Ideology and the transition to environmental sustainability

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Last week, EPA and the Department of Transportation proposed a retreat on Obama-era auto pollution and energy efficiency rules. According to *New York Times* environmental reporter Coral Davenport:

"The proposed new rules would also challenge the right of states,

California in particular, to set their own, more stringent tailpipe pollution standards. … The plan, jointly published by the Environmental Protection Agency and the Transportation Department, would roll back a 2012 rule that required automakers to nearly double the fuel economy of passenger vehicles to an average of about 54 miles per gallon by 2025. It would halt requirements that automakers build cleaner, more fuel-efficient cars including hybrids and electric vehicles. [The] rule…was opposed by automakers who said it was overly burdensome. However, Thursday's proposal goes much further than many major automakers wanted, and manufacturers are now worried that years of legal challenges and regulatory uncertainty could complicate their business."

Almost half a century ago, the 1970 Clean Air Act gave California the right to set more stringent air quality standards than the federal government and gave other states the right to follow California's lead. This provision of the Clean Air Act was necessary because California already had a very aggressive air pollution control program, and in the spirit of state's rights under our federal political system, Congress accepted California's demand to do more than the rest of the country. The smog in Los Angeles motivated California to get serious about air pollution control well before the rest of the country did. After half a century of effort, LA's air is decent, and no Californian wants to go back to the bad old days; America's air wasn't so great back then.

Andrew Wheeler, EPA's new acting administrator, certainly knows that if this proposed rule is actually issued, it will be hung up in court battles for years. Meanwhile, while the courts adjudicate, the existing regulation may remain in effect. For auto manufacturers, the proposed new rule is a disaster, although it is one of their own making. Manufacturers need certainty in the regulatory environment to make investments in capital equipment and research. By complaining about the Obama rule, manufacturers may end up with one set of rules for California and the states that follow California's lead, and one for the rest of the country.

Like California, the global market wants more fuel efficient, low and zero pollution vehicles. The auto business is global, but the Trump Administration continues to make economic policy better suited to the less global 1970 economy than fully global economy we see in 2018.

Unless the Clean Air Act is amended, or the Supreme Court becomes as dysfunctional as the other two branches of the federal government, the Court will have no choice but throw out the new regulation—especially the part that preempts California's rules. But the process of litigating these new rules will take time, and during this time auto manufacturers in the rest of the world will be busy building more fuel-efficient cars and transitioning from the internal combustion engine to electric vehicles. Our auto companies would be prudent to adhere to the Obama-era standards anyway, since one way or another our personal transportation needs to be based on renewable, non-polluting fuels.

But reality takes a back seat to ideology in this administration. Incredibly enough, they are trying to justify larger, heavier and less fuel-efficient cars with the argument that they are safer than those that are lighter and more fuel efficient. This is almost as ridiculous as the argument that renewable energy, because it is intermittent, makes the electrical grid less reliable and that "lack of reliability" is a threat to national security. The Trump energy policy emphasizes heavy, inefficient cars, coal-fired power plants and drilling for fossil fuels wherever they might be. While the technology of motor vehicles, renewable energy generation and battery storage advances everywhere, the ideologues running our national government think the answer is to turn back the clock. Perhaps they think that the best way to make America great again is to build a time machine and go back to the 1950s.

The people running our corporations know they are in a fiercely competitive global economy. America has dominated that economy with its ability to develop and deploy new technologies. It's true that the

Obama era auto standards would have been a challenge to the auto industry. So was JFK's 1961 goal of reaching the moon before 1970. But these ambitious goals are technology-forcing. They require us to be creative and ingenious risk takers—and that turns out to be a very good thing in the global brain-based economy.

The internal combustion engine replaced the horse and buggy nearly a century ago. Given the pace of technological change now underway, we are only a few advances away from a cheaper and more long-lasting battery. That breakthrough will result in an electric car that is less expensive to buy and run than current motor vehicles. At that point the new car market will be dominated by the electric car. The only thing that might hold it back is a corrupt or ideological bias toward fossil fuels. Imagine the lobbying: "America has all this investment in fossil fuel extraction, refining, distribution and sales." "We must protect this critical national industry!" "For the sake of national security!" Arnold Schwarzenegger says it best in a wonderful video where he argues that "coal is the Blockbuster Video of fuel sources."

The transition to a renewable resource-based economy requires ingenuity and technological innovation. Innovation can be stimulated or blocked by government policies. The space program gave us smaller computers and advanced water filtration technology. The auto industry, like most businesses, has long opposed nearly every form of regulation proposed by government. They opposed seat belts and air bags for safety. They opposed the catalytic converter for smog control. They opposed gasoline mileage standards that save consumers money on fuel. And the list goes on. But today's motor vehicle is safer, more reliable and more efficient than the cars of the mid-20th century. Government pushed this along, but it was the engineers and the growing technical capacity of the auto industry that made these policies operational and real. When the team that figured out how to make a car more fuel efficient and safe finished that work, they started in on computerizing the mechanical elements of

the car and then started working on self-driving vehicles. This is the conclusion of a careful study of this issue by the late Professor Ann Johnson of Cornell University. According to Professor Johnson:

"In the case of automotive innovations, it is clear that high emissions standards did force the development of new technologies by jumpstarting a quest to improve the car, to make it less environmentally taxing and harmful to human health. More importantly, the continually escalating emissions standards, exemplified here by increasingly stringent nitrogen oxides standards, led to fundamental changes in the car that made it not only less polluting but also more reliable as a (largely unanticipated) byproduct of computerization. Cars also have become much safer through regulation, with deaths per miles driven dropping from approximately 20.6 deaths per 100,000 people in 1975 to about 10.3 per 100,000 in 2013—a drop of 50 percent."

Shortly after Donald Trump became president, the auto industry started to lobby for a rollback of the mileage standards. At that time I wrote a piece about the "Can't Do Approach of the American Auto Industry" and observed that:

"Until President Trump's election, the auto manufacturers supported the ambitious emissions and fuel efficiency goals set by the Obama Administration. Now, with the chance to escape these requirements, they are lobbying to get rid of them. They complain about cost and feasibility, when they should welcome the opportunity to develop the technology needed to modernize their product line."

Our goal should be to develop a high throughput economy that preserves the planet while enabling the entire world to live as we do in the developed world. To do this we need to develop both a deeper understanding of our planet and the technology to deliver material goods without destroying our environment. Anti-regulatory ideology is an

obstacle to the development of the technology needed to transition to environmental sustainability.

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