

# POPP | HUTCHESON<sub>PLLC</sub>

## *The Property Tax Firm*

## Popp Hutcheson Announces

Popp Hutcheson's Jim Popp, Mark Hutcheson, David Hugin and Darlene Sullivan will present at the upcoming A&M Legal Seminar on Ad Valorem Taxation, August 27th - August 29th, in San Antonio, TX. Jim Popp will present on the Equal and Uniform Panel this year and David Hugin will present on the Annual Case Law Update Panel. Darlene Sullivan and Mark Hutcheson will speak as Moderators.

### Expert Opinion

## U.S. Ethanol Industry Overview

by Greg Kort

The ethanol industry has grown significantly over the past decade, with annual reported production increasing from 1.6 billion gallons in 2000 to 13.3 billion gallons in 2013, according to the U.S. Energy Information Administration. Ethanol demand increased substantially in the 1990's, when U.S. federal law began requiring the use of oxygenates in reformulated gasoline in cities with unhealthy levels of air pollution on a seasonal or year-round basis. These oxygenates included ethanol and MTBE which, when blended with gasoline, reduce vehicle emissions. Although the federal oxygenate requirement was eliminated in 2006, oxygenated gasoline continues to be used in order to help meet separate federal and state air emission standards under the Renewable Fuel Standard ("RFS") program. The refining and chemical industry has all but abandoned the use of MTBE making ethanol the primary clean air oxygenate currently used in the U.S. The RFS mandates that U.S. refiners must blend a specific amount of renewable fuels into their gasoline each year, and it set a goal for the industry to blend 36 billion gallons of renewable fuels a year by 2022.

As of January 2014, the Renewable Fuels Association ("RFA"), estimated that there were 192 ethanol production facilities in the United States with a nameplate capacity to produce approximately 14.9 billion gallons of ethanol per year. Annual ethanol production for 2014 is expected to be 13.9 billion gallons. Every bushel of corn used in the manufacture of ethanol can produce 2.7 to 2.8 gallons of ethanol. In addition, one-third of every 56-pound bushel of grain that enters the ethanol process is enhanced and returned to the animal feed market, most often in the form of distillers grains. This

co-product is fed to beef cattle, dairy cows, swine, poultry, and fish. Today, more than 75% of dry mill ethanol plants also extract corn distillers oil, a product that is sold into the feed market or used to produce biodiesel.

### Global Market

The U.S. ethanol industry was responsible for an estimated 57% of world output in 2013. Brazil, which produced about 6.3 billion gallons and accounted for approximately 27% of world ethanol production, was second. At 1.4 billion gallons of production, the European Union contributed 6% of the world ethanol supply. China, India, and Canada were other leading producers in 2013. Ethanol production in Thailand and Australia continued to make strides, while the South and Central American countries of Argentina, Peru, Paraguay, and Guatemala also ranked among the world's top ten producers. The EU currently has a 5.75% blend mandate of biofuels in place and is expected to move to a 10% blend by 2012. China has a 10% blend mandate by 2012, however the country currently has just five ethanol plants in operation. India has a 5% blend mandate in place and is scheduled to move at a 10% blend as soon as production is in place.

### Outlook

The outlook for the U.S. ethanol industry has stagnated in the past few years primarily due to higher corn prices, weak acceptance of higher ethanol blended fuels and lack of infrastructure. U.S. gasoline consumption is projected to decline over the next two decades as more fuel efficient engines are adopted. The wave of low cost shale gas that is driving increased adoption of natural gas vehicles could also reduce growth in the gasoline pool that is the market for ethanol fuel demand. Finally, another challenge for ethanol manufacturers from the shale gas revolution is the possibility of corn based ethanol plants becoming obsolete due to the conversion of cheap ethane to ethanol via ethylene based chemical technology.

<sup>1</sup> 2014 Ethanol Industry Outlook, Renewable Fuels Association,

[www.ethanolRFA.org](http://www.ethanolRFA.org)

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