Subject: Delaware Electric Vehicle Mandate
Date: Thursday, May 25, 2023 at 7:46:10 AM Eastern Daylight Time
From: Josef D
To: HearingComments, DNREC (MailBox Resources)

Although I doubt if comments from the public (the folks who elect our representatives) amount to anything, here are a few factual downsides to electric vehicles. Following are factual researched reactions to the downsides of electric vehicles.

1 . Electric vehicles use a lot of lithium. Guess who produces some of the largest amounts of lithium – CHINA. So, we continue to go down this slippery slope of giving China the opportunity to manage the world, very dangerous! Other metals to produce electric vehicles are copper, **cobalt**, aluminum, nickel and sometimes manganese and non metal graphite. Rich deposits of cobalt are in the Congo which are mined by everyone to include woman and children. Cobalt is extremely toxic to humans. Do you think anyone cares?

2. Making electric vehicles actually creates more emissions. The raw materials necessary to make an electric vehicle need to be mined creating greenhouse gases. Then these raw materials have to be refined, again producing more greenhouse gases. Its also true that to make a gas/diesel vehicle greenhouse gases are produced.

3. Making an electric vehicle releases roughly the same about of CO2, but then you have to add in the production of the battery. Estimates suggest that 150kg of CO2 are released for every 1 kilo watt hour of battery capacity. For an electric vehicle to have a decent range (300 miles) between charges, it needs a battery that at least 60 kilo watts in capacity. This means that a further 9 tons of CO2 will be emitted during the making of an electric car, giving a total of 16-19 tons of CO2 emitted. At this point, an electric vehicle seems worse for the environment than a fossil fuel one.

4. Electric vehicles can be expensive to buy. Normal everyday folks can't afford an electric vehicle. How can you possibly mandate a large price tag for most of us to bare while trying to make ends meet..

5. The best electric vehicles (cost is more than $60k) now have a range of well over 300 miles between charges. But many (those that the middle/lower class would try to afford) have a range about 150 miles or less between charges. Longer distance travel will be problematic. And, to recharge these vehicles take normally a half hour at a high voltage charging point. Compare that with the time it takes to fill a tank of gas/diesel fuel and distance traveled between fuel ups, about 500 miles … please don't let us feel more pain! Batteries hold less of a charge when its cold. Using the heater will reduce travel time even more not to mention what will occur in our own state when the weather gets cold.

6. There aren't enough charging points at this time, and – will all this put a further strain on our already over used fragile electric producing infrastructure? Many people would most likely attempt to put charging units at their residence, a cost many can't afford or a location (apartments, townhouses, etc.) to place this luxury.

7. The need to charge the vehicles could potentially cause big problems. What if everyone plugs their vehicles (not to mention the commercial versions) into a charging station when they arrive at work at 9am or when they get home at 5pm? How will the surge in demand be dealt with especially on one of those hot humid days when most have their air conditioners running?

We have the necessary self producing commodities available to us now. If anything, continue with the hybrid vehicles. The best of both worlds, at this time! Are we really prepared to hand the baton off to China?

Respectfully,

Joseph Darabasz
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Sent from Mail for Windows