## United States Senate

**WASHINGTON, DC 20510** 

May 25, 2023

The Honorable Michael S. Regan Administrator US Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20004

## Dear Administrator Regan:

We request the Environmental Protection Agency (EPA) withdraw two recent proposals to regulate tailpipe greenhouse gas emissions from light-, medium-, and heavy-duty vehicles (Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles and Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3). These proposals effectively mandate a costly transition to electric cars and trucks in the absence of congressional direction, and the Agency should immediately rescind both proposals.

Forcing a transition to battery electric vehicles (BEVs) through regulation without explicit delegated authority from Congress violates the separation of powers, as reaffirmed by the Supreme Court's decision in *West Virginia v. Environmental Protection Agency*, 142 S. Ct. 2587 (2022). Under that precedent, the EPA cannot force a wholesale change to "substantially restructure the American energy market" without explicit congressional authorization. According to the EPA's own analysis for the light- and medium-duty rule, the proposal will require approximately 67 percent of new vehicles sold in model year 2032 to be BEVs – a dramatic shift away from internal combustion engine vehicles, which made up around 95 percent of the new light-duty vehicle market in 2022. The heavy-duty vehicle rule will require 40-percent sales of zero-emission vehicles by 2032, up from a mere 0.1 percent globally for heavy-duty trucks and 4 percent globally for bus fleets. If finalized, these proposals will effectively require a wholesale conversion from powering vehicles with widely available liquid fuel to charging BEVs off our nation's electric grid. This is a major, multi-billion dollar, policy-driven technology transition mandate to be imposed on American consumers by your Agency, without any semblance of the clear and direct statutory authority required by the ruling in *West Virginia v. EPA*.

In addition to concerns about the legality of these proposals, the EPA is forcing this transition to electric vehicles at a time when the capacity and reliability of our nation's electric grid to meet current demand is of increasing concern. A recent American Transportation Research Institute study found that full-scale electrification of the transportation fleet would require the addition of

<sup>&</sup>lt;sup>1</sup> Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, 88 Fed. Reg. 29,329.

<sup>&</sup>lt;sup>2</sup> Trends in electric heavy-duty vehicles, IEA (2022).

generation and transmission capacity equal to more than 40 percent of our current electricity demand. Grid operators are already raising concerns over other EPA proposals targeting the electricity generation sector that will significantly impact *existing* capacity and reliability. PJM recently released a report highlighting how baseload power retirements are policy driven and "retirements are at risk of outpacing the construction of new resources." Concerns like these from electric industry stakeholders draw attention to proposed EPA regulatory mandates on that sector that will decrease the capacity of our nation's grid to meet that existing demand, including the Mercury and Air Toxics Standards, regulations on Coal Combustion Residuals, a new proposal on Effluent Limitation Guidelines, and the recently announced Clean Power Plan 2.0 Rule. Given this upcoming regulatory onslaught on the electric fleet and the chronic delays and uncertainty associated with federal and state permitting of new generation and transmission assets, it is unclear that current levels of electric service can be maintained – much less expanded to replace the latent energy of liquid fuels with electricity to power BEVs.

In addition, there remains a lack of support infrastructure capacity to implement the sweeping transition envisioned in these proposals, particularly for the heavy-duty vehicle category. While the Infrastructure Investment and Jobs Act provides states funding for electric vehicle charging infrastructure, charging technology and deployment continues to focus on passenger and commercial vehicles, not on heavy-duty vehicles. The White House has noted that 72 percent of goods in this country are moved by truck, placing the industry and the center of our critical supply chains and economic competitiveness.<sup>5</sup> Efficient and reliable charging infrastructure for heavy-duty vehicles is essential for the sort of transition to electric trucks that the EPA has proposed. However, the technology is nowhere near ready to meet the demand necessary to keep our supply chain moving at the same rate it is today. Charging heavy-duty vehicles requires significantly more expensive conduits and transformers, and consumes vastly more electricity. than what is necessary for charging light- and medium-duty vehicles. Heavy-duty vehicle charging takes longer and is required more frequently than liquid fueling due to electric trucks having reduced range compared to conventional diesel vehicles. This proposal will result in increased curb weight for heavy-duty vehicles due to the significant weight of batteries, leading to reduced payload capacity and ultimately more heavy-duty vehicles on our roadways to move the same amount of freight. This shift may have highway safety implications and create increased congestion on our nation's roadways. In short, the charging technology for heavy-duty vehicles is not readily available and it will take many more years to develop and deploy if it is even economically feasible, making compliance with the EPA's proposal for heavy-duty vehicles unattainable for the foreseeable future.

