

Please accept these comments relative to the 2022-R-A-0011:Low Emission Vehicle Program. The proposed program seems completely unrealistic for many reasons. The small percentage of electric and hybrid vehicles is a testament to how quickly the adoption of electric cars realistically progresses. Delaware does not have the infrastructure relative to charging stations and capacity in the electric grid to accommodate even a modest (few percentage points) over current market penetration.

The increased cost burden to Delaware residents is very predictable. Aside from being more costly to purchase, the depreciation of cars has to be accelerated, as the batteries have a definitive life, with the replacement cost exceeding the value of the car. Owners of electric cars face higher insurance premiums for both car and home insurance. Electric costs to heat and power our homes has increased by approximately 40-50% this year alone. The cost of installing high speed charging ports in one's home is not inexpensive. Can you imagine having to charge multiple cars in the same household?

Side note one of the risk factors of hybrid and electric cars as a result of the fire hazards associated with battery fires, even the Cape May Lewes Ferry is now locating electric and hybrid cars so as to mitigate fatal fires that cannot be extinguished with current technology from sinking a ferry.

That brings to mind an interesting problem in much of the lower parts of the state, which is low lying and flat. What happens in the case of flooding, and spontaneous combustion of the car batteries occurs? How can the state be able to accommodate charging all those vehicles in the event of a mandatory evacuation from a storm? Did anyone pay attention to the reports of hundreds of spontaneous electric car fires when flooded?

How are Delaware residents who live in apartments going to charge their cars? Has the State looked at the news reports of long lines at charging stations in the evenings and overnight for city residents in California?

Take for example the occasion where a family member, such as my wife is returning home and finds her car is in need of charge, so she has to stop at a charging station alone at night. I would be very worried for her safety while waiting 45 minutes for a charge, would not anyone be concerned for a family member in that circumstance, especially given the increase in crime rates?

Can you demonstrate how to deal with the environmental issues associated with recycling batteries? Are you aware that only a very few numbers of the plug-in hybrid cars ever have their batteries replaced/recycled. They just become non-functional, and not very efficient hybrids any longer. Here is a real-world study on battery life for a Nissan Leaf electric car. [A Study on Real-Life Nissan Leaf Battery Deterioration | NimbleFins](#) This study documents a 35% reduction in range over 5 years, and it drops precipitously after.

Technically, what about covering the cost of building and maintaining highways? Is that not covered by taxes associated with fuel sales? Will there have to be a new taxing system to replace State revenues for road maintenance.

How about an interesting proposal? Delaware as a state should first try an experiment whereby, they convert all state vehicles to electric first. Then based upon the direct experience of the State with a full electric fleet, they would be better informed to make judgments that adversely affect State residents, many of who have retired to the Delaware for reasons of lowered cost of living, which mandating all electric vehicles in the State would likely add an undue financial and practical burden to all residents,

especially seniors citizens and those on fixed incomes, without ever having any valid reference point to assess. It would be very interesting to evaluate the State's own experience with an all-electric fleet for several years from of cost, practicality, environmental impact, and even safety.

Try developing infrastructure first, not only for charging, but for safety. How can fire departments extinguish an electric car fire? How do first responders address car accidents with electric cars, including safety issues from the batteries?

Battery technology has been lagging. There are not even enough raw materials to accommodate the more a single digit percentage increase in electric vehicles worldwide. The increased demand for such raw materials will not help the cost decrease, but only increase even more. As a result, car prices are going to increase, not decrease. We did not even talk about that fact that many studies being ignored demonstrate the energy or environmental savings from an electric car may actually exceed the life of the car in order to brake even.

Anyone who wishes to have an electric car and the inventiveness and costs that are associated with such are more then welcome. If the idea is so great than the market will undoubtedly increase but should happen on its own. I laugh every time one of my friends with an electric car tells me they are renting a gas to go on a long trip, as it is impractical to make that trip with their electric car, even with charging stations along the route.

We did not choose to retire in Delaware only to be told what kind of car to drive. Even electric car energy has to be generated from something. There is not enough wind and solar energy available to accommodate the infrastructure demand that would occur from what is being proposed.

Beside there are likely other competing technologies that might prove more practice, such as hydrogen-based fuel cells for vehicles. Let the market drive what consumers would like and what is best for them. Last year I purchased an electric trimmer for my lawn. Works great. How about we start with something more practical such as small engines for lawn equipment? If I had a lawn care business though, how would my trimmer work for an entire day?

For the moment, the current plan is without valid real-world research to support the proposed regulation. It is for this and other reasons described in this letter that I and my family are vehemently opposed to 2022-R-A-0011:Low Emission Vehicle Program. This proposal seems to be a fanciful wish, not based upon evidence and facts which would allow for practical implementation and will cause financial and even safety concerns for the entire population of the state of Delaware, nor does it even address the likely adverse environmental concerns such a regulation is being proposed to address.