



## Press Release

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### *POET-DSM's cost-competitive fuel cuts emissions, creates jobs, improves energy security* **First commercial-scale cellulosic ethanol plant in the U.S. opens for business**

POET-DSM Advanced Biofuels, LLC, a joint venture of Royal DSM and POET, LLC, today proved its revolutionary technology that converts agricultural residue into renewable fuel at the Grand Opening of its first commercial cellulosic ethanol plant in Emmetsburg, Iowa.

The plant, named “*Project LIBERTY*,” was formally opened in the presence of His Majesty Willem-Alexander, King of the Netherlands, U.S. Secretary of Agriculture Tom Vilsack, Deputy Under Secretary Michael Knotek of the Department of Energy, Governor Terry Branstad and Lieutenant Governor Kim Reynolds of Iowa, other dignitaries and thousands of guests.

Project LIBERTY converts baled corn cobs, leaves, husk and stalk into renewable fuel. The plant has now officially started up, processing its first batch of biomass into cellulosic ethanol and is moving forward toward continuous operation. At full capacity, it will convert 770 tons of biomass per day to produce ethanol at a rate of 20 million gallons per year, later ramping up to 25 million gallons per year.

Feike Sijbesma, Chief Executive Officer and Chairman of the Managing Board of Royal DSM said: “*This is an historical day in the development of plant-residue-based cellulosic ethanol as a viable, commercially attractive alternative to gasoline as we are moving from the fossil age to the (bio-)renewable age. For DSM this is a strategic investment, applying our proprietary technology to convert agricultural residue on a commercial scale, allowing it to be replicated at other facilities globally as we are ramping up our cellulosic ethanol licensing business.*”

“*Some have called cellulosic ethanol a ‘fantasy fuel,’ but today it becomes a reality,*” said Jeff Broin, POET founder and Executive Chairman. “*With access now to new sources for energy, Project LIBERTY can be the first step in transforming our economy, our environment and our national security.*”

This first commercial-scale cellulosic ethanol facility marks a huge step forward in the wider adoption of biofuels, both in North America and elsewhere. It is also a victory for the Renewable Fuel Standard (RFS), which prompted increased investment into advanced biofuels that accelerated development of this new technology. The RFS is a critical tool in moving the U.S. beyond 10 percent ethanol use to allow this new technology to expand to other parts of the country.

Meanwhile, in other parts of the world the development of cellulosic ethanol is expected to be boosted as POET-DSM’s Liberty process and technology to effectively convert agricultural residue using a proprietary cocktail of enzymes and yeast becomes available via licensing.

The Departments of Energy and Agriculture and the State of Iowa have been important partners in bringing this technology to commercial scale. The DOE has awarded \$100 million in grants to support the costs of

engineering and construction, as well as biomass collection and infrastructure. The State of Iowa has taken a lead role in helping make Project LIBERTY a reality by contributing \$20 million in grants for capital costs and feedstock logistics. USDA invested \$2.6 million to support the delivery of more than 58,000 dry tons of corn crop residue, helping establish the feedstock logistics network.

Assuming continued support from the RFS program and depending on the adoption rate of cellulosic ethanol both in and outside the United States, POET-DSM Advanced Biofuels LLC has the potential to achieve net sales of about \$250 million from bio-ethanol and license income by 2020 with EBITDA margins clearly above average.

Remarks about Project LIBERTY's Grand Opening:

**Agriculture Secretary Tom Vilsack:** *"The Project LIBERTY opening demonstrates that America is ready for advanced renewable energy production. USDA invested to help bring this facility online because it is boosting America's energy independence, cutting carbon pollution, and holds great promise for our domestic agriculture and energy industries. This facility has already created local jobs and opportunities for farmers, and it will continue to spur local investment and open the door for new technology and job growth across rural America. I congratulate the POET-DSM Advanced Biofuels team on their grand opening and for all they have done and the opportunities they will continue to create for farmers and rural communities."*

**Iowa Governor Terry Branstad:** *"We have been relentless supporters of the biofuels industry and know that the success of biofuels is a result of the efforts by hard-working farmers, the hard-working Iowans at the biofuels facilities and the communities that support them. In Iowa, more than 82,000 good-paying and important careers are supported by the biofuels industry. We want to work with companies like POET-DSM, and others, to sustain and grow more careers here at home."*

