

**Roger Caiazza Comments on Amendments to  
6 NYCRR Part 218, Emissions Standards for Motor Vehicles and Motor Vehicle Engines  
March 6, 2023**

**Introduction**

I am submitting these comments to the Department of Environmental Conservation (DEC) because the proposed rulemaking ignores feasibility, affordability, and life-cycle environmental impacts. The primary rationale for this emergency rulemaking is to implement the control strategy recommendations included in the Climate Leadership & Community Protection Act (Climate Act) Scoping Plan. The Climate Action Council deferred a feasibility analysis of reliability, affordability, and environmental impacts to the rule-making phase. The result of this irresponsible avoidance of responsibility is a regulation that could very well not be in the best interests of New York.

There is no reason that this must be an emergency rule-making. New York [greenhouse gas emissions](#) are less than one half percent of global emissions per year but global greenhouse gas emissions have been increasing by more than one half percent per year on average since 1993. Anything New York State does to reduce GHG emissions will be supplanted by emissions elsewhere in less than a year. That does not mean we should not do something but it does mean that we can take the time to do it right. Doing it right means doing the feasibility, affordability, and environmental impact analyses that the State has not done to date.

There is another important aspect of this rule-making that should be considered by DEC. There has been very little public notification of the rule-making so most of the public has no clue this is being considered. I recommend that the comment period be extended and an extensive outreach program to alert more New Yorkers of the rulemaking.

I submitted detailed comments on the Draft Scoping Plan and they were ignored. These comments are not detailed because I do not believe they will be considered. The opinions expressed in these comments do not reflect the position of any of my previous employers or any other company I have been associated with, these comments are mine alone.

**Rule-Making Package**

The materials provided in the proposed amendment are insulting. The rationale for the program boils down to California did it so we can too. There is no consideration of the potential that circumstances in New York differ from California. The two-county [Buffalo–Niagara Falls Metropolitan Statistical Area \(MSA\)](#) had an estimated population of 1.1 million in 2020 and can be crippled by winter storms. [Blizzard conditions](#) with winds excess of 70 mph and heavy lake effect snow in the Buffalo area on Christmas Eve 2022 resulted in devastating impacts across the Buffalo area. Battery electric vehicles (BEV) mandated by this proposed rule do not do well in those conditions. [Thirty-nine people](#) died in this storm and more surely would have died if electric vehicles were the only option available. California has no similar major metropolitan areas subject to this type of extreme weather so relying on their analysis and suggesting that it will work here too is disingenuous at best.

## Life-Cycle Analysis

The Climate Act mandates a full life-cycle analysis of fossil-fuel use. On the other hand, the life-cycle impacts of the so-called “zero -emissions” alternatives are ignored. BEVs may not have emissions when operating but the volume of materials needed to access the rare earth elements necessary for those technologies certainly have environmental impacts when mined and processed. The vehicles mandated by proposed Part 218 [require between](#) 1,000 and 2,000 percent more minerals to deliver the same amount of power and on the order of 400% more metals to deliver the same vehicles. The consequence of this is that many more materials will be required. The Part 218 Regulatory Impact Statement should address where the materials necessary for BEVs come from and whether there will be sufficient quantities available for the New York transition.

As a result of the incomplete consideration of life-cycle impacts, the Climate Act did not address the trade-offs of the so-called “green” technologies. This has a specific impact relative to the proposed amendment that DEC must address. The modern gas automobile is one of the [most highly recycled products in human existence](#). After initial creation, each vehicle has an average life cycle of about 20 years. At that point it is dis-assembled and its parts are sold used in a global used parts chain, which is the most profitable part of the whole life cycle. This means almost all auto components worldwide do not require new mining/manufacturing, etc. – which means they have one of the lowest long-term life-cycle environmental impacts of most things global consumers use. In comparison, a Tesla has a plastic body, and a battery assembled from thousands of 18650-type cells, so it is extremely hard to recycle. The body can’t be recycled. According to recent Tesla documents the batteries are “valorized” by grinding them up and putting their waste in construction cement. In contrast, Toyota/Honda hybrid batteries are easily re-used and recycled.

The biggest point that New York State must address is that current solar panels, wind vanes, massive utility batteries, and other “green” energy infrastructure is almost impossible to recycle in any manner close to Toyota/Honda life cycle components. In addition, the current “green” energy generation technology consumes huge amounts of water in desert regions (see [LATAM “salars”](#)) – and generates millions of tons of [global e-waste](#). Current e-waste comes from “green” industries – which have almost no meaningful, scalable forms of recycling (except ones that require large amounts of energy to melt and re-process tons of glass, plastic, and complex metals). Any post-sale actions of New York are almost irrelevant compared to the total life cycle global environmental insults of current EV, solar, wind, and other “green branded” technologies. What are the waste disposal impacts of the proposed amendment?

