

Penta Policy Insiders

Charging Forward
Electric
Vehicles

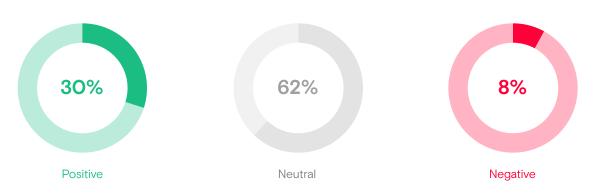
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## Introduction

The market for electric vehicles (EV) has grown significantly over the last decade with some forecasts estimating electric vehicles sales to comprise 40 percent of all auto sales by 2030. Given the increase of consumer demand, we wanted to know what policymakers think about these developments in the transportation sector.

## Conversations on electric vehicles

### Number of content pieces by tone of mention:



The policymakers we spoke to agree that electric vehicles are part of the future, but want to consider a variety of factors and how they will impact the success of the transition. Among the topics of debate between policymakers is to what degree consumer demand should dictate the transition, and if and when the government should encourage consumers to switch to electric vehicles through incentives or regulations. Some policymakers point to the high costs of electric cars and inadequate infrastructure as barriers to a large-scale shift in EV adoption. In addition, many policy leaders feel that technology needs to be further developed in order to support an increase in electric vehicle use. However, policy leaders also recognize the potential environmental benefits of the conversion to electric vehicles, and believe the change can be positive for society if their concerns and prospective challenges are accounted for.



I am in favor of all the technology. I just think we need to live in reality of what [electric vehicles] will offer, how to coordinate with one another, and the affordability and feasibility for a majority of the population who can't afford and use the technology.

Sr. Legislative Assistant, U.S. House of Representatives, R

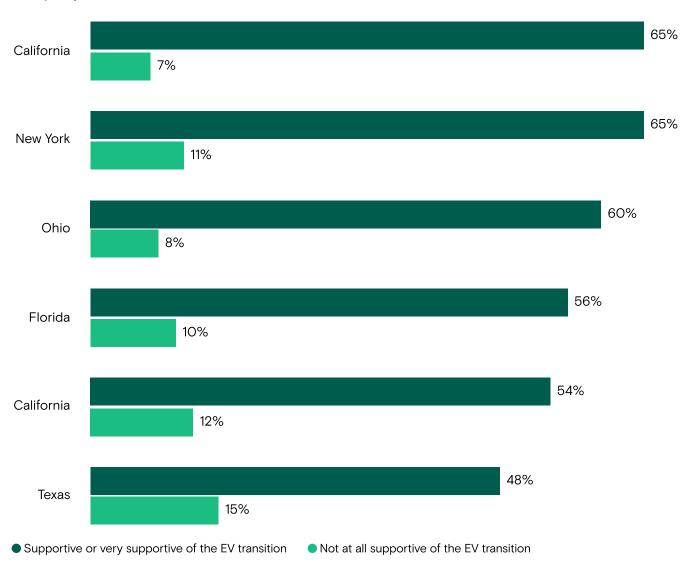


I think [the electric vehicle transition] is crucial. It's undeniably challenging, but it's incredibly important. The biggest hurdles are making sure there's the infrastructure and network across the country associated with electric vehicles and electric vehicle-charging."

Sr. Legislative Assistant, U.S. House of Representatives, D

# State spotlight: Policymaker support

How policymakers feel about the transition to electric vehicles:



# State spotlight: Top issues







## Current concerns: Infrastructure

The policymakers we spoke to point out current limitations with technology and infrastructure, such as uncertain battery life, lack of widespread charging stations, and weaknesses with electric grids, as obstacles to the electric vehicle transition. One major concern for policymakers is the driveable range of such vehicles. Given most charging stations are concentrated in major cities, electric vehicles may not be a feasible option for individuals who need to drive longer distances or in more remote areas of the country. Though the number of electric vehicle charging stations has tripled since 2015, a recent study found that the number will have to increase by about eightfold to accommodate the current market projections for electric vehicles in 2030. Policymakers believe that further developing the charging network, and the electric grid needed to support it, is critical for the future of electric vehicles.

### Charging stations



It'll be good as long as we get the charging ports, the charging stations, and everything in line. I think that that's probably the biggest focus from what I have seen and have come across... infrastructure is the number one concern.

Republican Counsel, U.S. House of Representatives, R



There's not enough charging stations for electricity. There's not enough charging stations for hydrogen... the challenge is it's expensive because of the need to sort of retrofit and get even bigger services out of electric providers. So it's happening, but whether it's going to happen fast enough to actually make a difference, I guess remains to be seen.

Mayor, California State Municipality, D

#### Batteries and vehicle range



[Vehicle range] is something that people are a little nervous about when it comes to long-distance trips. People from the midwest are known to drive most places especially when it's 10 hours or less. And so I think that there's a little bit of hesitancy to move towards electric vehicles at this time.

