

Expert discusses how low gasoline prices can influence fuel efficiency policies

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The Environmental Protection Agency earlier this year touted its [Fuel Economy Trends Report](#) that found new vehicles produced in 2013 had achieved the highest fuel economy of all time. However, a recent sharp drop in U.S. gasoline prices has experts questioning how this could affect broader fuel economy and energy-efficiency policies and efforts.

Bradley Lane, a University of Kansas assistant professor in the School of Public Affairs and Administration, is available to discuss issues related to fuel economy and the effect of lower [gas prices](#), which are below \$2 per gallon in most states. Lane's research interests include public policy and transportation, including travel behavior, electric vehicles, fuel prices and public transport.

Q: What is the significance from a public and energy policy standpoint with recent news that the average fuel economy has hit an all-time high and gasoline prices relatively low compared to recent years? Is this overall good news or bad news? Or does it depend who you are?

Lane: It's good news for the everyday consumer, especially with the overall economy improving. Gasoline prices dropping combined with improved vehicle fleet [fuel economy](#) make travel cheaper for consumers. Transportation and economic growth are fundamentally

coupled, so the cheaper transport is, the better potential effects there are for the economy.

For advocates of change, it's bad news. Pressure to move away from petroleum and toward alternative energies in transport has been building up for decades, and high petroleum prices, international conflict, congestion, air pollution and economic factors have all been strong forces encouraging policy and investment in alternative [energy](#) sources. But all that work has, to a certain extent, now become a victim of its own success, as it has helped alleviate pressure on domestic and international petroleum demand, and now that [gasoline prices](#) are plummeting, some of the pressure driving those ventures starts to slack. This is bad news because it takes a lot of that pressure over a long term to drive just a little change, and just a little loss of it to discourage change and encourage a reversion to old, entrenched ways.

Q: Do these trends influence perhaps either people's or government's decisions to seek to use alternative resources of transportation – whether that is electric vehicles or public transportation in general?

Lane: The trends have a disproportionately large impact on the general public's perceptions, as well as the level of immediacy and attention they receive in media. The perception is that, when gasoline prices (and other petroleum energy source prices) go high, there's reactionary panic. It's, "We need [electric cars](#), hydrogen cars, mass transit, higher gas taxes. How did we ever let this happen?" And when gasoline prices, etc., are low, it's, "Why did we ever invest in this? We don't need electric cars, why are we spending all this money supporting vehicles that are expensive and don't go very far? We're holding back the economy doing this." The reality is the movement and the inertia behind any energy source and mode of transportation is extremely slow and deliberate.

We've been working on developments in transportation, including infrastructure, emissions reduction and [alternative energy sources](#) for decades, and while these trends are intimately intertwined with their contemporary political context, they're also the product of immense long-term effort and investment.

Q: What will be key things to watch moving forward regarding energy and transportation?

Lane: I think there are several key things to watch going forward for energy and transportation. One is the developing world, spearheaded by China. Though most of the research and media attention that we're exposed to is on the United States and Western Europe, these actually represent a relatively small proportion of the world population. China alone expects to add a billion cars to its fleet in the next fifty years; that's more than are on the road in the U.S. and Western Europe now. That's also a lot of new additional demand for petroleum for gasoline cars, and coal for electricity generation for, among other things, driving electric cars in dense, new and very dirty urban cities.

Other near-term things to keep an eye on are the future of fracking. While it has been lauded not just for lowering gasoline and oil prices but also for providing jobs and economic activity to remote areas, it also has several negative side effects. There are environmental concerns with the outputs of the fracking process, but discussion of these is very contentious between energy companies and environmentalists. There are more acute externalities, such as property devaluation and seismic activity, that could rise to derail momentum for fracking.

Another industrial and technological component to track is the nascent powers in the electric vehicle/battery industry. Forward thinking and risk taking by the Teslas, the Elon Musks, the visionaries and innovators of

the 21st century, push the powers in any field that dominate the status quo first into defending the status quo, then into innovating themselves. We're at the beginning of seeing this in U.S. automakers today.

Lastly will be other forms of energy in transport. Our mistake is we think of something "replacing" gasoline; the reality is no other alternative energy source (in its current form) has the energy density of petroleum. This simple truth is as much why we are so dependent upon it to power our contemporary society. We appear set in transportation on using electricity as a transitional energy source, but there are other alternatives, including natural gas and hydrogen, that may have an important future.

For all we talk about gasoline prices in the near-term and their effect, there are some undeniable facts that remain. Petroleum is a finite resource with an effectively infinite demand. Some day, we'll reach a point where it is no longer the dominant, or even a primary, energy source in transportation and society. The only questions are about the transition away from it.

Provided by University of Kansas

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