

ENERGY MATTERS

New Technologies Helping To Make Ethanol More Sustainable

(NAPSA)—Ethanol is helping America reduce its dependence on foreign oil, lowering gas prices, improving the environment with lower emissions and growing the economy with jobs that can't be outsourced. In 2014 alone, the ethanol industry created and supported nearly 400,000 new jobs across the country¹. And a University of Wisconsin/Iowa State University study found that, in 2011, ethanol saved consumers an average of \$1.09 per gallon¹.

Now, new technologies are helping make ethanol more sustainable. Enogen™ corn enzyme technology, available only from Syngenta, is the industry's only corn bioengineered specifically to enhance ethanol production. By incorporating Enogen grain into its existing production process, an ethanol plant can reduce its carbon footprint.

In a 100 million-gallon plant, for example, Enogen corn can help save²:

- 350 billion BTUs of natural gas;
 - 10 million kWh of electricity;
 - 68 million gallons of water;
- and
- 106 million pounds of CO₂ emissions.

Similar savings across the U.S. ethanol industry would generate enough natural gas to heat three-quarters of a million homes for a year and enough electricity to light 1.5 million more, while saving water equal to 140 billion eight-ounce glasses. The reduction in CO₂ emissions would be equivalent to removing approximately 630,000 passenger cars from the road each year².

More Ethanol From the Same Kernel of Corn

Last year, Quad County Corn Processors (QCCP) helped kick off a new era for the biofuels industry



New technologies help make ethanol more sustainable and better able to improve the economy and the environment.

when it opened its 2 million-gallon cellulosic ethanol facility in Galva, Iowa. QCCP employs Cellerate™, a revolutionary process technology, to produce cellulosic ethanol from corn kernel fiber. Cellerate is licensed exclusively by Syngenta and will be marketed along with Enogen. Dry grind ethanol plants can integrate Cellerate into their existing production process. With Cellerate, the biofuels industry now has the technology to create 2 billion gallons of additional cellulosic ethanol—all from the same kernel of corn³.

During 2013, Syngenta announced six commitments to address the global food security challenge. The Good Growth Plan has specific, ambitious and measurable targets that focus on boosting resource efficiency, rejuvenating ecosystems and strengthening rural communities. Enogen and Cellerate are examples of how Syngenta is bringing The Good Growth Plan to life by helping ethanol plants increase production efficiency and make ethanol more sustainable.

Ethanol is a fuel for today and tomorrow. Ethanol is making a significant contribution to the U.S. economy, helping to drive down gasoline prices for consumers and reduce carbon emissions for a cleaner environment.