



Achieving an Equitable Transition Toward Sustainable Transportation

To debate the transition to sustainable transportation, ELI convened some of the key players from the multiple sectors involved for the annual policy forum honoring the memory of Judge Nancy Firestone. The marquis event is held each year just before the ELI Award Dinner. Our panel this time discussed the legal and policy obstacles and opportunities presented by the shift to an equitable and carbon-free transportation system.

The transportation sector comprises diverse users and operators, ranging from truck and car fleets to hundreds of millions of private individuals. The forum focused on these electric vehicles and, importantly, on the infrastructure needed to support the EV revolution.

That includes new generation from

wind and solar sources, new power lines connecting these generators to enlarged trunk lines and into a national grid able to accommodate and modulate the terawatts flowing ultimately to individual EVs. That includes also providing accessible and equitable chargers, not just to fleets and homeowners but to low-income rental neighborhoods as well.

What infrastructure needs to be created, and how can it be incorporated into land use planning? How can charging stations be installed equitably and accessibly across the country? What are opportunities to incentivize the adoption of EVs? What challenges will utilities and other stakeholders face as more EVs are sold, and how can these difficulties be addressed by better policy?



Andrew Wishnia
Partner
EpicWorks Advisors

“Of course we have a lot of work to do! The Interstate Highway System wasn’t completed until four decades after it was launched”



Rob Gramlich
Founder and President
Grid Strategies

“Policymakers now realize there is no transition without transmission. Wind and solar resources are usually not where the people are”



Jeffrey Page
Senior Attorney of Government Affairs
FedEx

“By 2030 we intend to purchase zero tailpipe emission vehicles for our own pickup and delivery vehicles”



Cynthia Williams
Global Director of Sustainability,
Homologation, and Compliance
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“We started by electrifying our most iconic vehicles. We know what the customers already love about them”



Beia Spiller
Director, Transportation Program
Resources for the Future

“Procedural justice requires that communities have a central role in the decisions that affect them”

Jordan Diamond, moderator:

Our focus for the 2024 Firestone Policy Forum is the road to equitable and sustainable electric vehicle infrastructure. Federal and state governments are already issuing regulations and offering incentives to encourage greater EV adoption by consumers and businesses. The focus now for policy development is on ensuring that our infrastructure can support this shift equitably and sustainably.

Electrification of vehicles substantially increases national power demand. At the same time, new renewable energy generation is coming online. These changes are already taxing our aging electric grid. Additionally, there are questions swirling around charging access, which bring in issues of equity. Our panelists will tackle how to plan and deploy EV infrastructure effectively and justly, and comment on which adoption incentives are or aren't effective.

We begin with Andrew Wishnia. He's a partner at EpicWorks Advisors and senior advisor to LSM Partners. Andrew previously served as the first ever deputy assistant secretary for climate policy in the Department of Transportation. In this role, he was a principal architect of the Bipartisan Infrastructure Law and provisions of the Inflation Reduction Act, including authoring, negotiating, and implementing the charging and fueling infrastructure and national EV infrastructure programs

Andrew Wishnia: In 2015, the law of the land for infrastructure policy was a bill called the FAST Act, for Fixing America's Surface Transportation. I was handling technical assistance as a career staffer in the Federal Highway Administration. The Senate wanted to create what were then called alternative field corridors. There was no money attached, but there were designations for natural gas, hydrogen, propane, and electric vehicles. If we were able to *designate* corridors, I wondered,

why can't we *fund* corridors? And if we can fund corridors, why can't we put charging infrastructure in place?

Under the stewardship of then President Obama and the Council on Environmental Quality, we issued Executive Order 13693, which at the time had the most aggressive electrification goals in the world: 100 percent EVs for the U.S. federal fleet by 2025. I said to myself, if we can do it for the federal fleet, why can't we do it for the rest of the country?