## Zero-Emissions

The rationale for this action is that “zero-emissions” vehicles in New York are good for the planet. However, the proposed amendment simply exports the emissions elsewhere. Consider, for example, the effects of the relentless push for EVs evident on an industrial village in Indonesia. The people who work at [the Indonesia Morowali Industrial Park](#) call it a “tainted city” because of the dangers and pollution involved in mining nickel at a rapid pace to meet the demand for EVs. Conditions there have led to epidemics of “respiratory problems, sickness, and eye injuries” among residents, as [Wired reports](#). Over half the patients at one local health center come in with breathing difficulties, while a considerable

number suffer damage to their eyes. How does this proposed amendment comport to the environmental justice cornerstone of the Climate Act?

### **Feasibility – On-Street Charging**

The [regulatory documents](#) associated with the Proposed Amendment do not address a critical feasibility problem. DEC must address BEV charging requirements and existing on-street parking. It will be necessary for BEV owners to not only find a parking spot but also one with charging infrastructure. Who is going to provide that infrastructure? Who is going to pay for the likely upgrades necessary to the local distribution network for this additional load requirement? Is it possible to develop off-street charging infrastructure? If just 30% of the total vehicles in use in the New York City larger metropolitan commuting area were converted to BEVs, exactly how much land area would be required to charge them, and exactly where would this land be? I estimate that even for 30% BEV penetration it will be on the order of 600,000 vehicles. Assume both gasoline and electric vehicles take up 130 to 180 square feet of space. Assume it takes 4-10 minutes to refuel a typical gas car for 250-400 miles of range. Assume an Electric Vehicle takes up the same square footage of space, and takes 30 – 180 minutes to “re-fuel” for 70-200 miles of range. How much land will be required in the larger NYC Metro area if 30% of the vehicles in use in that region are converted from gas to electric? Where exactly will that land be?

### **Purchase Requirement**

The proposed amendment mandates that starting with model year 2026, car makers, will be required to deliver an increasing annual percentage of their sales that are ZEVs or PHEVs. This percentage requirement will start at 35% in model year 2026 and increase to 100% of sales for 2035 and subsequent model years. Despite tremendous publicity and extensive subsidies nothing can obscure the fact that EVs remain extremely costly for consumers and offer unproven maintenance and reliability records. I will never buy a BEV because I cannot afford a car that does not offer the same flexibility and convenience as an ICE vehicle. Moreover, I do not want to deal with home charging infrastructure and the safety risk of Lithium-Ion battery chargers below my bed room. What happens when the public does not buy enough of these vehicles to meet those quotas?

### **Transition Period**

Assuming average vehicle sales and scrappage rates and an average annual increase rate in ZEV sales to achieve 100 percent market share, a 2035 ZEV mandate could convert 16.5 percent of the fleet by 2035 and 60 percent by 2050. This means 83.5 percent of vehicles in operation in 2035 will be primarily powered by liquid fuels. Think about that. Even under an optimistic scenario of achieving a 100% market share of annual vehicle sales in 12 years, less than one-fifth of the nation’s overall vehicle fleet will be EVs. That means more than 83% of all the cars and trucks on the road will still require gasoline or diesel. All that infrastructure has to remain in place at the same time enormous funding for EV charging infrastructure is required. The proposed amendment should document the costs for charging infrastructure and maintaining the existing system.

### **Conclusion**

This is another instance of a regulation that affects most New Yorkers but only a few are aware of its existence. I expect that the climate activists will mobilize their acolytes to submit comments supporting the rule-making. DEC will count the pro and con comments and consider implementation as a mandate

from the public because more comments in favor than against will be submitted. If everyone was aware of this proposal, I am sure there number of people opposed would far outweigh the number in favor.

Worse is the complete disregard for rigor in the analysis. The primary rationale is “California said they could do it and we agree”. I did not spend sufficient time to develop comments on the California analysis but given the record of the state’s response to my comments it would only have been a waste of time. The lack of a feasibility analysis of reliability, affordability, and environmental impacts in general and on-street charging infrastructure and the life-cycle of the proposed amendment, in particular, is sufficient reason to delay this amendment until those analyses have been completed.

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