



Iowa Renewable Fuels Association

GREEN Team

Grassroots REnewable Energy Network

Newsletter for renewable fuels advocates

5505 NW 88th Street #100 • Johnston, IA USA 50131-2948 • 515-252-6249 • FAX 515-225-0781

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Algae Project Advances at GPRE Plant

BioProcess Algae LLC has started operating commercial-scale algae bioreactors at **Green Plains Renewable Energy Inc.**'s ethanol plant in Shenandoah, Iowa. **GPRE, BioProcessH2O LLC**, a division of Tennessee-based water filtration company **Clarcor Inc.**, is working as a joint venture with international renewable energy investment group **NTR plc**.

This will be the second phase of a project designed to utilize waste products at ethanol facilities such as waste water, CO₂ and waste heat along with sunlight and nutrients to promote the growth of algae that can in turn be used to produce saleable co-products such as biodiesel and animal feed. The \$11.5 million project has received \$4 million in financial assistance from the state of Iowa—\$2 million for each phase of the project.

GPRE CEO Todd Becker said the goal of the project is to manufacture feedstock. "We're focused on acting as a farmer in the process," he said. "There's a lot of money being deployed into using algae for fuels and things like that. We wanted to focus first on making sure we had the feedstock."

A December report from **the Iowa Office of Energy Independence** stated that **BioProcess Algae** plans to identify what natural algae can be used in Iowa's climate and verify that it can produce continuously at a level exceeding 200 tons per acre per year. At that level of production, a 50 MMgy ethanol plant could be expected to extract enough algal oil to produce 5.8 MMgy of biodiesel and 51,000 tons of high-protein meal product per year.



Oregon and Canada Both Establish Biodiesel Requirements

With more renewable fuel options becoming available, many areas have decided that it's time to go green. The state of Oregon as well as the Canadian government are two groups that are following this trend.

Oregon's in-state biodiesel production threshold of 15 MMgy was recently met, triggering Oregon's B5 requirement. Following April 1 of this year, all diesel fuel sold in Oregon must contain at least 5 percent biodiesel.

Daniel Shafer, principal manager of Beaver Biodiesel LLC, a small-scale biodiesel plant in Albany, Ore., stated he thinks this new policy is a statement about Oregon's commitment to renewable energy. Shafer added, "Beaver Biodiesel is glad to be part of Oregon's competitive advantage in developing a renewable energy economy."

Canada also announced a national biodiesel requirement. Diesel and home heating fuel in Canada will soon be required to contain at least 2% content of renewable fuels.

Environment Minister Peter Kent said new regulations would be introduced within weeks to implement the policy that would come into force in July. The regulations echo similar policies that came into force last September that require gasoline to have a minimum 5% content of renewable fuels. The Canadian government estimates these two regulatory policies would result in a four million ton reduction in yearly greenhouse gas emissions, which is equivalent to removing an astonishing one million vehicles from the roads.

\$9 Million Awarded to DuPont Danisco to Build Cellulosic Ethanol Facility and Create Iowa Jobs

DuPont-Danisco Cellulosic Ethanol LLC (DDCE) was recently awarded a \$9 million grant by the **Iowa Power Fund Board** to build a commercial scale demonstration biorefinery facility to produce cellulosic ethanol and create jobs in the Iowa counties of Story or Webster. An announcement is expected by early summer as to the final site location. At least 60 full-time jobs are an expected result of this project.

DDCE will also provide funds of \$226 million to bring the total project cost to over \$235 million. This demonstration biorefinery facility will have the ability to produce 25 million gallons per year of cellulosic ethanol in Iowa.

Menendez Floats Senate Bill to Cut Oil Subsidies

Robert Menendez (D-NJ) has reintroduced legislation that would halt tax breaks for the oil industry, following **President Obama's** State of the Union call for reducing subsidies for oil companies. This legislation could generate more than \$20 billion over a decade.

"It's incredible that some of the richest corporations in the history of the world are allowed to shortchange the American taxpayer," Menendez said. "Middle-class families see the price at the pump rise and wonder why the federal government is heaping favors on oil companies."

"I don't know if you've noticed, but they're doing just fine on their own. So instead of subsidizing yesterday's energy, let's invest in tomorrow's," said President Obama during his State of the Union address.

Debunker Shermer Speaks at Conference

Dr. Michael Shermer demonstrated recently at the **National Biodiesel Conference & Expo** how harmful pseudoscience can be to society. Shermer warned that cleaner-burning fuels like biodiesel have been the target of junk science, causing people to dismiss the benefits based on false assumptions.

