Concerns on the mandating the use of electricity to power the New York State by David Pulhamus

Thank you for allowing me to voice my concerns and opinions on the proposed electrification mandates. While this is a laudable goal it is not in the best interest of all residents of New York.

Why such mandates? Why can't this be put up as a voter referendum? Is this an instance where the politicians think they know what is best? My view is that truly knowledgeable professionals should be listened to.

Back in the late 1970's and early 1980's new home construction in some communities in the State mandated new home construction be all electric powered. Using electricity to heat the homes proved to be extremely costly to the owners. Many installed wood burning fireplaces or stoves. Burning wood is very polluting. All of the owners I know of these houses subsequently converted to natural gas or propane.

The State lacks the electric grid infrastructure to support such goals. As the current draw increases problems arise. Last year Ohio had a massive blackout caused by high demand on their grid.

Electrical generation using solar and wind works, but not all the time. I favor Nuclear Power. France and Switzerland successfully utilize it. Japan had issues by placing backup generators that would have prevented the partial meltdown below the water level. (They could not have guessed that the subsidence of the coastline would result in their breakwater not being high enough.)

Cars:

- I live in the western part of the State and am retired on a fixed income. The proposed elimination of the sale of internal combustion engine (ICE) vehicles is one I do not support. ICE cars allow me to visit children who live over 1800 miles always. An electric car traveling that distance would take much longer. The use of public charging stations, with their high costs, negates any savings. (Refer to *Car and Driver* test results.)
- Electric cars make sense for urban residents and those who do not travel far. Those of us who live in rural areas would be burdened.
- Electric cars have low resale value, due to the high cost of replacement batteries.
- The materials that are required to produce the vital components come from areas of the world that do not like the United States or are in a conflict region.
- Electric cars cost are very high and tax credits do not help in the purchase. I could not afford one.
- Franchise dealers will continue to exploit and cheat consumers. Do away with the Franchise Laws, as a company would treat me better than a dealer.
- I do not want a battery electric vehicle, but would consider a hybrid one. Why aren't hybrid cars an option in the mandates?

Appliances:

- Natural Gas fired conventional water heaters are very efficient. Heating water with electricity is very inefficient. Tank less water heaters are very costly and require expensive yearly maintenance, while their service life is limited. (Europe uses them due to the very small size of their dwellings.) Tank less heaters are not as efficient as claimed. It takes the exact amount of energy to heat a given volume of water and natural gas does it quicker than electricity.

- I have a Hot Water Heating system, which uses a gas fired boiler. Using electricity to heat my home would be a tremendous financial burden, due to the high cost. I would like a Geo-thermal system, but the cost is prohibitive. (Not all of New York State residents earn over \$200,000.)
- Heat Pumps: while they have been around for decades and the technology is proven, the units are expensive and unreliable. Their efficiency has also been compromised by being unable to use the fluids best suited for the purpose (Freon).
- I am okay with electric stoves, but the most efficient ones are Inductive, which are expensive.

Outdoor equipment:

- Using battery powered lawn trimmers, blowers and other small powered tools makes sense and I use them. Very convenient and quiet.
- I mow over 3 acres around my house and barns. An electric mower would not be a wise choice. The ones currently made are very expensive, have narrow mowing widths and do not have the capacity to mow large areas. Their initial cost is prohibitive to me. My son lives in the City of Rochester and an electric mower would be perfect. (He currently uses a human powered push reel mower.)

Growth of New York:

- With a mandate that does not allow choice will discourage people and companies to locate to New York.
- Mandating that all new structures have to be all electric will result in fewer commercial buildings, as the cost of running them on electricity is cost prohibitive.
- Buildings taller than seven (7) stories will become fewer, due to the mandate that they be powered solely by electricity.
- By limiting growth of New York, the State will become poorer. The tax base will shrink, causing taxes to rise leading to more people moving out of State. This will leave behind those that are affluent enough to afford staying and those who cannot leave and are a financial burden on the State.

Electric School Busses:

- A quick search reveals there are few makers currently able to produce battery electric school busses. The cost of the options available range in price from \$350,000 to \$500,000.
- The Governor states that funds will be made available to school districts to offset the vast cost. Those funds come from my State taxes that are sure to rise to create the monies required.

In summation; I am in favor of the goal of reducing greenhouse gasses, but not at the expense of limiting options and forcing residents (voters) to accept policies that are well intentioned, but ill conceived.

Thank you.

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