Senator Tom Carper of Delaware, then the ranking member on the Environment and Public Works Committee, gave a green light to create the first climate title in an infrastructure bill in American history. Under Senator Carper's leadership, we created the Clean Corridors Act in 2017, which became the \$2.5 billion Charging and Fueling Infrastructure program, or CFI, in the Bipartisan Infrastructure Law. Along with the National Electric Vehicle Infrastructure program, or NEVI, which was intended as the formulated version of CFI, the programs combine to provide \$7.5 billion to deploy chargers across the United States.

This is just the beginning of the story, because we're only three years in and there's a lot of perseverating and headlines about how much more work we have to do. Of course we have a lot of work to do! The Interstate Highway System wasn't completed until four decades after it was launched.

We are going to hear today about visions, and challenges, and opportunities related to equity in particular. But recognizing where we started and where we have yet to go means the ability to figure out how we want to deploy charging infrastructure that's convenient, accessible, reliable, and above all equitable.

Jordan Diamond: Our second speaker is Rob Gramlich, founder and president of Grid Strategies, a DC-based consultancy focused on

transmission and power markets for a reliable, affordable, and sustainable power system. He previously co-founded Americans for Clean Energy, the Macro Grid Initiative, and the Future Power Markets Forum.

Rob earlier oversaw transmission and power market policy for the American Wind Energy Association as senior vice president and interim CEO. He served as economic advisor to FERC Chair Pat Wood and as senior economist at PJM Interconnection.

Rob Gramlich: To electrify transportation, we need to make sure we have the power infrastructure to serve electric vehicles. America's power needs are changing. LED light bulbs and TVs and other advances flattened out U.S. power demand for 25 years. Now, data centers are emerging as huge energy users. New manufacturing plants are very big energy users. Electrifying heating in particular will raise our power demand. Given this context, can we do EV infrastructure and can we do it cleanly?

One thing that the electricity industry was already working on was resilience. Hurricanes, droughts, wildfires—all these things affect electrical infrastructure. When the power goes out, interregional transmission becomes an important priority. If these weather incidents knock out generation, we can ship the power in.

Clean energy and climate goals are causing a new look at transmission. In other words, policymakers now realize there is no transition without transmission. That's because wind and solar resources are usually not where the people are. Connecting different renewable resource sites, spread through different time zones across the country, we can get a much more reliable supply.

The Federal Power Act is critical to making this happen. The Federal Energy Regulatory Commission has very strong authority—but not everybody interprets it that way.

However, the language on just and reasonable rates is quite strong.

Recently, we were involved in what is now known as FERC Order 1920, governing required regional transmission planning. It takes into account all the public policies that states have, and looks into the future for reliability, low growth, and clean energy goals.

The fossil infrastructure is largely already built—and almost all the clean energy infrastructure is yet to be built. If we err on the side of making things easier to build, that is how we are going to rapidly clean up the overall power system. Texas is the leading renewable energy state in the country, because it's very easy to build there.

When you make it easy to build, you're going to get a lot of clean energy and you're going to displace the polluting plants we have now. In Houston, L.A., New York, Chicago, and other places there are dirty peaker plants, many built too close to disadvantaged communities. These will become obsolete if we can bring in enough clean electricity.

For environmental justice reasons, for overall public health, and for climate stability, we need to put in place policies to get more clean energy infrastructure built.

Jordan Diamond: Jeffrey Page is senior attorney of government and regulatory affairs at FedEx, where he advises and represents the company on environmental compliance and sustainability matters. He joined FedEx in 2022 after almost 15 years of federal environmental practice experience with EPA and the Department of Transportation.

Jeffrey Page: I'm happy to bring an industry perspective to the challenges that we are facing. FedEx has a goal to be carbon neutral by 2040. That encompasses all our operations. We have over 700 aircraft and 215,000 motorized vehicles. We operate in 220 countries. So that's a large footprint.

We try to approach the challenge

of electrification from a practical standpoint. The first prong is to decarbonize what we can, which means minimize our emissions where it's possible. Second, we want to engage our stakeholders in policy development, so we can work together to find solutions. And third, we want to recognize that reducing our emissions will not get us to our goal alone. That means we have to look at things such as carbon offsets and our investment with the Yale Natural Carbon Capture Center.

