From:	Garvin, Shawn M. (DNREC)
To:	Marconi, Angela D. (DNREC)
Subject:	Fw: Major Concerns with Mandatory Electric Vehicle Mandates
Date:	Thursday, February 9, 2023 10:23:58 AM
Attachments:	State of Delaware_concerns with mandatory electric vehicle mandates.pdf

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From: terri dunham <sweety_dunham@yahoo.com>
Sent: Thursday, February 9, 2023 6:13 AM
To: Office of Governor John Carney <GOVCOMM@delaware.gov>; Garvin, Shawn M. (DNREC) <Shawn.Garvin@delaware.gov>; Buckson, Eric (LegHall) <eric.buckson@delaware.gov>; Yearick, Lyndon D (LegHall) <Lyndon.Yearick@delaware.gov>
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Subject: Major Concerns with Mandatory Electric Vehicle Mandates

This email is directed to Governor John Carney, DNREC Secretary Shawn Garvin, Senator Buckson and Representative Yearick.

The remainder of the Legislature has been copied, along with a fair media contact, as the attachment has important information that all aught to be familiar with.

To whom it may concern,

The attached letter, written by another versed Delaware citizen, breaks down major issues in regard to the proposed Mandatory Electric Vehicle Mandates. Below is a bulleted breakdown, for those who would like an overview. The overreach needs to STOP NOW!

Rights Violations

1. The State of Delaware has no right or Constitutional authority to dictate which kind of personal transportation we decide to purchase.
2. It is discriminatory to force someone to purchase something that they do not want.
3. To force someone into a purchase is to deny them their Constitutional right to the pursuit of Live, Liberty, and the pursuit of Happiness.
4. The decision as to what someone may want to drive needs to be left to the individual.
5. The free market as expressed by our economic system based on capitalism should be the only route that government should permit.
6. It is Communism to tell us what kind of vehicles we must drive.
7. Anyone in the legislative, executive, or other branch of government who voids our Constitutional rights has voided their oath of office and should be removed from office.
8. The electric car mandates are an attempt to control the population of the state. To control our freedom to travel, move about as we wish. Basically, deny our God given rights.

Track Record of Unqualified Officials

9. The State of Delaware has exhibited many mistakes when it comes to energy and transportation decisions such as Bloom Energy (fuel cells) and Fiskar cars (hybrid plug in electric)
    a. For 6 years the State of Delaware was apparently unaware that Bloom energy was producing hazardous waste and improperly shipping it to unlicensed facilities. Costing the Delaware taxpayers

hundreds of millions of dollars that a prudent government would have not wasted.

10. The State is not recognizing that while upstate is urban, downstate is rural, with lots of suburban in between, and applying a one size fits all program will not be successful and will harm the taxpayers.
11. The State has apparently not looked at all the variables involved.
12. The Delaware officials have a demonstrated lack of understanding of business principles when it comes to energy and transportation.
13. The lack of understanding has cost the taxpayers millions of dollars and put the environment at risk.
14. It is concerning that the Director of the Clean Cities programs for the State of Delaware "holds a Bachelor of Science degree in Natural Resources, with a wildlife management concentration rather than a higher level transportation/energy/business degree. We do not need another costly debacle like Bloom or Fiskar.

<u>Actual Science on Green Energy/Carbon Footprint</u>

15. Electric vehicles are not pollution free.
16. The energy to recharge the electric vehicle must be generated by fossil fuel, wind, solar, hydro, or nuclear. All of these fuel sources have issues.

a. Electric vehicles have been using lithium batteries to achieve better range and performance. Lithium is a toxic material. It poisons the environment. It catches fire and is very difficult to extinguish. It can go thermal if punctured in an accident, mishandled, or an internal defect.

b. Putting out lithium battery fires uses considerable amounts of water, which is then contaminated with lithium and other heavy metals. This polluted runoff is then subject to polluting our groundwater and streams.

c. Lithium batteries require the mining of the ore. This work if often done in very poor conditions which contaminates the environment, local communities, and inhabitants.

d. Lithium batteries require cobalt which is mostly mined in very poor conditions in the Democratic Republic of Congo. In the smaller operations it is estimated that 40.000 children constitute the workforce.

e. Electric cars require rare earth elements. These elements are in the drive train or the controls and electronics. 90% of the rare earths are from China or Chinese controlled mining operations. ‘

f. Per a US 4 star general on Jan 28, 2023, we expect to be at war with China by 2025. With the China spy balloon issue this past week, and other things going on I believe we already are at war with them.

g. How will the US get the raw materials to build electric vehicles if we are at war with the supplier?

h. The cost of rare earths has drastically increased in the past ten years and is expected to continue to rise.