The situation for infrastructure to support charging of light- and medium-duty vehicles is only slightly better, with your Agency touting the availability of 130,000 public chargers in its press release announcing its proposals.<sup>6</sup> Setting aside their significant reliability issues and lack of broad geographical availability, even a rapid expansion of the number of operational chargers is

<sup>&</sup>lt;sup>3</sup> See generally comments on EPA's proposed "Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standard."

<sup>&</sup>lt;sup>4</sup> See Energy Transition in PJM: Resource Retirements, Replacements & Risks (Feb. 24, 2023).

<sup>&</sup>lt;sup>5</sup> The Biden-Harris Administration Trucking Action Plan to Strengthen America's Trucking Workforce, The White House (Dec. 16, 2021).

<sup>&</sup>lt;sup>6</sup> Biden-Harris Administration Proposes Strongest-Ever Pollution Standards for Cars and Trucks to Accelerate Transition to a Clean-Transportation Future, US EPA (Apr. 12, 2023).

unlikely to meet the demand for the electrification of two-thirds of the new vehicle fleet by 2032. For reference, 2022 was the worst year for US car sales in a decade with 13.7 to 13.9 million new vehicles sold due to inflation, economic uncertainty, and supply chain disruptions. Two-thirds of that depressed sales figure would still represent more than 9 million new vehicles per year being added to the cumulative demand on public charging infrastructure by 2032.

Further, the proposals lack coordination with the US Department of Transportation (DOT) to address safety issues that increased vehicle weight will introduce on our roadways. Safety should always come first. The National Transportation Safety Board recently warned that the heavier weight of electric vehicles pose increase risks of severe injury or death to passengers in lighter vehicles. The increased weight of BEVs not only calls into question safety impacts during vehicle-to-vehicle collisions and vehicle-to-pedestrian or bicyclist collisions, but also the overall design and safety standards of our roads, bridges, and roadside safety hardware such as guardrails.

The DOT has a responsibility to research and ensure vehicle and roadway design and safety standards meet the challenges and demands of our future transportation system. This Administration continues to push policies that will result in more BEVs on our roadways, but has failed to plan from a safety and infrastructure perspective. The sequence of proposals is misguided; vehicle and roadway design and safety standards should have been under development and deployed well before the EPA proposed a rule to force consumer adoption of heavier EVs. This type of research and development, including vehicle, roadway lifespan, and guardrail and work zone safety equipment testing all will require years to undertake. If these proposals move forward without the appropriate safeguards in place, backed by sound science, the vehicle and infrastructure investments being made today may miss the mark on safety and longevity in the years to come.

Perhaps the most conspicuous flaw that will leap out to the American public is that these proposed actions were taken with complete disregard to consumer choice or affordability. In addition to potentially lacking access to charging at home, work, or public charging stations, consumers looking to purchase a new car may be unable to purchase these vehicles due to the higher purchase price or lack of availability. Today, the average purchase price of EV cars in 2022 was approximately \$65,000 – which is more than what 46 percent of American households earn in income in a year. Adding demand to the grid amid the confluence of other EPA regulations referenced above will drive up the cost of electricity, making powering these vehicles less affordable and undermining the EPA's claims of savings for consumers that ignore or understate the increase in vehicle and energy prices. Taken together, the erosion of choice and affordability of vehicles will have profound impacts on how American families run errands, get to school, commute to work, and recreate. Additionally, there are serious concerns about the range of electric vehicles and the performance in rural areas of the country, where people may have to drive much longer distances to reach a charger, especially in locations where cold weather can impact the range the vehicle can drive.

<sup>&</sup>lt;sup>7</sup> Wayland, Michael. Automakers are cautiously optimistic for a 2023 rebound after worst new vehicle sales in more than a decade, CNBC (Jan. 6, 2023).

<sup>&</sup>lt;sup>8</sup> See Kelley Blue Book and Cox Automotive Average Transaction Prices Reports; and Average, Median, Top 1%, and all United States Household Income Percentiles, DQYDJ.

In addition to pushing larger, heavier, and more expensive BEVs, domestic automakers are losing money on this transition and are passing costs on to consumers in the form of higher prices for both internal combustion engine (ICE) vehicles and BEVs. Ford's electric vehicle business unit is on track to lose \$3 billion this year. Mannounced it will lose money on BEVs until 2025. And the Chevy Bolt, cited by multiple members of the Biden Administration as an affordable alternative is being discontinued in favor of higher-priced electric SUVs and trucks. Unless economies of scale and a significant reduction in the cost of presently foreign-sourced input commodities for BEV production reduce costs – the likelihood for both of which remain highly uncertain – ICE vehicle buyers will continue to subsidize purchasers of BEVs directly through taxpayer subsidies and paying fuel excise taxes into the Highway Trust Fund, as well as indirectly through increased sales prices.

