

DUPONT CELLULOSIC ETHANOL: COMMERCIALIZING ADVANCED RENEWABLE FUEL IN IOWA



Over the last ten years, DuPont has invested hundreds of millions of dollars and challenged our top scientists to deliver on the potential of cellulosic ethanol. With construction underway of our commercial-scale facility, we stand by our commitment to this industry and to helping the United States lead the world in the production of advanced renewable transportation fuel.

As a market-driven science company, DuPont invests nearly 2 billion dollars a year on R&D, with more than 85 percent of these dollars directed at three global challenges: increasing food productivity, decreasing dependence on fossil fuels and protecting people and the environment from harm. Today's research builds upon a diverse technical toolkit that includes industrial biotechnologies, agricultural biosciences, nanotechnology, chemistry, materials science, engineering and more.



Yes to the RFS!

Commercialization of the cellulosic biofuels industry is creating jobs, supporting farmers and driving innovation. It is energizing the global economy, tapping into the world's supply of renewable biomass. But to capitalize on this renewable source of energy, private companies need stable, long-term policy support. Policies like the U.S. Renewable Fuel Standard are CRITICAL to encourage companies to innovate and invest. *Those policies need to remain in place.*



DEMONSTRATION FACILITY

Location: Vonore, Tennessee
Feedstock: Corn Stover, Switchgrass
Product: Cellulosic Ethanol
Capacity: 250,000 gallons per year
Project Profile: Working in partnership with Genera Energy and the University of Tennessee Biofuels Initiative, this demonstration facility has generated the data necessary for commercial production, while also producing the renewable fuel used to operate flexfuel vehicles at UT.

DUPONT CELLULOSIC ETHANOL FACILITY

PLANNED COMPLETION
Q3 2014

Location: Nevada, Iowa
DuPont Investment: Approximately \$225 million
Status: Construction begins 2012, operational in 2014
Feedstock: Corn stover
Products: Cellulosic ethanol
Capacity: 30 million gallons per year



Project Profile: One of five commercial plants currently underway in the United States, this cellulosic ethanol biorefinery will be fueled by corn stover biomass harvested from a 30-mile radius around the facility. Once completed, it will be one of the first and largest advanced biorefineries in the world, helping the US to lead the global race for scale while spurring additional private investment in the industry.

JOBS: GOOD FOR RURAL AMERICA

60-70 permanent jobs at the plant, including operators, technical personnel and management

1000

construction-related jobs, with a site workforce of over 350 at its peak

150 individuals involved in collection, transportation and storage of seasonal feedstock collection



500 local farmers who will supply corn stover for the biorefinery

PATH TO COMMERCIALIZATION

2000-2005
DuPont works in partnership with DOE's NREL to increase performance of cellulosic ethanol enzymes and fermentation technology. The results of that work formed the foundational science for the commercial biofuels program.



2002
Technology development begins with a 2002 DOE cost-share grant

2009
Demonstration facility in Vonore, TN begins operations, working in partnership with Genera Energy and The University of Tennessee Biofuels Initiative

2010
Feedstock Harvest Program: DuPont begins multi-year supply chain research work in collaboration with Central Iowa corn producers, harvest service experts, equipment manufacturers, and Iowa State University. Research focuses on optimizing the collection, transport and storage of biomass.

2011
DuPont selects Iowa as location for first commercial facility with investments from Iowa Power Fund and Grow Iowa Values Fund.

2011
DuPont purchases land adjacent to the existing Lincolnway Energy ethanol plant for CE commercial facility. Co-location enables synergies in energy and logistical management.

2012
Construction begins on commercial-scale facility in Nevada, Iowa

2014
Nevada site begins operations of 30 million gallons per year facility.