We also have three questions that we use to guide our approach to sustainability. The first is how can we operate more efficiently to achieve our carbon neutral operations goal. Second, how do we foster innovation and investment today to inform tomorrow's climate solutions. Finally, how can we empower our customers with the tools and resources they need to achieve their own sustainability goals.

Those three questions help guide our approach to vehicle electrification. By 2030 we intend to purchase zero tailpipe emission vehicles for our own pickup and delivery vehicles. By 2040 we aim to have all parcel pickup and delivery vehicle fleet using zero tailpipe emission models as well, including for our contractor transportation. As you can see, we have developed a very practical approach with a phased target deadline to tackle our carbon neutral goals.

Jordan Diamond: Cynthia Williams is global director of sustainability, homologation, and compliance at Ford Motor Company and the 2024 recipient of ELI's Environmental Achievement Award. She plays a central role in Ford's efforts to achieve carbon neutrality by 2050 and lead the automotive industry's transition to electric vehicles.

Cynthia Williams: Ford has been in the automotive industry leading the revolution to drive change for over 120 years. I've been with Ford for 33 of those years. During my time, we've always had a

sustainability plan. We work directly with our research and advanced engineering team to have science-based targets to back up that plan.

Our goal is to become carbon neutral no later than 2050. We have a three-pronged approach as well. Our goal is to reduce 95 percent of our CO₂ emissions by attacking our vehicles, our facilities, and our supply chain. We share best practices and make sure our partners can get to their carbon neutrality goals too.

We started by electrifying our most iconic vehicles. So we have the Mustang Mach-E, the Ford F-150 Lightning, and the E-Transit commercial EV. We chose those vehicles specifically because we know what the customers already love about them. If we can get owners in there at scale, we know the impact that Ford Motor Company can have.

We also look at how we build the products. We want to make sure that we construct a responsible supply chain. We want to make sure that raw materials are responsibly sourced. We're also looking at the way our team is respecting the human rights of everybody who works for Ford. We go down to the mine site to understand how these minerals are being processed, who's working there, are their goals aligned with Ford's goals.

We set up interim goals for 2035 for our facilities. We plan to use 100 percent carbon-free electricity by that year. We also want to ensure that we can use recycled materials in our products and use less natural resources to build our products. We're setting up an entire manufacturing ecosystem in which we are reusing and recycling material.

We meet with our research and advanced engineering arm on a weekly basis to make sure that we are creating the right strategies. We are bringing in new technology to make sure that we can meet our goals.

Jordan Diamond: Our fifth speaker is Beia Spiller, a fellow and

director of the transportation program at Resources for the Future. Prior to joining RFF, she was lead senior economist at the Environmental Defense Fund, where she worked for almost a decade. During her time at EDF, she participated in many electric utility proceedings in New York and California, with the goal of ushering in a cleaner, more efficient, and equitable energy system. Her more recent efforts have concentrated on electric vehicles and environmental justice, exploring some of the most pressing issues around electric car, truck, and bus adoption.

Beia Spiller: At RFF, we are focused on how to achieve a decarbonized transportation future through effective policymaking. Equity plays a big role in this transition. We have been thinking a lot about the issue of what equitable infrastructure investment, including access to charging stations, actually means.

The United States is on the cusp of a third industrial revolution. In the last industrial revolution, beginning in the early 1900s, we built a transportation future on the backs of poor households, on the backs of Black and brown communities. We ushered in a future built on cars by tearing down communities of color and building highways through them.

We are at a point where the federal government has billions of dollars to spend on carbon-free investment. Are we going to take a similar approach to what we did at the beginning of the 1900s—saying today, “Let’s get those charging stations up as quickly as possible to usher in this decarbonized transportation future.” Or are we going to take a more deliberate approach, where we ask how can we actually achieve a decarbonized future—and at the same time make sure that these investments are not exacerbating the inequities that underserved and overburdened communities already face.

