



Secular Maryland

secularmaryland@tutanota.com

March 30, 2022

HB 94 - SUPPORT

State Vehicle Fleet - Conversion to Zero-Emission Passenger Cars and Other Light-Duty Vehicles

Dear Chair Guzzone, Vice-Chair Rosapepe, and Members of the Budget and Taxation Committee,

Secular Maryland appeals to our lawmakers to enact new laws to tackle climate change now. Being rational requires following the empirical evidence wherever it takes us. Climate warming denialism is an attack against rationality that needs to be unequivocally opposed. Transportation currently accounts for about 40% of Maryland's greenhouse gas emissions. Air pollution is also a health problem. People who live and work in areas with high levels of air pollution are significantly more likely to die from COVID-19 and suffer from various other ailments such as asthma and dementia. This bill responsibly confronts these problems by setting a zero emissions policy for state government vehicles.

Although the production for an EV generates higher emissions than the manufacturing of a comparable non electric vehicle, those initial higher environmental costs are more than offset by EVs' superior energy efficiency over time. A recent MIT study concluded electric vehicles in the U.S., on average, emit about 200 grams of CO₂ per mile. After cleaning up the grid it is estimated we can reduce emissions from electric vehicles by 75% to about 50 grams of CO₂ per mile in 2050. A complete lifecycle study concluded that electric vehicles are less emissions intensive in 53 out of 59 world regions [Knobloch, F., Hanssen, S., Lam, A. et al. Net emission reductions from electric cars and heat pumps in 59 world regions over time. *Nat Sustain* 3, 437–447 (2020). <https://doi.org/10.1038/s41893-020-0488-7>]. A recent Yale University study found that "electricity continues to decarbonize" as anticipated then "the simultaneous reduction of both direct and indirect emissions indicates a win-win situation for climate change

mitigation, meaning that climate policy with very high shares of BEVs represents a no-regrets strategy in terms of emissions” [Wolfram, P., Weber, S., Gillingham, K. et al. Pricing indirect emissions accelerates low-carbon transition of US light vehicle sector. Nat Commun 12, 7121 (2021). <https://doi.org/10.1038/s41467-021-27247-y>]. Electricity can be generated by renewable resources such as solar panels and wind turbines (the vehicles can themselves be outfitted with solar panels).

An electric vehicle has no need for oil changes, air filters, transmission service, or spark plugs. Battery technology keeps improving. The reliability problems with many, but not all, of the first generation of EV will likely diminish as manufacturers compete to satisfy a consumer preference for cars that fail infrequently and are inexpensive and quick to fix when they do fail.

Respectfully,
Mathew Goldstein
3838 Early Glow Ln
Bowie, MD