Insight

EPA's Proposed RFS Targets: Still Short, Still Expensive

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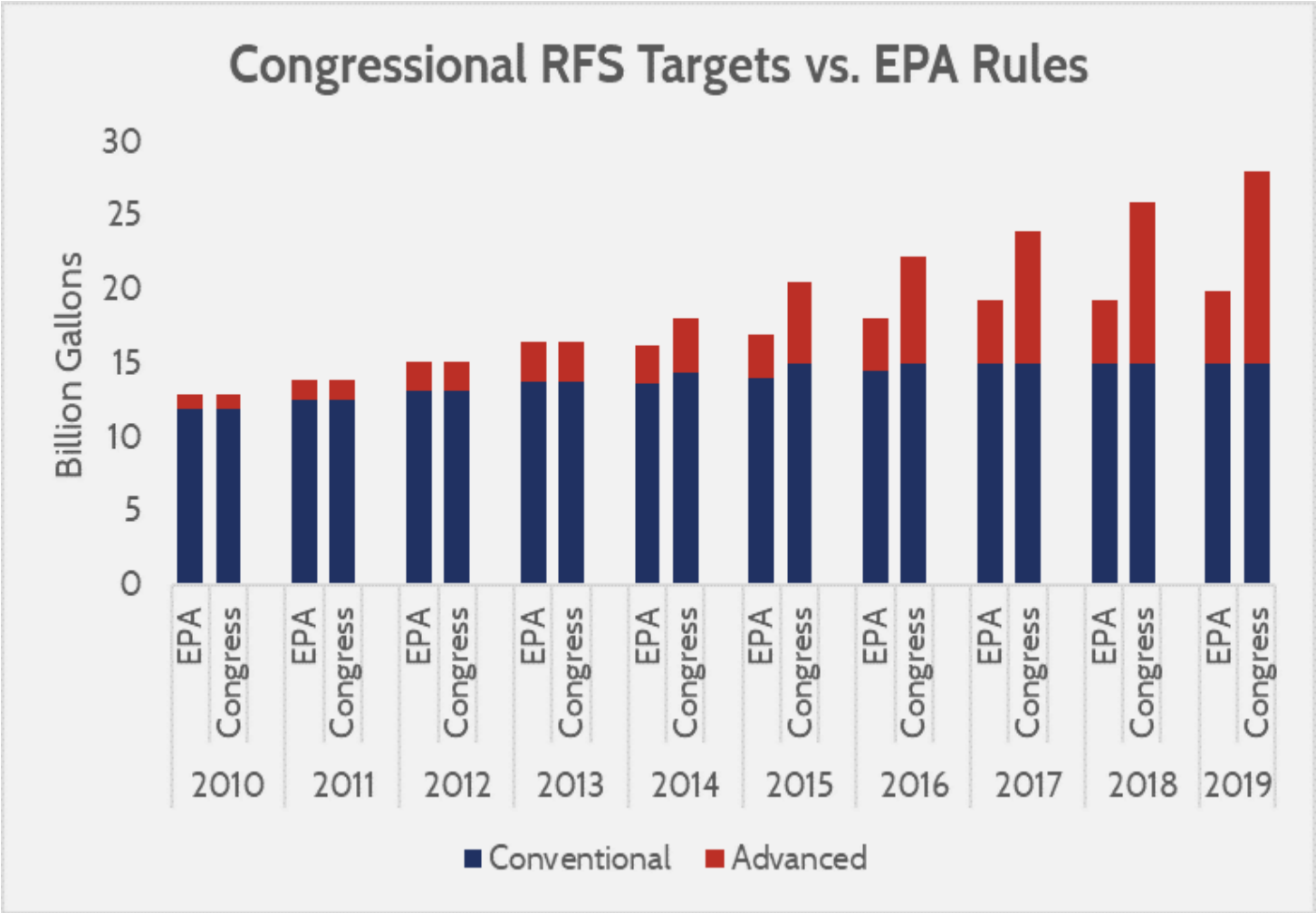
This week the Environmental Protection Agency (EPA) released its annual proposal for the volume of renewable fuels to be blended into the gasoline supply, also known as the Renewable Fuel Standard (RFS). A quick overview of the numbers shows that the EPA continues to expect that the biofuel industry will not be able to produce enough to meet the ambitious targets that Congress laid out in 2007. Despite the weak compliance requirements, the cost of the RFS continues to rise, underscoring the need for reevaluating the policy.

Each year the EPA proposes a volume of biofuels that are in line with what they expect the industry can produce. The EPA has proposed a target volume of 19.88 billion gallons of renewable fuel for 2019, 15 billion gallons of which come from the "conventional" sources (i.e. ethanol derived from corn), and 4.88 billion gallons from "advanced" sources (i.e. inedible plant matter and biomass). This target is 590 million gallons higher than last year's 19.29 billion gallons.



The fundamental challenge with the RFS is that the biofuel industry has struggled for years to produce enough "advanced" renewable fuel (like ethanol from algae or plant fiber), as the chart above demonstrates. When Congress set targets for the RFS in the initial legislation creating the program, it assumed that the industry would be able to produce much more advanced fuel than ended up being feasible. Because production never ramped up for advanced fuels, the RFS targets set by the EPA continue to drift further from the policy objective. By contrast, conventional biofuel requirements for the RFS have a statutory maximum of 15 billion gallons, which is maintained in the EPA's latest proposal.

The limited production capacity remains a challenge in the latest production targets, but meanwhile, the mandated substitute of biofuels for gasoline comes at a cost, and the latest iteration of the RFS comes with an increase. The EPA anticipates the new targets, even though they are just slightly higher, will increase annual costs of the RFS by $380-740 million. Past AAF research found that over the past 10 years the RFS cost consumers $76 billion due to higher fuel costs and reduced energy efficiency. Further, the compliance mechanism for the RFS (known as Renewable Identification Numbers) reflects costs not measured in AAF's research, typically between $0.30 and $1.00 per gallon of renewable fuel ($6-20 billion per year).

The same AAF research evaluating the costs of the RFS also showed that the program failed at its policy objectives. The program was intended to curb the United States' reliance on foreign oil while reducing pollution from fossil fuels. Domestic oil production has more than doubled since Congress created the RFS, and as a

result the RFS is now more likely to displace U.S.-produced oil than foreign oil—in other words, to put an American producer out of business than a foreign one. The environmental mandate of the RFS is in question, as analyses which account for the entirety of energy inputs in ethanol production show conventional ethanol has higher lifecycle pollution despite lower tailpipe pollution.

The Upshot

The RFS always entailed a sacrifice of market-driven efficiency for national security and environmental objectives. As the latter becomes increasingly ephemeral, the trade-off hardly seems worth it. With each year the costs of the RFS continue to climb, the RFS falls further and further from achieving its envisioned goals, and yet the policy continues to exist as a government preference for alternative fuels that would otherwise be uncompetitive. It is time to seriously evaluate if the RFS is a policy worth its costs.