Social justice has several different core tenets. One of these is distribu-

tion justice—that the benefits and costs need to be distributed equitably across all communities.

So 40 percent of all charging stations need to go into disadvantaged communities following the Justice40 goals of the Biden administration. But unfortunately that doesn’t get us there because, if we really think about all the distribution of costs and benefits associated with these investments, we have to go beyond just where these chargers are placed.

Then there is the matter of affordability. This raises another equity issue in that higher income individuals and white communities tend to have garages, allowing them to benefit from lower off-peak power prices. But the rest of society doesn’t have that option and so relies upon public charging stations. The price there is going to be significantly higher than what you’re paying at home off peak.

There are also ways in which placing these chargers in those communities could exacerbate inequities. This can be true if chargers are increasing local traffic. Or if the electricity provided is sourced from dirty energy and thus is exacerbating the area’s air pollution exposure.

The final thing I will say concerns another really important tenet. Procedural justice requires that communities have a central role in the decisions that affect them. There are indeed questions that, to answer them, requires communities to be able to have a voice. But, they generally do not have a say in these decisions.

Jordan Diamond: Andrew mentioned the Bipartisan Infrastructure Law and the Inflation Reduction Act. We’ve seen dollars flowing to states through programs such as the National Electric Vehicle Infrastructure Program and others. What have you all seen come out of these programs to date? What is going to happen next?

Andrew Wishnia: You can see some of the tension that policymakers are trying to adjudicate in real time as we move forward. The ten-

sion between moving too fast and not fast enough. Not fast enough because electric vehicles are not sufficient but necessary to meet our Paris climate commitments and our commitments to do right by overburdened and underserved communities. Not too fast because we have to make sure that we are deploying charging infrastructure in a way that rights the sins of our past.

It’s absolutely true that we bulldozed communities in the past and committed a number of other sins that we don’t want to repeat. So as soon as we passed the Bipartisan Infrastructure Law, we didn’t just begin to deploy chargers. We started to put architecture around a framework for deploying charging infrastructure.

Part of that architecture was BABA, otherwise known as Build America-Buy America. So all of those chargers are henceforth going to be made in America, which creates some supply chain concerns.

One of the reasons it takes time to roll out energy infrastructure is because we had to promulgate regulations on minimum standards. Some of those standards have to do with reliability—at least 97 percent uptime, for example. We want folks to have the same experience when they’re using an EV charger as when they’re using a gas station fuel pump. It needs to be convenient, accessible, reliable, and above all equitable.

There are also spacing standards. There are disability standards. These are designated as Justice40 programs, where at least 40 percent of every covered program has to benefit overburdened and underserved communities. That means that the chargers can be deployed by minority and disadvantaged business entities.

Where we are going to struggle going forward is creating wealth opportunity for as many EVSPs—electric vehicle service providers—as possible. We represent now as a consulting firm a large number of EVSPs who want to take advantage of these programs. But it is harder

for up-and-comers for a lot of different reasons, including the fact that they often don't have the capital.

Cynthia Williams: Just to add to that, one of the things that the Inflation Reduction Act did is to put in guidelines about providing equity and putting charging stations in low-income and disadvantaged communities. The charging stations may not get as much traffic initially. But as more and more EVs get out there, these communities will benefit. The providers and users both will benefit.

Jordan Diamond: Cynthia, how do oscillations in the deployment of charging infrastructure affect auto manufacturing?

Cynthia Williams: For companies like Ford, we look at how to flex between building to capacity while also looking at consumer demand.

But looking at our Quarter 2 and Quarter 3 results for 2024, we see huge benefits for the F-150 Lightning as well as the Mustang Mach-E. In Quarter 2, our Mach-E sales grew 77 percent. They may not be growing as much as we thought they would be in terms of the entire industry but they are growing. To increase demand further, we're implementing programs like the Ford Power Promise. We will provide consumers with a charging unit as well as providing help installing that unit.

