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WRITTEN TESTIMONY REGARDING ELECTRIC VEHICLE FEES
being heard by the Pennsylvania House Transportation Committee
on Monday, May 1, 2023

Chairman Neilson, Chairman Benninghoff, and distinguished members of the Transportation Committee:

Thank you for the opportunity to provide written testimony on the subject of electric vehicle fees. Tesla appreciates being part of these discussions and I look forward to meeting with members of the committee this session to further discuss this and other issues related to transportation electrification.

Tesla's mission is to accelerate the world's transition to sustainable energy. Tesla believes the world will not be able to solve the climate change crisis without directly reducing air pollutant emissions—including carbon dioxide (CO2) and other greenhouse gases (GHGs)—from the transportation and power sectors.

To accomplish its mission, Tesla designs, develops, manufactures, and sells high-performance fully electric vehicles and energy generation and storage systems, installs, and maintains such systems, and sells solar electricity. Tesla currently produces and sells four fully electric, zero emissions light duty vehicles (ZEVs): the Model S sedan, the Model X sport utility vehicle (SUV), the Model 3 sedan, and the Model Y mid-sized SUV. In addition, Tesla has announced plans to produce the Cybertruck (pickup truck) this year and began deliveries of the Semi (Class 8 truck) in December 2022. Tesla commends the Pennsylvania legislature for passing the weight exemption legislation for electric trucks in October 2022. EPA recognized in its *2021 Automotive Trends Report* that Tesla had by far the lowest carbon dioxide emissions (0 g/mi) and highest fuel economy (119 miles per gallon equivalent) of all large vehicle manufacturers in MY 2020.[1]

Tesla is also deeply committed to ensuring the U.S. remains a leader in advanced manufacturing.[2] All Tesla vehicles sold in the United States are manufactured in the U.S. In 2022, the Tesla Model Y ranked as the most American-made car, based on overall contributions to the U.S. economy, and the Model 3 ranked just below as the second most American made car on the market.[3] The National Highway Safety Administration (NHTSA) similarly confirms that 100% of the vehicle, engine, and transmission assembly in each Tesla vehicle sold in the U.S. occurs in the U.S.[4] In addition, Tesla's U.S. supply chain continues to expand and spans across more than 40 states.[5]

Tesla has continued a remarkable period of growth and scale based precisely on its advanced technology vehicle product offerings. In the U.S., Tesla conducts vehicle manufacturing and assembly operations at its factory in Fremont, CA, and produces electric drive trains and manufactures advanced battery packs, as well as Tesla's energy storage products, at its Gigafactory Nevada in Sparks, NV. Tesla also builds and services highly

[1] EPA, The 2021 EPA Automotive Trends Report, Greenhouse Gas Emissions, Fuel Economy, and Technology Since 1975 at 13 (Nov. 2021) (preliminary MY 2021 at 125.7 miles per gallon).
[2] See generally, Tesla, Impact Report 2021 (May 6, 2022).
[3] Cars.com, Cars.com's American-Made Index Adds Tesla to Exclusive List of Multiyear Chart-Toppers, Model Y Nabs No. 1 (June 21, 2022); See also, Cars.com, Tesla Model 3 Snags No. 1 Spot on Cars.com's 2021 American-Made Index®; First All-Electric Vehicle to Top the List in Its 16-Year History (June 23, 2021);, American University, Kogod School of Business, 2021 Made in America Index (Oct. 15, 2021) (Finding in 2021, each of Tesla's vehicles - the Model S, 3, X and Y - ranked in the top 10 and Tesla was the only manufacturers to have representation from its entire portfolio in the top 10.).
[4] NHTSA, Technical Support Document: Proposed Rulemaking for Model Years 2024-2026 Light Duty Vehicle Corporate Average Fuel Economy Standards (Aug. 2021) at 96, Table 2-6.
[5] See e.g., AutoNews, Suppliers Starting to Set Stage for Tesla in Texas (Sept. 5, 2021).

automated, high-volume manufacturing machinery at its facility in Brooklyn Park, MN, and operates a tool and die facility in Grand Rapids, MI.[6] Tesla produces solar energy and vehicle charging products, including manufacturing of its DC-fast charging equipment for heavy duty vehicles, at its Gigafactory New York in Buffalo, NY.

In the spring of 2022, Tesla began production of Model Y vehicles at its newest vehicle and advanced battery manufacturing facility in Austin, TX. The project will invest over $10B in factory development and create 20,000 new jobs.[7] Upon full completion, the Gigafactory Texas will produce Tesla's new Cybertruck and Model Y crossover, and manufacture Tesla's new, advanced 4680 lithium-ion battery cell and battery packs.[8] Globally, by 2030, Tesla aims to sell 20 million electric vehicles per year.[9]

