. I believe it is now time to take some audience Q&A.

**AUDIENCE Q&A SESSION**

**Josh D. Boone, Veloz:** Thank you so much for indulging us with our unconventional lightning round of cross-panel Q&A. But as Rosa said, now's the time to look through the questions that have come in and give our Digital Dialogue audience an opportunity to hear from you. I have some really good news, and that is we've got a lot of questions. So I'm going to do my best to get as many as possible in the next five to six minutes. Some of the questions are directed to specific panelists, and some are more general. So let me work through them. A general question is, as we look ahead, what upcoming legislative or regulatory decision should stakeholders be paying the most attention to, and what actions can they take now to help shape the outcome?

**Liane Randolph, CARB:** Well, I actually just want to put in a plug for not giving up on the federal level. There's action going on in Congress. There's action going on at EPA. I think it's really important for the private sector/public sector advocacy organizations to really participate in that process and make sure that the voices of making progress on climate change and air quality are heard and that the business case and the manufacturing case for this work to continue is heard loud and clear. As the bills move through, as the rule changes and potential rollbacks are considered, it's really important to not be quiet.

**Josh D. Boone, Veloz:** Yeah, that's really helpful. We've got a California perspective. Do we have a Georgia and New York perspective?

**Tim Echols, Georgia PSC:** From Georgia, this tax credit, I'm just hoping that it survives. It's so important. Maybe not to the Tesla buyer but everybody else. I'm talking the federal credit. We lost our credit here in Georgia. We saw what that did: 90% drop in sales. We were the Nissan Leaf capital of America, and we lost that. So there's a general hostility going on out there with Republicans. I'm a Republican. I get a lot of flak for my EV stance. I was hoping we don't lose that credit.

**Doreen M. Harris, NYSERDA:** Yeah, I'd say, much like Liane, obviously we have to monitor the federal context very carefully. Among the other areas we're monitoring is, of course, the possibility of tariffs that could have impacts on this industry writ [inaudible 01:08:24], many, many aspects of the clean energy transition writ large. So I'd say really when we think about it, we need to be smart about the federal context we're working within. But I think it's also true that there's many, many things that we as states can do ourselves to support EV adoption that don't depend on federal approval, certainly, state-level investments. The policies, a lot of this is state-level utility policy and ultimately the ways in which we can permit these sites more efficiently. So I'd say we find ourselves, the sub-nationals as it's known, in a very important role in ways that we can be coming together is also important, irrespective of the federal context.

**Josh D. Boone, Veloz:** Yeah, that's really helpful. Team, I'm getting several questions about messaging EVs. This is a question to all of you, and I'm going to do a little bit of an interpretive dance here to try to weave the needle. But essentially, we're here because we believe in the value of EVs, and we might believe in the value of EVs for different reasons. But as we think about going forward, how do we message the positive attributes of electric vehicles to our fellow countrymen and women?

**Nancy Skinner, CEC:** Well, I'll start, as having had an EV before but not having gone through the purchasing process for it, so I didn't deal with things like the tax credits and such, it was a different circumstance, and recently purchasing one, I think that one-stop shop type of website, literally, even though in a place... California is big. We have a lot of different utilities. We have a lot of different programs that will help you with... We have more than just the state tax credit. The federal tax credit still exists. There's the federal tax credit. But we have all kinds of utility programs. Some of our Air Districts have programs. We have something called Community Choice Aggregators. Those are like an overlay in effect in some areas to your utility provider, and they have programs to support your EV.

But to find them, you have to do an enormous amount of research. So a one-stop shop website that gave you all that info and showed you that even purchasing a used EV, because a lot of people think, "Okay, I'm only going to get these benefits if I purchase a new," but there's many of these same benefits that are direct dollars to you that are for a used purchase, that kind of one-stop shop I think would help enormously making it easier. I think it's what Tim always said. Making it easier on the person who's interested in adopting so they do not have to do a lot of work, and, yeah, they adopt.

