



Secular Maryland

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HB 889 - SUPPORT

HB0889 Retail Service Stations - Electric Vehicle Charging Stations and Property Tax Credit for Service Station Conversions

Dear Chair Wilson, Vice-Chair Crosby, and members of the Economic Matters 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. Air pollution is also a health problem. Transportation currently accounts for about 40% of Maryland's greenhouse gas emissions. This bill responsibly confronts this serious problem by requiring new retail service stations to install at least as many electric charging stations as gasoline dispensers and by authorizing municipal government to grant a credit against the municipal property tax when existing retail service stations are converted to other uses.

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). Battery technology has been improving.

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. A recent study [Erika Garcia, Jill Johnston, Rob McConnell, Lawrence Palinkas, Sandrah P. Eckel. California's early transition to electric vehicles: Observed health and air quality co-benefits. Science of The Total Environment, 2023; 161761 DOI: 10.1016/j.scitotenv.2023.161761] of California's transition to zero emissions vehicles (ZEVs) compared data on total ZEV registration, air pollution levels and asthma-related emergency room visits across the state between 2013 to 2019. As ZEV adoption increased within a given zip code, local air pollution levels and emergency room visits both dropped.

Respectfully,
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