

# BCO Newsletter

## Bioenergy – Climate Protection – Oil Reduction

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**COMMENTARY**

**What is the Sun Grant Initiative?**  
**By the Sun Grant Association**

Today, land grant universities serve agriculture by implementing research, extension, and educational programs to benefit agricultural producers and consumers, to assist rural families and communities, and to conserve the world's natural resources. Clearly, agriculture will play an important role in providing power, fuels, and biobased products for America. Because of the unique position land grant universities have in science, service and education, it is critical that they are proactively involved in creating the biobased economy. Over the past several years, land grant universities have been working to develop a new model for harnessing the capacities of the distributed agricultural research and education system into a national network that can work in ready partnership with the federal agencies to help reach national bioenergy goals, which has led to the development of the Sun Grant Initiative.

**The Sun Grant Mission**

The mission of the Sun Grant Initiative is to (1) enhance national energy security through development, distribution and implementation of biobased energy technologies, (2) promote diversification and the economic viability of America's agriculture through land grant based research, extension, and education programs in renewable energy and biobased products, and (3) promote opportunities for biobased economic diversification and the development of new biobased industries in rural communities.

**Authorizations and Funding**

The Sun Grant Initiative is authorized in the Energy Title of the 2002 Farm Bill. It receives funding from the Departments of Agriculture, Energy, and Transportation. Current funding resources will amount to over \$40 million over the course of the next four years.

**Centers of Excellence and a National Network**

The 2002 Farm Bill establishes a network of five land grant universities that are serving as regional Sun Grant Centers of Excellence. The universities include South Dakota State University, Oklahoma State University, the University of Tennessee – Knoxville, Cornell University, and Oregon State University. Federal funds will be shared among each of the regions. As federal funds become available, a portion of the funds will be utilized at each center to enhance their abilities to develop model research, extension, and educational programs on agriculture-based renewable energy technologies and biobased industries located in rural communities. In addition, each Center will oversee the a grants program that will be competitively awarded among all land grant universities in the region, drawing on the expertise of all land grant universities to address national priorities at the regional level.

These regional programs will embrace the multi-state, multi-function, multi-disciplinary integrated approach that is at the heart of the land grant method of addressing problems. The centers will interface their activities with DOE research laboratories at Oak Ridge, TN (ORNL, Oak Ridge National Laboratory) and Golden, CO (NREL, National Renewable Energy Laboratory).

### **National Priorities**

The Sun Grant Initiative programs will revitalize rural communities, enhance the nation's energy security and improve our soil, water, and air. The primary challenges that must be faced include:

- The emergence of agriculturally based bio-industries that can coexist with and complement petroleum based industries.
- Developing biobased industries that improve the environment and protect air, water, soil, and other natural resources.
- Developing biobased industries that diversify American agriculture and complement food production.
- Developing industries that provide opportunities for the growth and prosperity of rural America.

The transition to agriculturally-based bio-industries will create economic opportunities for other sectors of the US economy through creation of high-tech companies and jobs. Through the Sun Grant Initiative, the US will continue to be a world leader in technology and innovation for future high-tech commerce and trade. Agriculture will not only produce feedstocks, but agricultural industries will also lead the world in technologies and the intellectual property that makes this transition to a biobased economy possible.

### **Regional Priorities**

During the development of the Sun Grant Initiative a series of regional workshops were held with agricultural, industry and community leaders. Priority needs were identified for bioenergy and bioproducts projects within each region. The unique structure of the Sun Grant Initiative will enable the land grant universities to address national issues of concern to the federal agencies in the context of regional and local needs and circumstances.