**Iowa Lieutenant Governor Kim Reynolds:** *"We're pleased to officially welcome POET-DSM to Emmetsburg today. Iowa is a proud agriculture leader, ranking first in the nation for the production of several commodities, including corn. That leadership helps our state also be a top producer of biofuels and saves consumers money at the pump and creates quality careers across our state."*

Photos will be uploaded throughout the day to the [POET DSM Flickr Stream](https://www.poetdsm.com/libertymedia). B-roll will be at [www.poetdsm.com/libertymedia](http://www.poetdsm.com/libertymedia) as it is available in the afternoon/evening.

#### **Fast facts about Project LIBERTY:**

- Capital costs are \$275 million.
- Fuel from Project LIBERTY represents a GHG reduction of 85%-95% over gasoline.
- The plant employs more than 50 people directly, and biomass harvesting is creating another 200 indirect jobs in the community. In addition, hundreds of people were involved in the construction of the plant.
- The state of Iowa has estimated a \$24.4 billion impact on the state over 20 years.
- Project LIBERTY will consume 285,000 tons of biomass annually from a 45-mile radius of the plant.
- Farmers remove approximately 1 ton of residue (~25%) per acre.
- Project LIBERTY will spend approximately \$20 million annually purchasing biomass from area farmers, providing additional income to the farmers.
- Project LIBERTY will produce up to 25 million gallons of cellulosic bio-ethanol annually.

#### **About POET-DSM Advanced Biofuels, LLC**

POET-DSM Advanced Biofuels, LLC, is a 50/50 joint venture between Royal DSM and POET, LLC. Based in Sioux Falls, South Dakota, the company is a cooperative effort of two innovators that provides a key to unlocking the opportunity of converting corn crop residue into cellulosic bio-ethanol. Built on the strengths of both companies, the joint venture has a critical mission: to make cellulosic bio-ethanol competitive with

corn bio-ethanol, the most competitive renewable liquid transportation fuel on the US market today. Drawing on the deep expertise and experience of POET and DSM in different areas of converting cellulosic biomass into bio-ethanol, POET-DSM Advanced Biofuels has built its first commercial-scale plant co-located with POET' Biorefining - Emmetsburg in Emmetsburg, Iowa. Based on this plant, the JV plans to globally license an integrated technology package for the conversion of corn crop residue to cellulosic bio-ethanol. More information: [www.poetdsm.com](http://www.poetdsm.com)

#### **About POET**

POET, one of the world's largest ethanol producers, is a leader in biorefining through its efficient, vertically integrated approach to production. The 25-year-old company has a production capacity in excess of 1.6 billion gallons of ethanol and 9 billion pounds of high-protein animal feed annually from its network of 27 production facilities. POET, through its joint venture with DSM, also operates a commercial-scale cellulosic ethanol plant in Emmetsburg, Iowa. For more information, visit <http://www.poet.com>.

#### **DSM - Bright Science. Brighter Living.™**

Royal DSM is a global science-based company active in health, nutrition and materials. By connecting its unique competences in Life Sciences and Materials Sciences DSM is driving economic prosperity, environmental progress and social advances to create sustainable value for all stakeholders simultaneously. DSM delivers innovative solutions that nourish, protect and improve performance in global markets such as food and dietary supplements, personal care, feed, medical devices, automotive, paints, electrical and electronics, life protection, alternative energy and bio-based materials. DSM's 24,500 employees deliver annual net sales of around €10 billion. The company is listed on NYSE Euronext. More information can be found at [www.dsm.com](http://www.dsm.com).

Or find us on:    

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#### Forward-looking statements

This press release may contain forward-looking statements with respect to DSM's future (financial) performance and position. Such statements are based on current expectations, estimates and projections of DSM and information currently available to the company. DSM cautions readers that such statements involve certain risks and uncertainties that are difficult to predict and therefore it should be understood that many factors can cause actual performance and position to differ materially from these statements. DSM has no obligation to update the statements contained in this press release, unless required by law. The English language version of the press release is leading.