Moving to BEVs will also result in a loss of domestic auto manufacturing jobs due to higher levels of automation and a reduction in the number of components that go into these vehicles. For example, Ford has estimated a 30-percent labor reduction in its transition to electric vehicles, with many more jobs to be lost in the specialty automotive aftermarket that has been built on the internal combustion engine. In Europe, more than a half-million jobs are expected to be lost in the auto sector if the European Union relies on an electric vehicle-only approach. Similar job losses can be expected in the United States based on these proposals.

These proposals are also deficient in their consideration of BEV mineral input availability and cost, and will make our nation's transportation sector reliant on foreign adversaries, including China. China currently dominates mining, extraction, and battery manufacturing for EV batteries. For example, China produces nearly 65 percent of the world's graphite, a mineral required for BEV deployment, and accounts for a third of US graphite imports. Yet, the US currently does not produce any natural graphite domestically. Lithium is another mineral vital to EV batteries where China dominates global production and 80 percent of yearly global lithium production is used in battery manufacturing. Last year, lithium prices spiked by 438 percent yet EPA's proposals claim the price of these vehicles will decrease even as global demand is forecasted to grow without offsetting expansion of supply. Finally, cobalt is also essential for battery chemistry. The United States is dependent on imports for 76 percent of current domestic demand. The global leader in cobalt production is the Democratic People's Republic of Congo, with its mining sector identified as a significant violator of environmental protection and human rights, including child labor. 1718

<sup>&</sup>lt;sup>9</sup> Borney, Nathan. Gas-powered vehicles are paying for their own funeral, Axios (Mar. 23, 2023).

<sup>&</sup>lt;sup>10</sup> Lienert and Gomes. Ford sees \$3 billion pretax loss in its EV business this year, Reuters (Mar. 23, 2023).

<sup>&</sup>lt;sup>11</sup> Holderith, Peter. General Motors Will Lose Money on Its Electric Cars Until 2025: Report, The Drive (Nov. 14, 2022).

<sup>&</sup>lt;sup>12</sup> Seifert, Dan. GM killed the Chevy Bolt — and the dream of a small, affordable EV, The Verge (Apr. 26, 2023).

<sup>&</sup>lt;sup>13</sup> An Electric Vehicle-only approach would lead to the loss of half a million jobs in the EU, study finds, CLEPA (June 12, 2021).

<sup>&</sup>lt;sup>14</sup> Mineral Commodity Summaries 2023, USDOI and USGS (Jan. 2023).

<sup>&</sup>lt;sup>15</sup> *Id.* at 109

<sup>&</sup>lt;sup>16</sup> Lithium Prices Surge on Increased Battery Demands, Foley & Lardner LLP (Apr. 28, 2022).

<sup>&</sup>lt;sup>17</sup> *Supra*, note 14.

<sup>&</sup>lt;sup>18</sup> Combatting Child Labor in the Democratic Republic of the Congo's Cobalt Industry, US Dept. of Labor.

Further, our country is reliant on China for more than 50 percent of our imports of between 19 and 26 critical minerals with implications for BEV production. Policies that expand our need for imports of critical mineral EV battery inputs, without expanding domestic mining and refining capacity, will only make the US more reliant on our adversaries. Thus, claiming these regulations will make our country more energy independent and globally secure is patently false. Moreover, claims that these proposals will meaningfully address climate change or satisfy other federal priorities, such as securing supply chains, are inherently specious given their dependence upon environmental and human rights data from – in some cases hostile – foreign competitors.

Lastly, both rules rely on a questionable cost metric, known as the Social Cost of Greenhouse Gases (SC-GHG), to inflate the rules' projected benefits and skew its overall cost-benefit analysis. The EPA's use of SC-GHG in its cost estimate relies upon an economic modeling sleight of hand in the form of "discount rates" to exaggerate potential costs associated with the status quo and the benefits of transitioning to BEVs. The estimate also emphasizes theoretical future costs in foreign countries to justify imposing the rules' real costs and job losses on American families today.

Since these proposals are legally flawed, divorced from reality with regard to the associated costs and domestic capacity to implement them, and would be devastating for American consumers and workers already burdened by sustained levels of historically high inflation, we respectfully ask the EPA to rescind these two proposals immediately.

Sincerely,

Shelley Moore Capito

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<sup>&</sup>lt;sup>19</sup> Supra, note 14.

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