"Biodiesel has clear, documented, scientifically proven benefits," Shermer said. "Yet detractors of biodiesel have made it the target of junk science, pseudoscience, nonscience, and nonsense. As a society, we need to understand the impact that jumping to conclusions can have on us."



Michael Shermer

ISU Student Receives Scholarship to Attend 2011 National Ethanol Conference

The **Renewable Fuels Association (RFA)** and the **Renewable Fuels Foundation (RFF)** recently announced the recipients of scholarships to attend the **16th Annual National Ethanol Conference: *Building Bridges to a More Sustainable Future***. Recipients will receive a complimentary registration to the conference, providing them the opportunity to meet and connect with ethanol industry leaders, top policymakers and preeminent experts in the field of renewable fuels.

One of this year's recipients is **Andy Pringnitz**, a junior undergraduate student at **Iowa State University**, where he is studying Agricultural Business, Economics, and International Agriculture. Having grown up on the family farm, along with his leadership roles **FFA** and other ag associations, Andy knows that agriculture and biofuels are vital to the future of America and planet earth, and he is excited to see the industry's progress into the future.

Biodiesel Powered City Buses Give Green Option

CTTransit as well as **St. Louis Metro** bus riders will not only enjoy more room on the new fleet of buses powered by biodiesel, but they'll breathe easier as well. Passengers on heavily traveled routes running through parts of Connecticut and St. Louis will be some of the first to enjoy these improvements.



Philip Fry, general manager for **CTTransit**, recently told the Stamford Advocate that the busses are part of a multi-year order of buses being purchased by the **Connecticut Department of Transportation** to replace much of CTTransit's fleet. In addition to reducing crowding, he expects the switch to result in better fuel economy. According to the article, the biodiesel buses also feature equipment that meets tougher federal emissions standards for nitrogen oxide emissions.

"The emissions are almost too low to be measured," Fry said. "In some cities the air coming out of the exhaust system is cleaner than the air going in."

Photos Posted!

To view photos from the 5th Annual Iowa Renewable Fuels Summit visit the link below:

<http://www.youtube.com/watch?v=Yk0xMbJqB3s>

Top U.S. Government Official Testifies on Higher Oil Prices

The head of the **Energy Department's Energy Information Administration (EIA)**, **Richard Newell**, told the **Senate Energy and Natural Resources Committee** that production is unlikely to follow step with growing world oil demand in 2011 and 2012.



Richard Newell

Due to this production issue, he forecast the price of West Texas Intermediate crude oil — a standard indicator — to average \$93 per barrel for 2011, a \$14 increase over last year's average. However, he cited a 30 percent chance that oil could exceed \$110 per barrel in December.

Newell also forecast \$99 per barrel oil in 2012. Despite near-term oil fears, EIA's long-term forecast also showed progress in reducing oil imports. By 2035, it predicts that U.S. oil imports will decline to 42 percent of total use, compared with 60 percent in 2005. Citing improved vehicle efficiency standards, greater use of biofuels and greater oil production as factors, Bingaman said 2005 "may well have been the high-water mark in U.S. oil independence."

American Ethanol Partners with NASCAR Racing Team

American Ethanol has recently established a sponsor partnership with **Richard Childress Racing** for its driver, **Clint Bowyer**, during the 2011 NASCAR Sprint Cup Series season.

American Ethanol will be the primary sponsor of the No. 33 Chevrolet car at the Kansas Speedway 400 and an associate sponsor of the car for the duration of the season. Bowyer, who is a Kansas native, will serve as an official spokesman for American Ethanol this season.

"Born and raised in the Midwest, it's truly an honor to support American farmers as they strive to develop energy independence for our country," said Bowyer. "I look forward to representing American Ethanol both on and off the track beginning this weekend in Daytona."

National Corn Growers Association as well as **Growth Energy** are the primary organizations that created American Ethanol, the coalition that signed a partnership agreement with NASCAR to promote the use of domestically-produced ethanol from both corn and cellulosic biomass.

California Moving Corporation Goes Green

NorthStar Moving Corporation, an eco-luxury mover in California, was recently given the Signature Award for Best Use of Green Practices by the **California Apartment Association of Los Angeles (CAA-LA)**. The award honors outstanding apartment communities and industry partners in Los Angeles County. NorthStar Moving was chosen for their unique eco-luxury moving and storage services as well as green corporate practices.

"From responsible recycling, biodiesel moving trucks, eco-friendly storage, and energy efficient warehouses and offices, NorthStar Moving ensures that a move is green from beginning to end," **CAA Los Angeles Executive Director Ryan Minniear** said.

GREAT OPPORTUNITY!

