

As consumers become more accepting of electric vehicles (EV), taxpayer-funded incentives expand, and automobile manufacturers produce a greater variety of models, EV purchases are expected to keep growing. The public and policymakers, however, should be increasingly mindful not to put the cart before the horse when it comes to centrally planned mandates that attempt to drive consumers to purchase products they aren't ready to accept, they can't afford to purchase, and that face significant supply-chain bottlenecks that are already limiting supply and increasing costs.

Substantial infrastructure investment — in both the EV charging network and the electric generation, transmission, and distribution systems — is needed before widespread adoption can occur. Banning gasoline and diesel-powered vehicles and forcing consumers to purchase EVs before states have the requisite infrastructure needed to support this will imperil the electric grid. Such policies will also be disadvantageous for consumers and the economy in terms of electric grid reliability and cost considerations.

During the last decade, as public policy action on climate and the environment has migrated from the federal to the state level, the automotive sector has found itself the subject of new regulations that could shake up the industry, and American vehicle choice, as never before. Where once it was incremental increases in Corporate Average Fuel Economy (CAFE) standards at the federal level that had the most impact on the industry, we now have EV mandates in place in several states and under consideration in quite a few more. Many of these mandates have been handed down without adequate cost-benefit or market impact analyses.

Massachusetts and New York have both enacted legislation banning new registrations of internal combustion engine light-duty vehicles starting in 2035.<sup>1</sup> California has pursued an EV mandate through an Executive Order and regulatory restrictions put into effect by the California Air Resources Board (CARB) that will ban sales of internal combustion engine vehicles as soon as 2035. Other states are opting into the California ICE ban or setting informal goals and targets. New Mexico recently set a goal of having 7% of all new vehicle sales be EVs by 2025. Michigan has set a goal of 2 million EVs on the road by 2030. Another half dozen states have set more modest targets, mostly by 2030 or 2035.

Most recently, the U.S. Environmental Protection Agency (USEPA) has released two new emissions rules that require 60% of all new vehicles sold to be only electric vehicles by 2030 and 67% by 2032.<sup>2</sup>

While there are clearly many reasons to pursue EV as a mobility option, the push by elected officials toward mandates or target EV sales goals by a certain date, often fail to take into account many of the real-world economic, social, and practical problems created by these sorts of regulations. Too often, the consumer is completely left out of the discussion.

What is also frequently left out of the discussion are the advances in new technologies – lower carbon fuels, hybrid electric vehicles, and fuel cells – that are moving us towards a lower-emission future while also offering families and businesses multiple, and sometimes better, choices to meet their driving needs and continue our march toward meeting our environmental goals.

It is becoming increasingly clear that policymakers are not fully considering all the implications of aggressively mandating EVs. This risks near- and long-term consumer acceptance of EVs and increases the likelihood of unintended consequences causing an overall negative reaction to the increased utilization of EVs. To avoid this possible outcome, policymakers should more carefully consider several critically important issues.

In an effort to ensure consumer acceptance for EVs and reduce negative economic and societal impacts, this paper raises many important topics that should be considered and poses questions that lawmakers and regulators should address before imposing mandates which will have a significant impact on the U.S. economy—and especially those living on low and fixed incomes.

## Some of these questions include:

- What is a realistic timeframe for the United States to move its fleet to all-electric vehicles?
- What is the true cost to consumers of moving from internal combustion engine-powered vehicles to electric vehicles?
- What electric generation requirements are necessary to power a move to electric vehicles?
- What transmission investments are required to ensure consumers are able to conveniently charge electric vehicles?
- Is the supply chain for electric vehicles more or less advantageous to the national security prospects of the United States in comparison to ICE vehicles?
- With state transportation budgets primarily financed by gas and diesel fuel taxes, how will governments ensure our transportation infrastructure is adequately maintained?
- How does a transition and vehicle affordability affect equitable job growth in the United States?
- Is due consideration being given to EV affordability and current taxpayer-funded incentives, which at present can only be availed by higher-income earners and not the majority of Americans?