EPA's Proposed Adjustments in 2013 Renewable Fuel Requirements

Richard K. Perrin
University of Nebraska-Lincoln, rperrin@unl.edu

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EPA’s Proposed Adjustments in 2013 Renewable Fuel Requirements

Late last month, the Environmental Protection Agency (EPA) proposed changes to the Renewable Fuels Standard (RFS2) for 2014. The proposals are illustrated in Chart 1 (on next page). The changes address two problems in achieving the targets established by Congress and the Bush Administration in the 2007 Energy Independence and Security Act (EISA).

Problem 1 - No Cellulosic Ethanol Production

First, the 2007 Act called for 1.75 billion gallons per year (bgy) of cellulosic ethanol to be blended into the gasoline supply by 2014, but that industry has developed more slowly than Congress anticipated. As of today, virtually no commercial-scale cellulosic ethanol has been produced. Several plants are just coming on line now or in 2014, but their ultimate capacity will be less than one percent of the EISA target.

The proposal is to reduce the 2014 cellulosic ethanol requirement by 99 percent, from 1.733 bgy to .017 bgy. However, the overall "advanced renewables" requirement (the fuels grouped at the top of the columns in Chart 1), would be reduced by only 1.55 bgy. This would require an increase in consumption of other advanced renewables, which include biodiesel, sugar ethanol and some kinds of sorghum ethanol.

Problem 2 - The "Blend Wall"

The second big problem with the EISA targets from 2007 is the "blend wall." The 14.4 bgy of corn ethanol originally called for by 2014 was to be about ten percent of the total gasoline consumption expected for that year. But gasoline consumption continues to decline unexpectedly, to about 134 bgy this year, so the original RFS2 mandate for next year would constitute nearly 11 percent of gasoline consumption. This is more than could be blended at the ten percent rate for E10.
Could the blend wall be avoided by consuming more E85 and E15? Yes, it could. To achieve the EISA 2014 goal of 14.4 bgy of ethanol it would only take about 20 percent of the 15 million flexfuel vehicle drivers to find their way to the seven percent of stations that have E85 pumps, or if 15 percent of all drivers found their way to an E15 pump (difficult, given that there are only a few dozen of them installed so far).

So the blend wall is more a curtain than a wall.

Why aren't flexfuel drivers using E85? Lack of incentive - it has been overpriced relative to its energy content. Only in the past year has the price of ethanol per unit of energy fallen to the level of gasoline. But in recent months, ethanol has been a cheaper source of energy than gasoline and we have seen a small surge of E85 and E15 sales as a result. Corn prices in the vicinity of $4/bu would continue to facilitate more E85 and E15 sales, because of the low cost of ethanol relative to gasoline.

Assessment

Does EPA's 99 percent reduction for cellulosic ethanol make sense? For next year it does, but it would make even more sense to reduce the advanced biofuel requirement by the same quantity so as to have fewer policy changes that disrupt planning in other advanced fuel industries.

Does the EPA reduction of the 2014 corn ethanol mandate from 14.4 bgy to 13.01 bgy make sense? If the objective of the policy is to increase renewable fuel usage, it does not. The 14.4 bgy target would push distributors to price E85 and E15 more aggressively than in the past, and to install more E85 and E15 pumps. It seems quite conceivable that in so doing they could achieve the RFS2 target despite the so-called "blend wall."

Some progress toward higher ethanol consumption will likely occur next year, as long as the energy price of ethanol remains lower than that of gasoline. But the extra pressure of mandates will most likely be required to attain the level of ethanol consumption envisioned by EISA.

Would the changes for 2014 significantly affect the ethanol and corn industries? Not much, because the fractional changes are small. But the "blend wall adaptation policy" EPA proposes could have more significant impacts over subsequent years, especially if gasoline consumption continues to fall as the Energy Information Agency anticipates. Investment in biofuels will surely be spooked if mandated markets cannot be relied upon.

Richard K. Perrin, (402) 472-9818
Roberts Professor
Dept. of Agricultural Economics
University of Nebraska-Lincoln
rperrin@unl.edu

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