i. Nobody really has a good plan in place for dealing with used lithium battery packs. You cannot send these cars to the junkyard to be crushed. To do so will release multiple heavy metals and lithium into the environment. There is a real and tangible cost to recycle them.

j. Electric vehicles do catch fire. Puncturing a battery pack from a road hazard or accident can cause a severe fire that will usually consume the vehicle and everything around it. Massive amounts of smoke and particulate matter are released.

k. It often takes hours to extinguish a lithium battery pack fire. It has been known to take 4-12 hours to get one to go out. Due to the nature of lithium, they have been known to reignite days afterwards too. There is a real and tangible cost to the firemen spending so much time, plus equipment and water to put out one car fire.

l. The batteries are sometimes found to have manufacturing faults. 77,000 GM Bolts were recalled for battery issues like catching fire. One person noted they were told it would be 4 years until their new battery would be available for installation. The parts and service industry has truly not kept up with the needs of the market.

m. The cost to recharge a battery has increased steadily throughout the years and will continue to go up. During peak charging times we can expect to get slammed. In Norway it is now twice as expensive to use an electric car as it is gas. Even the tesla charging stations, if lots of cars are charging there, the rates go UP!

n. How long does it take to recharge. Maybe overnight. In really cold weather, maybe a day, or two, or a week. Even the Tesla fast chargers at commercial establishments take longer than a gas nozzle.

17. Wind energy is a problem when the relatively short 20-year life cycle of the windmill is up and everything must be disposed of.

a. Windmills are a visual pollution problem too. People do not want to see them off their beaches. People do now want to see them in the mountains either.

b. Windmills disturb the local environment. They sometimes catch fire due to mechanical failure. They are also known to leak oil and pollute the surrounding ground.

c. Making windmill blades releases considerable amounts of VOC’s, volatile organic compounds.

d. Windmill blades do not biodegrade in landfills and are stacking up in massive piles around the world.

e. It takes an enormous amount of energy to build, install, and maintain windmills.

18. Solar energy is not green. There are toxic and deadly materials used in their manufacture.
    a. Solar panels are subject to damage from wind/hail/tornadoes/hurricanes/earthquakes.
    b. Damaged solar panels release cadmium into the environment. Cadmium is a poison that can get into our groundwater and cause severe pollution.
    c. Solar panels also contain heavy metals like lead and others. These are also a pollution concern.
19. Fossil fuels have their own pollution issues but at least we have been successful in their use for over a hundred years.
20. Nuclear power has issues starting with the mining of the radioactive isotopes to the long-term storage of the spent fuel. Radioactive contamination of the environment and health issues can be severe.

<u>Economic and Social Impact</u>

21. If we locked in mandates for electric vehicles, we would expect even more price increases, making them unaffordable.
22. The lower wage earners often prefer a used vehicle. The used gasoline vehicle with 100K miles usually has another 100K miles available in it with proper car and some maintenance. An electric vehicle with 100K miles may need a new battery pack. The cost of a new battery pack can be from around 4 grand to 20 grand. The cost of the battery pack could exceed the cost of the car and is unviable for many people.
23. Reducing the availability of good, quality used gas cars would cause an increase in prices across the board. This increase in cost would affect the lower wage earners and in fact likely discriminate against specific segments of the working population.
24. Do you think you will be safe sitting with your car for an hour while it charges? How much has crime risen in Delaware over the past 2 years?
25. Anybody heard of copper thieves? Why wouldn't a thief cut the wires to the chargers and scrap them out for copper. Since its stripped, the scrap yards will not know if it is construction scrap or battery charger. This is happening all over the country now.
26. Road Rage? Charger rage? What if some ignorant person leaves their car plugged into a public charger, blocking your use. Maybe goes out for a beer or 6? Comes back the next day. What if someone parks their electric car in a charging station because there are no other close parking spaces? This is already happening around the country.
27. Removing an internal combustion motor from a car seems like it would lower maintenance, but it doesn't. There are lots of electronics to burn out on an electric vehicle. One single component on a Prius, the inverter, costs 4,000 dollars installed. More than the value of the car if it has some years on it. You

can install a rebuilt motor in a gas car for less money than that.

28. Going totally electric is setting our state up for a total breakdown in the transportation system. One solar flare or EMP and the entire system will immediately stop. One accident or operator error like putting the incorrect control relay in during normal maintenance can shut down the entire grid. Our state will lose its resiliency and ability to deal with emergencies. Having a backup source of energy is a good thing.
29. No-one out of the pool of honest hard-working taxpayers is demanding that we need electric car mandates.
30. It needs to be our choice for the type of car we have to use for our needs. A battery ev might be OK for some people, especially if they have a second car. But they are not towing a boat with it! A hybrid might be a good option for some folks but good old gas still fills the need for many.

Regards,

Terri Reylek