Ethanol Mandates Split Republican Interests

Renewable fuels in play this November.

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EIA
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Biofuel Debate

Last week, Joe Biden's campaign stepped into a biofuel debate that has divided Donald Trump's supporters from the farm lobby and Big Oil throughout the current administration. Biden expressed support for renewable fuel standards legislation requiring increased blending of biofuels into domestically sold gasoline and diesel. This puts the Democratic presidential candidate firmly on the side of farmers reliant on crops used to make biofuels. About 36% of U.S. corn is used to make ethanol that is blended with gasoline. Demand for the latter has shrunk during the coronavirus pandemic, hurting farmers. Big Oil opposes biofuel blending, which erodes refiners' share of transport fuels, adding to their woes this year on top of demand destruction during the lockdown. In the past three years, the Trump administration has walked a tightrope between opposing interests on biofuel blending because both sides are part of its core support. This note recaps the stakeholders' latest positions on an issue that the administration hopes to kick down the road until after the election and opponents want to highlight now.

Mandate

The Energy Policy Act of 2005 and the 2007 Energy Independence and Security Act mandated increasing use of renewable components blended into gasoline and diesel to reduce U.S. reliance on imported fossil fuels. By far the largest renewable fuel component is ethanol, made from corn, which now commonly makes up 10% of most gasoline, a blend known as E10. The EISA includes a mandate for a renewable fuel standard, or RFS, that requires refiners and importers to blend minimum renewable volume obligation, or RVO, quantities into their fuel based on gasoline and diesel sales into the domestic market. These RVOs increase over time to meet growing RFS annual targets set by the Environmental Protection Agency. Refiners and importers that fail to meet their RVOs are subject to heavy fines. RVOs are met when obligated parties surrender renewable identification numbers, or RINs, that are attached to every gallon of renewable produced and released when that renewable is blended with gasoline or diesel. Refiners that can't meet their RVOs must buy RINs in a secondary market to meet their obligations. Inefficiencies in the regulations have caused frequent RIN shortages, leaving some refiners paying too-high prices for these blending credits.

Previously

In the past three years, we've detailed the Trump administration's dilemma over renewable fuel policy between two competing constituencies, namely corn farmers wanting higher ethanol mandates and refiners wanting lower mandates and revisions to the secondary market for RINs (see our April 2018 note Trump Strings Along Farmers and Refiners With Waivers, September 2018 note Cheap Ethanol

Threatens Refiners' Gasoline Share), and July 2019 note Trump Walks Ethanol Mandate Tightrope). In May 2019, an EPA ruling extended sales of E15 blend gasoline (made with 15% ethanol) year-round in an attempt to appease the farm lobby by increasing demand. However, the concession had limited short-term impact since less than 2% of retail fueling stations currently offer E15. (Longer term, it would increase ethanol's share of the gasoline market by 5% if adopted nationwide.) A more impactful concession to refiners during the past two years was the EPA's granting of small refinery exception, or SRE, waivers to about 30 plants that removed their RIN obligations for current and some previous years. These reduced refiners' blending obligations enough to collapse RIN prices to negligible levels in 2019. In January 2020, a U.S. Court of Appeals ruled that the EPA should reconsider recently granted SRE waivers for three refiners since the regulations require such waivers to be extended year after year rather than granted only occasionally. The EPA hasn't appealed that ruling or decided how it will affect approval of new waivers yet, leaving both farmers and refiners uneasy about the administration's position and RIN prices drifting up toward $0.50/gallon.