Electric Vehicle Fees

In terms of today's discussion, it is important to remember that like many policies and taxes, the gas tax has multiple policy goals. The gas tax is used to raise funding to support transportation infrastructure, but just as important, the gas tax incentivizes citizens to purchase more efficient motor vehicles, and manufacturers to make more efficient vehicles to meet that customer demand. This helps to reduce harmful air pollution and improve public health. Additionally, the main driver of transportation infrastructure funding deficits is not the relatively recent increase in electric vehicle deployment, in fact electric vehicles make up less than 1% of the vehicles on the road in Pennsylvania; it is the fact that in most states – and at the federal level - the gas tax has not been indexed to inflation and all vehicles have gotten more efficient across the industry driven by federal CAFE standards and state ZEV requirements. A 2022 Ford F-150, for example, gets more than twice the mpg than a F-150 sold in 1992. While that truck still gets a relatively modest 25 miles per gallon, given the volume of F-150s on the road, this efficiency improvement has in fact reduced funding for Pennsylvania's roads far more than all of the Tesla cars in Pennsylvania today.

Tesla has consistently said that it is not opposed to fees on EVs and for EV drivers to pay their fair share to compensate for lost gas tax revenue. Tesla is opposed to excessive fees that are not fair for EV drivers and will disincentivize the purchase of an electric vehicle by making it more expensive to own. Further, any EV fee should only cover lost state gas taxes. The distribution of the federal gas tax through the Highway Trust Fund (HTF) is a complicated process but it is clear to transportation funding experts that the loss of HTF funding from electric vehicles in any one state is de minimis at current deployment levels, even in California where nearly 18% of new cars are EVs. Tesla also suggests that if the goal of this committee is to address transportation funding deficits in Pennsylvania, even the most aggressive EV fees in the country will make barely a dent on the fundamental issues at play with the transportation deficit. The Transportation Revenue Options Commission last year studied a $275 EV fee (would be one of the highest in the nation) and found that it would lead to less than $6 million of added revenue for transportation funding. When there is a multi-billion-dollar shortfall, this is simply not a solution to the problem at hand.

It should be noted, that in Pennsylvania, EV drivers already pay significant taxes on their fuel in the form of both the sales tax on electricity and the alternative fuel tax (AFT). The current AFT in Pennsylvania is $0.183/kWh and the sales tax on electricity at 6% comes out to another $0.18/kWh (at a rate to driver of $0.30/kWh). In 2022,

[6] See Tesla, Manufacturing: Build a Sustainable Future.
[7] See, e.g., KXAN/Austin Business Journal, Musk teases huge job number at Austin-area Tesla factory (Dec. 20, 2021); Reuters, Musk says Tesla's Texas factory is $10 bln investment over time (Dec. 15, 2021).
[8] See Tesla, Tesla Battery Day Presentation (Sept. 22, 2020).
[9] Tesla, Impact Report 2020 (Aug. 10, 2021) at 2.

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Tesla remitted more than half a million dollars in AFT alone to the Commonwealth. The majority of EV drivers charge their cars at home, making sales tax impacts harder to estimate on an individual basis, however, if an EV driver in Pennsylvania with 12,000 annual VMT did not have home charging and had to fully rely on public DC fast charging, as is the case for many EV drivers living in apartments or other multi-unit dwellings without designated parking, they would pay around $145/year in sales tax and the AFT for charging their vehicle. One idea that this Committee should consider would be to transfer the sales tax revenue from EV charging into Transportation Funding. This would ensure that the taxes that already exist on the fuels used in EVs are allocated appropriately to the roads.

If Pennsylvania chooses to move forward with an EV fee, as stated above, we believe it should be fair and should not make it less compelling for Pennsylvanians to purchase EVs when the Commonwealth has consistently tried to support the adoption of electric vehicles. As mentioned, it is important to note that gas taxes also serve to encourage the purchase of more fuel-efficient vehicles which is a public good in terms of health benefits. To determine a fair EV fee, we suggest looking at what a typical driver of the most fuel-efficient vehicles pay on average in state gas taxes. Utilizing the mpg of a non-plugin hybrid vehicle would serve as a fair proxy for what an EV driver would have purchased if they did not get an EV, while still rewarding them for purchasing the most fuel-efficient vehicle on the market. A typical Toyota Prius gets 56 mpg which equates to a fair EV fee for an EV driver in Pennsylvania driving 12,000 miles per year of around $131. Combined with the $145 in additional taxes paid by an EV driver for electricity in the case of those who do not have access to home charging, this fee could mean that certain EV drivers would be contributing around $275 annually.

However, if Pennsylvania is going to put an EV fee in place, it should be done as part of a holistic effort to systematically address transportation funding for the Commonwealth. Several other states have done so in recent years, including Colorado and North Carolina, by putting in place packages that raised revenue through a number of different streams including fees on transportation network company rides, fees on package deliveries, transfers of funds from the general fund, etc. as well as increases in EV fees. In short, these states worked to address the problem – a transportation funding shortfall – in a systematic way that addresses long term funding needs and saw EV fees as part of the larger solution.

Thank you for the opportunity to discuss this important issue today and Tesla looks forward to continuing to engage with this Committee on finding the right solution for Pennsylvania.

Sincerely,

Zachary S. Kahn
Public Policy & Business Development