Legislative Assistant, U.S. House of Representatives, D



I think there are issues that we haven't fully thought through, but it does seem to be becoming more and more viable. More and more vehicles are available on the market for electric vehicles, But I think policy—makers need to consider other alternatives. Or how do we address some of the unintended consequences with how we store that energy with the batteries and so forth.

Chief of Staff, California House of Representatives, D



I think it's clearly efficient for urban dwellers, but it gets a lot more problematic for certain states. Purely because of the distances that people have to drive. And the variation in temperature.

Chief of Staff, U.S. House of Representatives, R

### Electric grid



I think one of the big things with the proliferation of electric vehicles is making sure that the grid is able to actually sustain that increase in load demand... if the goal is in 30 or 40 years for all cars to be electric and they're all hooked up to the electric grid every night to recharge, that is an absolutely massive increase in electrical demand... there is still a lot of traditional work that needs to be done to the underlying electric system, such that it is able to sustain these larger loads we'll likely see in the future.

Former Senior Policy Advisor, Executive, R



If every vehicle was electrical and we're already having an electrical power grid issue, then will the grid even be able to support that continuous transition of vehicles?

Councilmember, California State Municipality, D



The electric grid in Michigan is not up to snuff, and we have a hard enough time keeping our homes with electricity, let alone add a whole another segment to it. And I think that's going to be a big challenge because a lot of the questions on the EV still aren't being dealt with in a serious manner.

City manager, Michigan State Municipality, I



# Current concerns: Affordability

Another top concern for policymakers is the affordability of electric vehicles. Policymakers do not believe that they are cost-effective for many consumers. In fact, in 2022, the average price of an electric vehicle was about \$18,000 more than a traditional non-electric car.<sup>5</sup>

However, the United States Department of Energy found in 2021 that over the life of the vehicle, electric options can be cheaper. According to their findings, traditional gas cars cost 4 cents more per mile than electric vehicles. <sup>6</sup> Policymakers want to see a decrease in the initial market price of electric vehicles, and hope this would make them a more practical option for consumers who want to save money on gas and maintenance costs in the long run.



You have to be of a certain means to afford some of these cars. And that, in and of itself is a way that it's a bit of an irony, right? It's that "Oh, well, I want to protect the earth, but I have to be able to afford to do that.

Former Chief of Staff, Executive, R



We're also looking into how to make them accessible for lower-income individuals, and people who just can't afford the more fuel-efficient, and the zero-emission vehicles that are out there.

Deputy Secretary, California Executive Branch, D



I don't think it's feasible for everybody - the average worker here makes \$50,000 a year, and cannot run out and buy a \$60,000 EV... it's not going to happen... there is a long way to go in relation to the technology itself... when it meets that equilibrium, when it's across the board, then the price, of course, will naturally come down, and it could be more feasible for more people to own them.

District Director, U.S. House of Representatives, R

## Government involvement

Policymakers have mixed feelings about the pace of the move towards electric vehicles and worry that certain government regulations, such as tax incentives and subsidies, are putting pressure on expediting the timeline of the transition.



One of the things that's really exciting to see is the infrastructure bill being passed in Congress and building of more charging stations across the country. And then public and private partnerships that are trying to build more ports along highways for people to be able to use.

Legislative Assistant, U.S. House of Representatives, D



Consumers will dictate what they want, not the policymakers. There aren't a lot of consumers saying, "I'm going to rush out to buy EV." That may change in the future, but it's just not there now. But automakers are being forced to make cars that people aren't buying.

Former Deputy Assistant Secretary, Executive, R



The only reason a lot of these things are out there right now is because they're getting government subsidies to either buy it from the state level. If you had bought a electric vehicle previously, you were getting a state incentivization to do it.

Former Chief of Staff, Executive, R



Despite the fact that we have a huge government intervention with incentive money, regulations, and these executive orders that say, "All vehicles are going to be electric in 2035," it's not very practical. They're making commitments for other future generations. And there's no accountability to those people making those decisions now.

Senior Policy Advisor, California Executive Branch, D

## Conclusion

Electric car sales are increasing, but policymakers have varying opinions on the pace and viability of mass adoption. Policy leaders are concerned that technology and infrastructure has not evolved enough to support what many anticipate will be rapid growth in the electric vehicle industry over the next decade. While noting that the transition is highly dependent on technological and infrastructure developments, many policymakers also highlight the positive potential such a shift would have for both the economy and the environment.



We believe it's the way to the future, both for new jobs, production of the vehicle, since we have the capability and capacity to build cars and to build the parts that go in them... The sky is the limit. It'll bring a cleaner climate and more jobs to our area.

Chief of Staff, U.S. House of Representatives, D



We do have to give technology enough time to catch up with needs and just get up to speed of where it would be feasible for everybody to have one.

District Director, U.S. House of Representatives, R

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### Citations

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