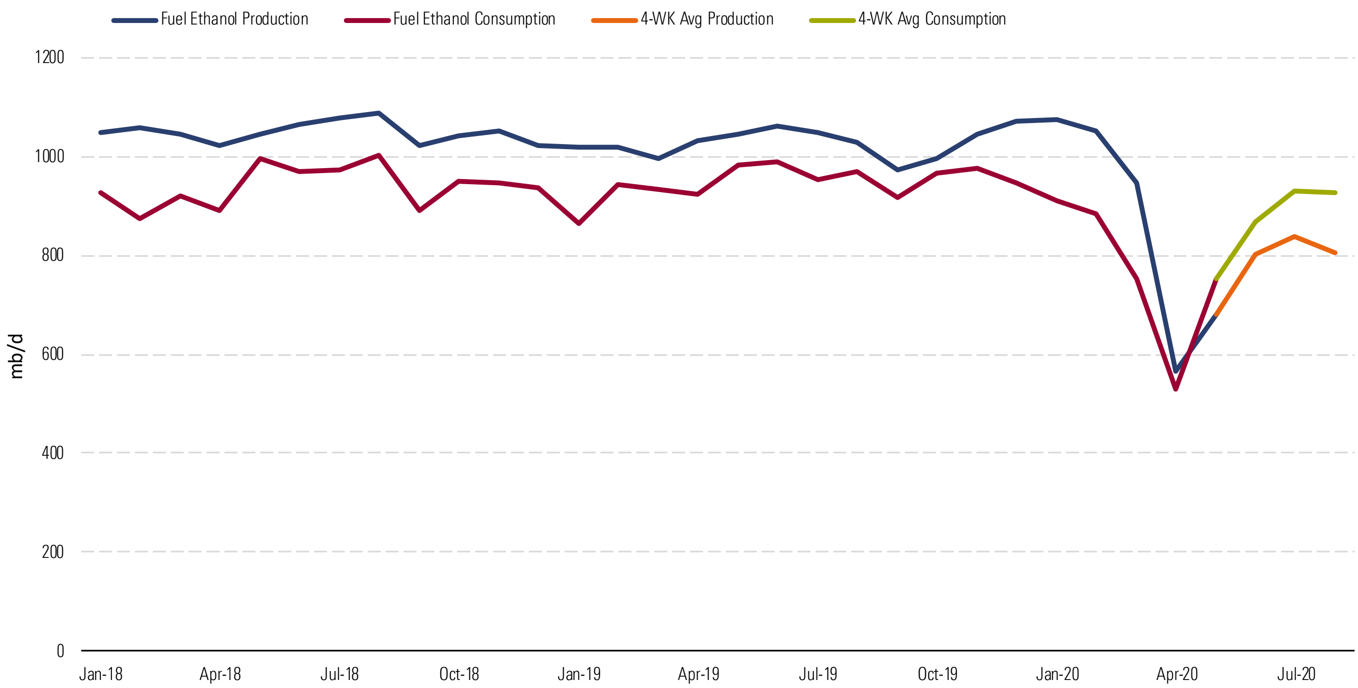
We summarize the latest stakeholder positions below.

Ethanol Producers

As of Aug. 26, 2019, U.S. ethanol plant capacity was 1.1 million barrels/day and average production last year was 1.03 mmb/d, according to the Energy Information Administration. Domestic ethanol consumption averaged 948 thousand barrels/day in 2019 or about 10% of gasoline sales, with the balance going to the export market, primarily Brazil and Canada. Average Chicago ethanol producer margins from corn were $0.21/gallon in 2019 with an additional uplift of $0.73/gallon from byproduct distiller dry grains, or DDG.

This year, the story has been quite different with April production and consumption plummeting over 40% versus 2019 (Exhibit 1) as a result of gasoline demand destruction caused by the lockdown. Although ethanol consumption has recovered well, reaching an average 932 mb/d in July or 98% of 2019 equivalent levels, production remains under 80% of capacity in August. Ethanol margins over corn averaged less than $0.10/gallon between January and August 2020, leaving producers reliant on DDG margins of $0.78/gallon. Full recovery for ethanol producers depends on gasoline demand returning to normal levels and sufficient exports to balance supply. Brazilian quotas and tariffs imposed two years ago continue to threaten export levels.

Exhibit 1 Monthly and Four-Week Average Ethanol Fuel Production and Consumption



Source: EIA, Morningstar.

Ethanol producers are hostage to the RFS legislation for their livelihood and natural allies with corn farmers in advocating greater adoption of renewable fuels. With the Trump administration sitting on the fence on SRE waivers and not pushing higher blend levels, their allegiance could be swayed toward Democrats in the November election.

Corn Farmers

Corn prices weren't affected as seriously as transport fuels by the COVID-19 lockdown and remain roughly at the same level as last year, although lower gasoline demand has reduced ethanol production from corn. Corn prices have been depressed by lower exports to China in the past two years as a result of trade tariffs imposed in April 2018. In July, U.S. Department of Agriculture data indicated a record harvest might be on the way this year, but a freak inland derecho storm on Aug. 10 cut a destructive path through the Midwest, destroying crops and damaging grain storage towers. That destruction has been supportive of corn prices because it threatens supply. A recent resumption of Chinese purchases is also supportive. Corn farmers were angered by SRE waivers that reduced demand for ethanol and remain frustrated that the issue hasn't been resolved. Any perception that the administration is taking the side of Big Oil on the RFS mandate is a threat to corn farmers' livelihood and will reduce their support for the president's re-election bid.

Refiners

As we recently noted, U.S. refiners have had a horrible year (see our July note U.S. Refiners' Worst Second Quarter in a Decade). Low margins and reduced demand have led to shuttered plants and plans for divestment. Demand recovery has been slower than hoped. Hurricane Laura barreling into the Texas and Louisiana Gulf Coast last week added insult to injury by shuttering multiple refineries. Amid all this, the price of RIN credits for ethanol blending into gasoline has been creeping up from an average $0.12/gallon in 2019 according to S&P Global to $0.46/gallon at the end of August 2020 according to Banyan Commodity Group. Refiners that don't operate downstream blending get no RINs because they aren't adding ethanol to their gasoline. They must purchase RINs from blenders or traders to meet their annual RVO obligation. This mostly affects smaller independent refiners that have sought relief from the EPA through SRE waivers. If no waivers are issued, this year's RIN obligation has a double burden, because the RFS legislation mandates that a fixed volume of ethanol is blended regardless of gasoline consumption. With demand hit by coronavirus, there's a shortage of RINs generated by blending. That supply concern and the administration's lack of response to the appeals court ruling on the legality of SRE waivers have combined to raise RIN prices.