Jeffrey Page: I'll add that at FedEx we operate a number of vehicles that are different classes. We need corresponding charging infrastructure there to secure the successful transition to EVs.

We continue to install our own charging stations as we deal with the infrastructure issues. We do this here and in Canada, the UAE, the UK. This is all in the effort to support the electrification of our fleets to ensure greater EV adoption.

Jordan Diamond: Let's turn to the electricity sector, including the question of pricing and whether we are concerned with a public provider or a private provider.

Beia Spiller: Electricity pricing is key when we think about public charging stations. The challenge is that the station operator is going to face an electricity price—some sort of a commercial rate, which likely includes a demand charge.

For an operator, let's say you only have ten vehicles come to visit your charger in one month, but seven of them show up at the same time. The operator is going to pay for the total maximum demand of those vehicles all charging at once even though you don't have a lot of vehicles coming in and out of your charging station every single day. The marginal cost for you as the charging station operator is going to be really high.

As more and more vehicles start coming into the market, the demand charge starts to matter less. In fact, if you have a lot of throughput, demand charges can actually be pretty good—because your marginal cost is a lot lower.

Charging stations are not very profitable. They are losing money because they are paying these high demand charges. There have been many attempts by utilities across the country to replace demand charges with volumetric charges for public charging stations.

Rob Gramlich: In the power sector we separate generation, transmission, and distribution. This is really more about distribution, which is the domain of the low-key utilities, usually under the oversight of a public utility commission. Again, for the lawyers in the room, there is a whole body of public utility regulatory law. Most states are pretty similar, but not always. You have to go deal with 50 different states in their 50 different ways.

On solar power and storage, that can help reduce your peak to the extent there is a demand charge. But the power density of the amount of electricity you really need there is very high relative to the likely area of a photovoltaic array. The demand charges and the pricing are going to matter.

Also, how the new hookups are done, sometimes by utilities, we see issues on the load side and the generation side. There's always a question of how specific you are about each individual new user's contribution to the system needs.

What we do for wind and solar generators, unfortunately, is that we study for three or four years whether this one or that project has to have a \$10 million or \$20 million charge to connect to the grid. Where if we had just said, all right, everybody just pays \$15 million and then would be done with it, we could have been integrating a whole lot more clean power over the years. The more we can increase the utilization of the whole set of infrastructure, the lower the rates are for everybody.

If we're all using electricity at the exact same time, well, then guess what? We need to build up this massive transmission, distribution, and generation infrastructure. But if we can manage the timing—and sometimes pricing helps for peak/off-peak users—then that can increase the utilization. That is, of course, easier to do with larger and more sophisticated customers. Not so easy with drivers. If we can give people an incentive, a discount, a rebate for using power at certain times, that could help the utilization.

Jordan Diamond: There is a fundamental tension at the intersection of making this transition equitable and making this transition profitable. Whether you're talking about the pace of rollout, what is feasible and what are the different factors involved?

Beia Spiller: The challenge—and this is what I was alluding to—is that in the end, if it's profitable for the company right now, it's probably not affordable for the customer. So you have this weird trade-off between either the company is making money or the consumer is actually benefiting financially from the shift to electric vehicles. That's really a challenge.

Part of this issue is that companies need to make money. But the challenge is that there's just not enough competition at this point to really help drive down costs. Part of the lack of competition is the lack of transparency. You don't know what you're going to be paying at the charging station.

Also, unlike gasoline, where prices per gallon are clearly displayed, for EVs, the price is not transparent and lacks clarity on how you will be charged—it could be by the kilowatt-hour, by the kilowatt, or by the hour. A lot of people thought it would be cheaper to go to EVs, but that's not what they're finding.

An option would be, particularly for lower-income EV owners, we could implement something like a gas card. When prices were really high a few years back over the summer in California, the governor implemented these gas cards where you were getting a credit card that had money that you could go and use at the pump. We could do something similar to that just for low-income EV owners so that they can pay those extra prices that they're facing at the charger. It wouldn't heavily distort the market because the cards wouldn't be going out to everybody.