**Josh D. Boone, Veloz:** Well, Nancy, it's almost as if we paid you for a Veloz ad because that is the very business that Veloz is in. You hear us talk about this a lot, but electricforall.org is our consumer-facing website. It's free to use. It has zip code intelligence in it. Plug in your zip code, and it will return federal, state, and local incentives. We believe at our core that education is needed more now than ever before, and so we're going to continue to invest in that and invest in messaging. So think of Veloz as a partner to you at the Energy Commission as well as the rest of the folks here on the panel. We're going to move on maybe to another question. Unfortunately, this is probably going to have to be our last. How can we ensure long-term policy stability so that EV investments remain viable even with shifting political winds?

**Liane Randolph, CARB:** The way I think about it is being consistent about the goals. As a state in California, we have been very consistent as we have progressed to cleaner and cleaner vehicles. Now the technology is at the point where we are able to support fully zero-emission vehicles, and our program does include plug-in hybrids so long as the range is 50 miles or above for a portion of the company's compliance.

So I think that consistency of purpose is the most critical thing. Because what ends up happening is different strategies come to the fore based on the current situation. For instance, early in the work, the utility support for infrastructure and vehicles was really, really critical. Using the market-based funding was really, really critical. Then as we got to the point where the technology was really supporting strong regulation, the regulations became stronger, became more at the forefront, the incentives started to be oriented more towards lower and middle income because they didn't need to be quite so technology forcing. Now as we are looking at the challenges around being able to fully implement our regulations, the incentives come back to the fore. The need for more of the carrot approach becomes more critical. So having a clarity of purpose and then addressing the policies to address any sort of external challenges but continuing to communicate that the goal does not change. The tactics may change, but the goals do not change.

**Josh D. Boone, Veloz:** That's really helpful. Does anybody else want to make a quick comment before we wrap up here?

**Tim Echols, Georgia PSC:** For me in Georgia working towards first-in-line privileges, for example, for EV rideshare vehicles at the airport, being able to provide some things that really doesn't cost government anything to do and keeping this growing commercial sector going. Let's have more Amazon vans. Let's have more delivery vehicles that are electric. These are out in our neighborhoods. People are seeing them. They have a subliminal effect on people as they see these high-tech-looking vehicles, and I think they can help move the general population forward.

**Josh D. Boone, Veloz:** That's great. Well, from my desk to each of yours, thank you for participating in this discussion. I feel like it should be one of five, but I'm going to kindly turn it back over to you, Rosa.

**Rosa Davies, Veloz:** Yeah, I'll echo that. As we wrap up this discussion for the day, once again, thank you to our panelists for joining us, and of course, special thank you to the presenter, Nick Nigro. It's been so wonderful having you all join our conversation, and we look forward to the important work you'll be doing in the coming months. Have a great rest of your day.

As a reminder to our audience, we will be sending out a recording of today's conversation as well as a transcript through our newsletter, so be sure to subscribe if you haven't already. Before we let you all go today, I have a quick announcement followed by a little teaser video that I think is worth the 80 seconds. In 2025, Veloz will be implementing our strategic plan of national expansion coupled with the nation's first EV education and awareness consumer campaign by a third party. So if you're interested in joining Veloz and supporting our efforts, please email me. It's my name, Rosa.Davies@Veloz.org or find me on LinkedIn.

Additionally, I want to take a moment to heartily thank the generosity of our Veloz member companies who provide the funding that allow us to put on our summits, Digital Dialogues, and other events. If you are not a Veloz member, these programs, like our Digital Dialogues, our industry summits and our communications working group, are part of membership. So we invite you to become a member. Reach out to Josh, my co-moderator, or myself to learn more. Speaking of events, please sure to stay tuned for the rest of our 2025 roster of events by signing up for our Veloz newsletter. Veloz will be publishing some of our 2025 events. You can bet that total cost of ownership and light-duty EV fleets will be on our airwaves with executive voices from across the US like today. Then finally, I highly encourage all of you to follow us on social media, sign up for our newsletter, and join our upcoming events.

I want to thank each and every one of you for joining us today and wish you a great rest of your week.