The biofuel lobby has made a number of claims to muddy the waters around the Renewable Fuel Standard (RFS) and halt progress on better aligning vehicle and transportation fuel policies. With 2022 on the horizon, after which the EPA will take control of the RFS to uncertain results, our opportunity to establish a better course for our country is now. But meaningful discussions about an improved path forward require all stakeholders to acknowledge some indisputable facts.

1. “Mandate” is an accurate descriptor for the RFS

For more than a decade, the RFS has required that obligated parties, including refiners, show that a minimum amount of renewable fuel has been incorporated into the U.S. fuel supply — regardless of whether obligated parties are actually capable of incorporating it. Contrary to suggestions that a wide range of fuels can wholly satisfy this mandate, the truth is that conventional ethanol is the fuel with the widespread availability needed to meet RFS targets. Because many refiners are unable to blend ethanol into their products or otherwise comply with the RFS (due to infrastructure constraints or lack of consumer demand for higher-ethanol blends, for example), they are compelled by law to buy Renewable Identification Number (RIN) credits from others who are able to incorporate renewable fuels. Failure to do so, without government authorization, results in refiners being found out of compliance and leads to expensive legal consequences.

2. Corn ethanol satisfies the biggest portion of the mandate

For 2019, EPA has proposed requiring a minimum of 19.88 billion gallons of biofuels to be blended into the fuel supply. Of that, 4.88 billion must be “advanced biofuels.” The remaining 15 billion gallons can be satisfied with conventional corn ethanol, advanced biofuels and even imported biodiesel.

Because of its broad availability, price and octane-boosting properties, conventional corn ethanol represents the lion’s share of fuel used to meet RFS mandates. No other energy source comes close. Many people refer to RFS as a “corn ethanol mandate” for that reason — but as we have stated before, demand for corn ethanol is secure regardless of the mandate.

3. The RFS mandate has failed to overcome challenges related to cellulosic and biodiesel production

The original RFS statute expected that cellulosic and biodiesel production would ramp up dramatically in response to the mandate. In fact, the law originally required that the cellulosic mandate would grow from 100 million gallons in 2010 to 8.5 *billion* gallons in 2019. In reality, the production of cellulosic ethanol is nowhere near that volume. The economics to get cellulosic production off the ground never panned out. For 2019, the EPA is still proposing a cellulosic ethanol mandate of 381 million gallons, which is more than the United States even produced last year.

Biodiesel also faces challenges. Since 2014, the **RFS mandate set by the EPA has only been met with help from imported biodiesel**. And gallon for gallon, biodiesel is more expensive and has less energy than the petroleum diesel it's replacing. It's wrong to suggest that "following the law" would overcome such supply problems.

4. Facilitated by an RFS sunset, optimizing octane represents a possible better way forward

Fuel retailers, auto-makers and refiners agree on the value of exploring the benefits of moving past formulaic, gallon-specific fuel mandates and toward a fuel-neutral octane solution. A 95-RON octane solution would enable better vehicle performance, a large increase in fuel economy and lower emissions in optimized engines. Overall, a 95-RON octane performance specification may have the potential to work as the most efficient, affordable way to address regulatory targets (i.e., light-duty vehicle GHG and CAFE) — providing that it's paired with a sunsetting of the RFS. The traditional fuel industry is trying to develop a reasonable way forward, even though less petroleum will be consumed because of a large increase in fuel economy.

5. 95-RON is the least costly and most efficient octane solution being discussed

AFPM worked with the automobile industry to evaluate ways to increase fuel economy in the vehicle fleet. The results make clear that 95-RON octane is the most cost-efficient answer to existing fuel economy standards — and it's a fuel that could be available, at scale throughout the country, by the time new cars need it. Additionally, a fuel-neutral, 95-RON performance standard would provide fuel retailers with optionality and flexibility in terms of their offerings to consumers.

In efforts to modernize the U.S. fuel system, our approach to measuring fuel octane ratings must improve as well. Most retail stations still display fuel octane ratings in AKI — short for “anti-knock index.” However, the National Renewable Energy Laboratory points to the “research octane number” (RON) as preferable, stating, “For modern technology engines, RON is the better measure of performance (knock prevention).”

The octane content of 95-RON fuel would be close to that of 90/91 AKI fuel today; however, 95-RON would not be intended as a specialty product. It would be the standard grade for new cars, which would all have engines optimized for 95-RON. Making the switch to RON ratings won’t be easy, but it could be a smart change to bring together vehicle and fuel transportation policy in a way that works for a wide range of stakeholders.

Conversations about moving beyond biofuel mandates and toward a more harmonized vehicle and fuel policies must continue. Rather than rewriting the history of the RFS or pointing fingers about its shortcomings, it is time to focus on the facts — and real possibilities for the future.

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