Cynthia Williams: There are also technology solutions. We have the FordPass App, where you can drill down to which charger you want to look at or go to. So that's one of the things that we're trying to help consumers along the way, providing technology to assist them.

Andrew Wishnia: Part of minimum standards is price transparency. So every publicly funded federal EV charger has to display price per kilowatt. Now that doesn't mean much, just to be clear to folks here and now, in the first or second or third year of the EV revolution. But going forward, it will, and there has to be price transparency just as you would experience at a gas station.

We also have to be real about the challenge. Commodities are not ter-

ribly profitable. Even the gas station experience is not terribly profitable. It's a marginal business where people don't necessarily make money on the fuel per se but on the amenities ancillary to the fuel.

That's not all that different than the electrification experience, where folks aren't making a ton of money on the power sales. That's something that we impressed as part of our negotiations to develop the \$7.5 billion for charging infrastructure.

What Beia was talking about, improving the customer experience, is going to be critical to making sure that you get not only people in seats but people at charging stations so that we drive up profitability for those businesses.

Jordan Diamond: Could we talk a little bit about what is next? Whether that's in the direction of micro-mobility or whether we're talking about medium- and heavy-duty vehicles, could you folks comment on what the next frontier is?

Cynthia Williams: There is a lot of promise with the medium- and heavy-duty sector, particularly because these customers are running businesses, so they understand the cost of ownership.

One other thing that we need to do is make sure that we can get them the vehicles that they need, the technology in terms of telematics and services that they need. That's something that our Ford Pro team is working hard at every day. They provide an end-to-end solution for our commercial vehicle customers. From financing the vehicle type to the telematics solutions, and not only for their Ford vehicles but across their fleet—across multiple manufacturers. We pulled these solutions together for the medium- and heavy-duty customers to make sure that they can be successful.

Where we need help and we need to work together on is ensuring that once the commercial vehicle owner orders their vehicle, it will take a certain amount of time to get it fitted

out. And the delivery time needs to align with the depot charging installation. That timeline needs to align with the vehicle ordering process.

There are gaps right now. The permitting and the installation of the stations, that timing needs to come down a significant amount and align with the vehicle ordering process. Because if it's not aligned, then they can't run their business.

Jeffrey Page: Given current battery technology and market availability, electrification is the practical solution for our parcel pickup and delivery vehicles. And our off-road vehicle equipment, like our ground service equipment at airports. With that being said, though, for larger vehicle classes, we are looking at things beyond electrification—such as biofuels. As we try to pursue our carbon neutral operation goals and while looking at these alternatives, we still are engaged in purchasing heavy-duty electric vehicles. FedEx Freight in 2023 and in the first half of 2024 purchased 36 Class 7 heavy-duty vehicles. In addition to that, in the UK we have transitioned from diesel to biofuels. So in pursuit of our carbon neutral operation goals, we're looking at a holistic approach and also recognizing some of the challenges that come with the different type of vehicles.

Cynthia Williams: We think there is a lot of promise in biofuels. Also, we're looking at fuel cell electric vehicles. We won a DOE project for \$25 million where we will have five pilot vehicles that we're bringing to market early next year to showcase with partners how fuel cell vehicles could work as a solution for the future.

Andrew Wishnia: I would add one other aspect of this since we're talking about equity. It's that medium- and heavy-duty vehicles constitute about 10 percent or less of the fleet that's out on the roadways today, yet they contribute about a quarter of emissions. That hurts marginalized communities. It affects folks who live

adjacent to ports, airports, and other transportation facilities. So I think it's incumbent on all of us to look for ways to support not just light-duty electrification but medium- and heavy-duty electrification as well.

There's an independent organization called NACFE. Their only purpose is to provide technical analysis as to a way forward on all fuel types. They've shown how to do that for medium- and heavy-duty fleets. As a result, Pepsi and a lot of other companies have taken up their technical assistance.

