Weekly Outlook: Corn Use for Ethanol Update

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December 11, 2017

The recent strength in ethanol production has led to speculation about changes to USDA’s estimate of corn used for ethanol in the pending WASDE report. Ethanol production for the week ending December 1 set a new ethanol production record with an average of 1.108 million barrels per day, continuing eight consecutive weeks of more than a million barrels a day of production. Currently, the WASDE forecast for corn consumption for ethanol production is 5.475 billion bushels, up 36 million bushels from 2016-17 marketing year estimates. The ability to surpass this projection is possible, but foreign demand for ethanol will be crucial as we move into 2018.

Domestic ethanol consumption is influenced by domestic gasoline consumption, due to the ethanol blending requirement, and the biofuels volume requirement associated with the Renewable Fuels Standard. The EPA final rulemaking for the Renewable Fuels Standard for 2018 was released on November 30. The renewable fuels volume requirement is set at 19.29 billion gallons for 2018, up slightly from the 19.28 billion gallons required in 2017. The conventional ethanol requirement is set at 15 billion gallons for 2018, the same as in 2017 and equal to the statutory requirement level. If the gasoline consumption forecast used by the EPA is correct, the E-10 blend wall will be near 14.3 billion gallons in 2018. The EPA believes an ethanol supply of 15 billion gallons is reasonably attainable in 2018 with a total domestic capacity of 16 billion gallons. Since the ethanol blending requirements did not change, the possibility for greater corn usage in 2018 due to blending is low unless gasoline consumption increases beyond current expectations.

According to the most recent Energy Information Agency (EIA) Short Term Energy Outlook, U.S. retail gasoline price is projected to average $2.45 per gallon in 2018, an increase of five cents from the current expected price in 2017. Despite the projection of higher gasoline prices, gasoline consumption is forecast at 143.27 billion gallons in 2018. The 2018 gasoline consumption projection is up from the 143.03 billion gallons projected for consumption in 2017. EIA’s forecast of ethanol production is set at 1.04 million barrels per day. If the EIA projection is correct, approximately 15.9 billion gallons of ethanol will be produced in 2018. To exceed the current USDA projections for corn use in ethanol, exports need to repeat the impressive performance of the 2016-17 marketing year.

Ethanol export numbers are available from U.S. Census trade data for 2017 through October. For the 2017 calendar year, U.S. exports of ethanol are at 1.09 billion gallons, up almost 16.6 percent from the similar period in 2016. A note of caution is warranted when considering ethanol exports in the current marketing year. During the first two months of this marketing year, ethanol exports are down 19 percent from previous
marketing year levels. The large reduction is due to drastically lower export levels to Brazil and China. Chinese imports of U.S. ethanol are minimal thus far in the marketing year. Brazilian ethanol imports from the U.S. are down 49 percent from last year for the first two months. During the 2016-17 marketing year, U.S. ethanol exports totaled 1.37 billion gallons, with exports to Brazil comprising 36.5 percent of the total. The imposition of the 20 percent tariff rate quota on Brazilian ethanol imports on September 4 is curtailing Brazilian imports. The tariff becomes active at export levels greater than 150 million liters per quarter (39.6 million gallons) and restarted in December. U.S. ethanol exports will require increases in other markets to meet or exceed the export levels attained during the 2016-17 marketing year.

Corn consumption levels for ethanol production during this marketing year is provided in the USDA Grain Crushing and Co-Product Production report. Grain crushing for fuel alcohol is available through October. For the first two months of the marketing year, 915.6 million bushels of corn has been processed for ethanol. The grain crush is up 2.8 percent from 2016-17 marketing year processing numbers over the same period. Using EIA weekly ethanol production numbers, November ethanol production averaged over 1 million barrels per day. These production levels place corn use for ethanol production in a range of 555 to 565 million bushels for the month. With a conservative estimate of corn crush in November, total corn consumption for ethanol production through the first quarter of the marketing year would be well above the current WASDE projection. While this is an encouraging sign for corn use, ethanol stocks have risen for five consecutive weeks to reach 22.5 million barrels as of December 1, a level not attained since June. During the same period last year, ethanol stocks fell around 700,000 barrels under strong export demand.

The December WASDE report may increase the corn use in ethanol projection due to the strong production during the first quarter of the marketing year. Lower ethanol export totals and growing ethanol stocks may create a wait and see scenario. Another strong year of ethanol production is highly likely, but flat projections for gasoline consumption and lower ethanol export levels may limit growth over last marketing year’s performance.