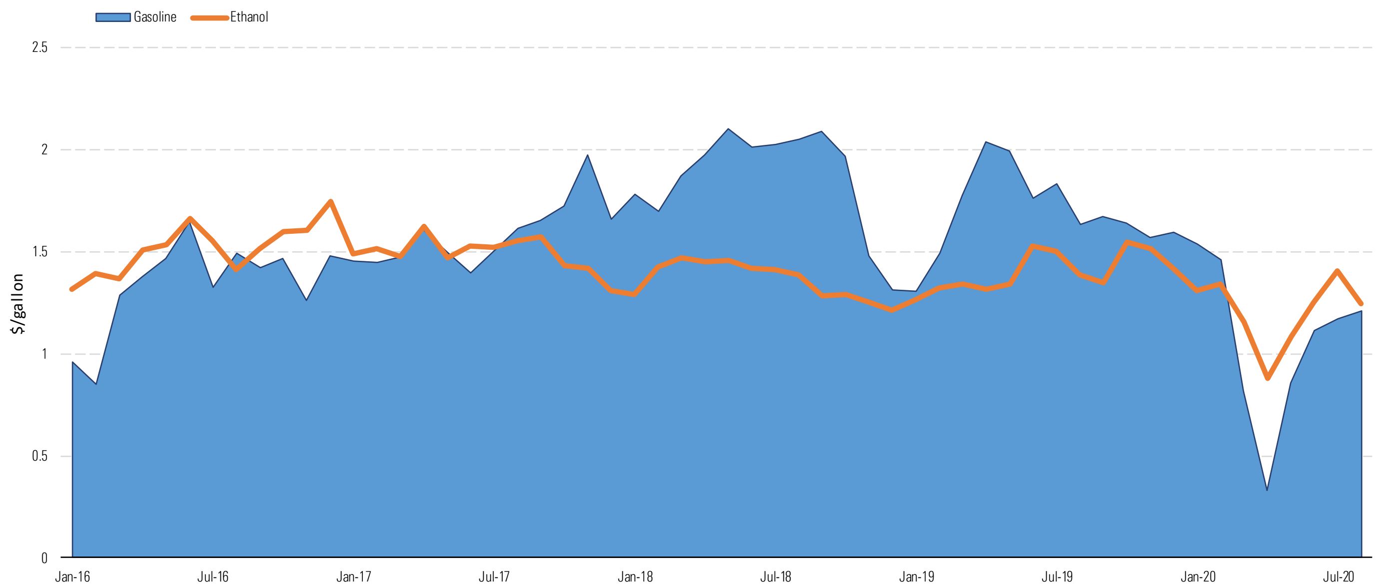
The administration continues to prevaricate on SRE waivers, probably hoping to avoid the issue before the election. Refiners aren't happy with that response, but with Biden coming out strongly in favor of biofuels, they're unlikely to jump ship to the Democrats.

Blenders

Exhibit 2 shows Chicago gasoline/ethanol blender margins. The pretax wholesale gasoline price is the blue shaded area and the Chicago ethanol price is the orange line. Gasoline blenders make money from ethanol mandates in one of two ways: blending margins and RIN sales. Blending margins are positive when ethanol is cheaper than gasoline, and that was the case for two and a half years between July 2017 and February 2020. Since March this year, falling gasoline prices remained below ethanol, meaning that blenders lost money on every gallon. Those losses are offset by the value of RINs collected as ethanol is blended into gasoline that can be sold to traders or refiners. Rising RIN prices this year have therefore compensated for negative margins. That compensation hasn't made up for lower throughput as gasoline demand cratered under lockdown conditions.

Ethanol blenders are a small constituency but natural allies of ethanol producers and corn farmers in the renewable fuel debate. They benefit from higher renewable mandates.

Exhibit 2 Chicago Ethanol Blender Margins



Source: CME Group, Morningstar.

Hybrid Refiners

Political lines in this debate appear to be drawn according to stakeholder interest. However, there are some crossover players, such as refiner Valero, that own blending capacity as well as ethanol production. That strategy recognizes that renewable fuels aren't going away and represent a growth opportunity for refiners. A number of U.S. refiners are looking to increase their exposure to renewables by investing in biodiesel capacity (see our September 2019 note Sixfold Increase in Renewable Diesel Capacity Coming!).

Election Time

The outcome of the November election has significant consequences for stakeholders in the renewable fuels debate. Although the public is largely ignorant of the underlying issues, the representatives of Big Oil and farmers are typically big financial contributors and generally support Republican candidates. Their loyalties are split by renewable fuels, and they don't appear to be happy with the Trump administration's tightrope act on the issue. If Biden's entry to the debate resonates with farmers, it could have an important impact in Midwestern swing states.

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