Within the federal aperture, there are also specific targeted programs for medium- and heavy-duty fleets. NEVI is a formalized program that goes out to all 50 states, D.C., and Puerto Rico. There's also the Charging and Fueling Infrastructure program. The Department of Transportation is currently reviewing those applications. There's a priority consideration for medium- and heavy-duty vehicles as part of that \$2.5 billion program.

EPA has a Clean Ports Program specifically for vehicles that are entering or within a port facility. There's a Reduction of Truck Emissions at Port program. So, the time is now. We don't have to wait until next year, five years, ten years down the road.

There's absolutely a business proposition for electric medium- and heavy-duty vehicles. The federal government is providing that additional support for gap filling purposes going forward.

Beia Spiller: You brought up micro-mobility. I think that's something that should be a key part of our strategy here because this is the time that we can leverage these massive investments to really reimagine mobility and how we move around.

Our hyper focus on vehicle electrification is not enough to decarbonize the transportation system. We have to get people out of cars and get them walking, biking, into public transit. Another yet impor-

tant reason why heavy-duty vehicles need to be electric.

But in terms of micro-mobility, this can be a pretty low-cost way to improve mobility in a decarbonized manner. I live in New York City, which has a reputation for excellent mass transit. But it can be a nightmare, because the way that the city was built up was in a very racist manner. All of the above-ground trains that used to exist were wiped out in favor of subway systems that took everybody into Manhattan.

And in certain parts of the city, like in Queens, there are no micro mobility options because Citi Bike does not cover that area. So you have these horrible transit deserts where people just don't have a lot of good public transit and they don't have micro-mobility. But extending out that micro-mobility options would be hugely beneficial and so much cheaper than trying to put in an above-ground tram or trying to put in an extra subway station.

Jordan Diamond: To conclude, I will ask each of you to tell us what you think is the most effective incentive that's in play right now.

Cynthia Williams: For me, it's incentives that go directly to the consumer at the time of purchase. That benefits the consumer hugely and also the automakers to get the vehicles out there sooner.

Andrew Wishnia: I absolutely agree with Cynthia. Maybe just to build off of that, we talk a lot about a \$7,500 tax credit for electric vehicles, which is incredibly important and incredibly helpful and an incredible win for this country. But in addition, there's also a \$4,000 tax credit for used vehicles.

Just given the topic, again on equity, that is such a critical lever that we need to do a better job of socializing and making sure that marginalized communities are aware of that tax credit as well. It's less sexy but extraordinarily important so that we can decrease the chasm between the haves and the have-nots.

Beia Spiller: The Clean School Bus Program has been wildly successful. It provides a huge subsidy for school districts to go electric. Unfortunately, electric school bus prices are absurdly expensive compared with their diesel alternative. Part of that is due to the fact that these subsidies are just a little too generous, and so the manufacturers are taking in that incentive for their own benefit. The question is: Can we have successful subsidy programs while at the same time keeping costs down? I think that's the balance that we need to be able to strike.

Jeffrey Page: I'm not going to name a favorite incentive. I'm just going to name an attribute that makes incentives successful. Partnership and collaboration among critical stakeholders is how we move forward. So I would advocate, whatever policy directions that are put forth, that you bring all critical stakeholders together so they can weigh in.

Rob Gramlich: There's one new program in the Bipartisan Infrastructure Law called the Transmission Facilitation Program. If you have a long line across many states, the challenge is very often who pays for it. It's a classic public good problem. So everybody argues and the things usually don't get built.

There is a program with the new Grid Deployment Office at the Department of Energy. It is colloquially known as the anchor tenant program. It takes a quarter to a third of the total cost off the table and then you still have to allocate the cost of the remaining say two-thirds, but the whole problem just got one-third easier than it was before.

The developers love it. You have transmission developers around the country who now have experience with this and it's really working well. So it was only funded at \$2.5 billion as a revolving fund; you have to pay the money back. But if I could significantly expand one program in any future budget bill, that would be the one.