

TESTIMONY OF:

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“Driving Innovation in the Transportation Sector Forward”
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Chairman Manchin, Ranking Member Barrasso and members of the committee, thank you for inviting me here today.

Toyota has been investing in America and employing Americans for more than 60 years. Today, we have 10 manufacturing facilities in the US, nearly 1,500 Toyota and Lexus dealerships, and 180,000 people working across the country.

In West Virginia, approximately 2,000 team members build some of Toyota’s most efficient engines, transmissions and hybrid drivetrains. This year we will commemorate the plant’s 25th anniversary. And as part of our on-going commitment to reduce CO2 emissions, Toyota has signed a 15-year agreement to purchase West Virginia wind power - roughly equivalent to all the electricity we use in the state.

Every auto company is committed to developing electric vehicle technology. Many have made aspirational statements about when they will phase out the internal combustion engine. But we also have to acknowledge the current reality. Last year, less than 2% of the vehicles sold in America were battery electric. If we are to make dramatic progress in electrification, it will require overcoming tremendous challenges, including refueling infrastructure, battery availability, consumer acceptance and affordability, and the reliability of the electric grid.

Too often, electrification has been defined as exclusively battery electric vehicles – or BEVs for short. We agree that BEVs are an important part of the answer – but they’re not the only answer. Hybrid vehicles are also electrified, as are plug-in hybrids and hydrogen fuel cell electric vehicles. All these alternatives will help in the pursuit of lower carbon.

The narrow focus on BEVs as the only solution stems from the view that they must be the most carbon friendly since they burn no gasoline. It’s true that if you compare an average hybrid, plug-in hybrid, BEV and fuel cell electric, you’ll generally find that BEVs and fuel cells are the lowest emitting, followed by plug-in hybrids and hybrids. While true in many cases, it’s not true across the board.

In fact, recent data shows that plug-in hybrids can achieve nearly the same or better GHG reductions than BEVs depending on your daily driving patterns, the carbon in the electric grid, the carbon resulting from battery production, and other factors.

Don't misunderstand - we're not saying plug-in hybrids are preferred over BEVs – we're saying maximum GHG reductions can be achieved with consumers having more access to technology – not less.

Toyota has been in the electrified vehicle business for a long time. We introduced a fully electric RAV4 in the US in 1997 and a second-generation version in 2012. And starting with the Prius launch in 1997, we've sold 17 million hybrids globally and over 4 million in the US – more than the rest of the industry combined. We currently sell 16 hybrid models including two plug-in hybrid models in the US. And we recently announced a third plug-in hybrid and two new BEVs coming next year.

We're also a leader in fuel cell electric vehicles, which offer the long driving range and quick refueling consumers have come to expect from their gasoline vehicles. We've sold over 6,500 Mirai fuel cell electric vehicles in the US and over 10,000 globally. And we're commercializing fuel cell powertrains in transit buses, trucks, industrial equipment and stationary power generation.

Our 25-years of electrified vehicle history has taught us two important lessons.

First, consumer needs vary greatly. What works for one doesn't work for all. Some live in urban areas with short commutes, some need room for families, some live in areas where weather or terrain mandate 4WD, some need towing capability, and some have garages where they can charge their vehicles while many others do not.

This diversity in requirements is exactly why OEMs offer a wide variety of vehicle types, styles and powertrains. It's also precisely why multiple electrification pathways are needed to reduce carbon emissions. If we tie our horse to a single approach, many consumers will simply opt for an internal combustion vehicle.

Second, transitioning to new technology takes time. We're proud of having sold more than 4 million hybrids in the US, but it took us 20 years to get there. Achieving significant BEV penetration may pose an even greater challenge given the cost of batteries, the need for national infrastructure, long recharging times, limited driving range and the need for consumer behavioral change.

Without doubt, technology-inclusive policies will provide more Americans with more electrified options and will likely achieve greater GHG benefits as a result.

The policy with the greatest immediate impact on sales is consumer purchase incentives. These incentives should be structured to promote all electrified vehicles, allow consumer choice, and provide greater opportunity for GHG reductions than a single pathway can provide. And these incentives can't sunset too quickly or they won't provide investment certainty manufacturers need.

Similarly, robust incentives for infrastructure development and fuel production are needed. The former will speed deployment of electric chargers and hydrogen stations and increase consumer willingness to purchase. The latter will reduce fuel costs and accelerate the use of low-carbon feedstocks.

Senators, our collective destination is a carbon free transportation system and I believe we can get there. But our experience tells us it won't happen overnight, and it won't be a single technology. We believe that this country, and the world, is moving inexorably to electrified transportation. But we need to overcome many obstacles along the way and remain supportive of all the many electric technologies on the road to that future.

Thank you for your time today and I will be happy to answer any questions you may have.