BIODIESEL TRAINING FOR AUTOMOTIVE TECHNICIANS

To learn about biodiesel and its performance in engines from a mechanic's view attend a FREE 3-hour class at your community college.

Iowa's Community Colleges in partnership with the Iowa Biodiesel Board are offering the classes, along with a meal, in the evenings this spring. Don't miss this great opportunity to attend FREE!

Click here for the schedule of classes:

www.onesourcetraining.com

New York Bioheat Requirement Enacted

New York City has a billion gallon home heating industry and is one of the largest users of biodiesel. Recently two dozen biodiesel industry leaders and feedstock suppliers from ten states participated in the New York Bioheat "The Big Apple Tour" to see first-hand what is happening in the big city.

A 2 percent Bioheat requirement citywide was recently enacted, which will consume an estimated 20 million gallons of biodiesel annually.

New York Assemblyman Marc Alessi said, "I find this extremely exciting. The future is here in terms of what we can do, whether legacy heating, electrical generation, in cars, in trucks. B20 blended into any system can grow our production and use; and it's here, right here, right now."

New York City, Ford, Disneyland Grab Top Honors at Biodiesel Conference

The **National Biodiesel Board** recognized several biodiesel champions at the annual “**Eye on Biodiesel**” awards presentation. The winners were recognized for their innovative efforts using biodiesel. Three of these winners included the city of **City of New York, Ford Motor Company**, and **Disneyland Resort**.

New York City Mayor Michael Bloomberg signed air quality legislation that requires all heating oil sold within the city to contain 2 percent biodiesel by October 1, 2012. This change will replace 20 million gallons of petroleum based fuel. The City of New York also uses biodiesel blends in several of their large diesel trucks as well as snow plows.

Another winner, Ford Motor Company, has directly embraced biodiesel by designing, engineering, and manufacturing its new Ford F-Series Super Duty trucks to support the use of B20 biodiesel blends. This innovation is a chance to significantly impact the marketplace.

Disneyland Resort has also shown strides toward a more environmental way of living through their use of biodiesel. Throughout the park, 56-year-old steam powered trains circle as an iconic image. These trains now run on B98 from recycled cooking oils from Disney’s own kitchens. Their efforts to become more environmentally friendly are being recognized.

E15 Fuels NASCAR

With the 53rd Daytona 500 fast approaching, drivers will be fueled with a more eco-friendly option. This 2011 season, all three national NASCAR series will be running on American made, American produced fuel, **Sunoco Green E15**. NASCAR has also entered into partnerships with **National Corn Growers Association (NCGA)** as well as **Growth Energy**.

“NASCAR is very proud to welcome as partners the hard-working family farmers all over the United States who grow the corn that will be used in our new Sunoco Green E15 fuel,” said **Brian France, Chairman and CEO of NASCAR**. “We are happy our sport can play a part in creating jobs and fostering energy independence by using renewable fuel grown and produced in America.”



Ethanol Report on World Supply and Demand Estimates

The February **USDA World Agriculture Supply and Demand Estimate (WASDE)** report lowered its corn supplies forecast of marketing year ending stocks to 675 million bushels, which is down 70 million bushels from the January estimate. The change follows slight increases in the estimates of corn for ethanol use and sweetener/starch use. Globally, USDA is estimating a smaller grain (wheat, rice, corn, etc.) supply than last year’s record amount of more than 2.7 billion metric tons. “People lose sight of the global picture of the grain



Geoff Cooper

markets,” **Renewable Fuels Association (RFA) Vice President of Research Geoff Cooper** says. “The fact of the matter is, the global grain supply remains very strong.”

Cooper says RFA believes USDA may be overestimating corn for the use of ethanol.

“Even if we do assume that we export 300 or 400 million gallons of ethanol in this marketing year, that still means the domestic market is going to need to absorb the remaining 13.3 or 13.4 billion gallons, which seems unlikely given the E10 blend wall and the fact that E15 hasn’t really penetrated the market yet.”

Novozymes CEO Forecasts Cellulosic Ethanol Takeoff in 2013

The first commercial plants manufacturing ethanol made from plant waste and grasses rather than foodstuff are set to ramp up in 2013, according to **Novozymes A/S Chief Executive Officer Steen Riisgaard**.

Novozymes partner **Poet LLC** is currently attempting to secure a government loan guarantee to build a plant to make the fuel, called second-generation or 2-G biofuel, within two years, Riisgaard recently commented in an interview.

“It looks like 2013 is the year 2-G will take off,” Riisgaard said. “It will still not be big numbers in 2013 because they’re just coming on stream, and then you will have to wait for the next round of building based on the advances from these first factories. 2014-15 is probably where we can see the whole thing take off in a big way.”



Steen Riisgaard