

Supporting American-Made, Clean-Burning Renewable Fuels in Michigan

Ethanol benefits Michigan in many ways – creating jobs, boosting our rural economy, driving prices down at the pump and increasing our energy security.

- More than 22,000 Michigan jobs are connected to the production of renewable fuels, and Michigan ethanol companies employ hundreds of workers directly.¹
- Ethanol-blended fuels reduce prices at the pump for Michigan families.²
- Ethanol reduces the amount of money America sends overseas to pay for foreign oil, to the tune of \$44 billion every year.³



Ethanol also boosts our rural economy. The creation of American-made, renewable fuels brings together our tradition of innovation and our productive agriculture sector. Right here in Michigan, ethanol is refined today at five plants, each of which is located in a rural part of the state and helps boost the local economy:

The Andersons Albion Ethanol, LLC – Albion, MI
CarbonGreen BioEnergy – Lake Odessa, MI
Green Plains Renewable Energy – Blissfield, MI
Marysville Ethanol – Marysville, MI
POET – Caro, MI

¹ Fuels America, Michigan Report. http://www.fuelsamerica.org/pages/fuels-america-releases-new-footprint-anaylsis

² **Iowa State University, "The Impact of Ethanol Production on U.S. and Regional Ga**soline Markets." http://www.card.iastate.edu/publications/dbs/pdffiles/12wp528.pdf

³ Fuels America, "Why Renewable Fuel Matters." http://www.fuelsamerica.org/pages/why-renewable-fuel-matters



Ethanol provides a cleaner alternative to gasoline. The National Lung Association of the Upper Midwest has <u>named E-85 as a Clean Air Choice</u> because it reduces dangerous air pollution⁴ - and a 2014 study by Michigan State University researchers showed that the use of ethanol in Michigan reduces dangerous greenhouse gas emissions by 1.4 million metric tons every year.⁵

Ethanol production is becoming more advanced every day. Using today's methods, each bushel of corn that goes into the ethanol plant produces 2.8 gallons of ethanol, just over half a pound of corn oil, and 17 pounds of animal feed in the form of dried distillers grains. Michigan's ethanol producers aren't just adding value to corn, their byproducts also help support Michigan's livestock farmers by ensuring a reliable and high-quality source of animal feed. And as we grow America's renewable fuel capacity, ethanol is also helping spur new innovation that will further increase our energy security. In September 2014, the first advanced cellulosic ethanol facility came online — a major milestone in the creation of an advanced renewable energy sector here at home.

Ethanol provides an alternative to foreign oil. Considering some of the oil we use comes from countries and areas hostile to the United States, our energy policy must continue to embrace renewable fuels to the greatest possible extent. Ethanol is one reason why we've been able to reduce our country's dependence on foreign oil in recent years — and now is no time to turn back the clock.

Ethanol doesn't impact food prices – and it helps bring down transportation costs.

We can produce ethanol without impacting food prices, as evidenced by the fact that corn production is increasing, and prices are dropping steadily today as retail food prices continue to rise. Many factors impact retail food prices, including labor, transportation, energy and more. In fact, crude oil prices account for the majority of food cost increases.8



⁴ American Lung Association, "Clean Air Choice – Clean Fuels: E85." http://www.cleanairchoice.org/fuels/e85.cfm

⁵ Dale, B. and Kim, S. "Greenhouse Gas Reduction in Michigan Due to Ethanol Fuel Use."

⁶ Renewable Fuels Association, "Ethanol Quick Facts." http://www.chooseethanol.com/pages/quick-facts/

⁷ POET, "First Commercial-Scale Cellulosic Ethanol Plant in the U.S. Opens." http://www.poet.com/pr/first-commercial-scale-cellulosic-plant

⁸ The World Bank, "Long-Term Drivers of Food Prices." http://bit.ly/1kzPpGf