

While I was traveling last week, EPA issue [new standards](#) for biofuels. This rule makes changes to the Renewable Fuel Standard program as required by a 2007 statute. The statute sets new specific annual volume standards for cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuel that must be used in transportation fuel. The statute also includes new definitions and criteria for both renewable fuels and the feedstocks used to produce them, including new greenhouse gas emission (GHG) thresholds determined by lifecycle analysis.

Under the statute, the lifecycle GHG emissions of a qualifying renewable fuel must be less than the lifecycle GHG emissions of the gasoline or diesel fuel that it replaces. Four different levels of reductions are required for the four different renewable fuel standards. For renewable fuels, the threshold is 20%, for example.

EPA concluded that:

- \* Ethanol produced from corn starch at a new natural gas-fired facility using advanced efficient technologies complies with the 20% GHG emission reduction threshold.
- \* Ethanol produced from sugarcane complies with the applicable 50% GHG reduction threshold for the advanced fuel category
- \* Cellulosic ethanol and cellulosic diesel comply with the 60% GHG reduction threshold applicable to cellulosic biofuels.

The most interesting finding is the ethanol figure. Ethanol *barely* made the 20% cut, and only after EPA rejiggered the numbers. EPA's explanation sounds reasonable, but it's hard not to be a bit suspicious of the politically convenient outcome.. In its final rule, EPA explained that it had modified initial results to favor ethanol in several regards:

- \* Based on new studies that show the rate of improvement in crop yields as a function of price, crop yields are now modeled to increase in response to higher crop prices. When higher crop yields are used in the models, less land is needed domestically and globally for crops as biofuels expand.
- \* New research available since the proposal indicates that distillers grains and solubles (DGS), a corn ethanol production co-product, is more efficient as an animal feed (meaning less corn is needed for animal feed) than EPA had assumed in the proposal. Therefore, in EPA's analyses for the final rule, domestic corn demand and exports are less impacted by increased biofuel production.

\* Improved satellite data allowed EPA to more finely assess the types of land converted when international land use changes occur, which led to a lowering of modeled GHG impacts. Based on previous satellite data, the proposal assumed cropland expansion onto grassland would require an amount of pasture to be replaced through deforestation. For the final rulemaking analysis EPA used improved satellite data, as well as improved economic modeling of pasture demand, and found that pasture is also likely to expand onto existing grasslands. This reduced the GHG emissions associated with an amount of land use change.

OK, maybe all that is true. But maybe the shrill complaints from corn states congressional representatives had something to do with it, too.