### **Relation to the Sun Grant Initiative to Federal Agency Biomass Programs**

One of the remaining challenges in developing bioenergy and bioproducts technologies is that they have to be developed as a complete system to be cost effective and economically viable. Many new biobased businesses have failed because they only addressed one part of a new biobased economy. In order for farmers to increase production of a needed biofuels feedstock materials they need to be assured of a steady demand. In order for bio-industries to develop a new product, they have to be assured of a steady supply of biobased feedstock materials. The rate limiting cost in developing biobased feedstock is often the cost of shipment; it may be most cost effective to process feedstock within a fifty mile radius of the site where it was grown, which in turn requires a distributed network of bioprocesses or generators. The generators may not break even unless they are also used to co-generate heat or unless they feed energy back into local energy grids. The Sun Grant Initiative provides a means for the Department of Energy and the Department of Agriculture to access the research and education expertise of the land grant university system across the country to develop new technologies and education programs. The structure of the Sun Grant Initiative will enable the Departments to "put the pieces" together to create comprehensive regional scale projects that can address multiple real world production needs simultaneously. The Sun Grant Initiative complements and completes the mix of legislative and funding tools that support biomass research and development. As the Sun Grant Initiative develops its programs, it will integrate the national bioenergy research and education priorities identified by the federal agencies with the state and local priorities identified in its regional workshops and listening sessions.

### **Biomass Monograph Project**

There are widespread efforts in the areas of renewable biobased energy and bioproducts from biomass. One problem identified is that the work done so far is not available in a single, logically organized, complete piece. It also neglects some of the regional differences and opportunities related to biomass. Further, much of the research available is not

readily available in a format that can be easily digested and understood by the policy makers and the general public. The Biomass Monograph Project seeks to engage some of the country's top biomass authorities to provide a comprehensive analysis of the current state of biomass, alternative paths for biomass development, and to quantify impacts associated with biomass industry development where possible.

The result of this project is not expected to be a roadmap. It is also not expected to include any specific recommendations. Rather, it is designed to be a comprehensive educational reference. Most of the contents of the monograph will not be new research, rather a first-of-its-kind organization and packaging of existing work. This work will complement existing research efforts with minimal overlap, and fill a niche that will benefit all of the agencies and organizations and individuals contributing to the advancement of a feasible and valuable biobased industry for America. Although pieces of the project will be shared over the next year through presentations, articles and collaborative meetings; the final monograph will be released in spring of 2007.

## **FEATURED ARTICLE**

### **2005 Solar Decathlon: More than Solar**

On October 7-16, Washington DC was the site of the 2005 Solar Decathlon, an international collegiate competition to promote solar energy and energy efficiency in home design. The National Mall was transformed into a "solar village" displaying 18 solar-powered homes designed by university teams. The solar-powered homes participated in ten competitions: architecture, dwelling, documentation, communications, comfort zone, appliances, hot water, lighting, energy balance, and "getting around," the last of which required teams to power an electric car from energy generated by their homes. The University of Colorado (CU) and several other teams went beyond these categories by including biobased products in the design and construction of their homes.

The winner of the competition was CU's biobased, solar-powered home, "BioS(h)IP." The name was derived from the team's goal to create a home composed of nearly 90 percent biobased products and CU's patent-pending structural insulated panel system (Bio-Sips), made from wastepaper panels and soy insulation. CU's mission is "to integrate natural materials and innovative technologies in an environmentally conscious, publicly accessible, modular, solar home design." The team stressed, "If more residences were built and operated using such techniques, overall US energy use and associated pollution emissions would be greatly reduced."

According to the Farm Security and Rural Investment Act, a biobased product is determined by the USDA Secretary "to be a commercial or industrial product (other than food or feed), that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials.

The CU home is a living demonstration of taking laboratory research and concepts and making it into a reality; in its efforts the University has been in close contact with the United States Department of Agriculture (USDA) and the National Renewable Energy Laboratory (NREL). The Bio-Sips have been tested and approved by NREL, have passed certifiable performance standards including structure, flammability and compression, and meet the International Building Code. The CU home also will undergo an "Embodied Energy Report." This test will analyze the amount of energy

consumed by the production of the material and construction process for the BioS(h)ip as compared to an ordinary wood frame home. The University should have the results in a few months.

When asked about cost and quality of the products, CU's team advisor, Julee Herdt, an associate professor at the College of Architecture and Planning, said "Biobased products are competitive with other standard types of construction materials." In some cases, biobased products can cost more than traditional products, but the non-monetary benefits from biobased products outweigh those costs. Some benefits of biobased products include being produced domestically, thereby supporting the US economy (especially farmers and rural communities); reducing the country's dependence on foreign oil; decreasing petrochemical use in the home which offgas, causing unhealthy indoor air quality; and reducing air and water pollution from petroleum product manufacturing. As Herdt stated, "It is time to say that there are ways to build that are not reliant on petroleum products." Biobased products are a great way to do this.

In addition to their Bio-Sips, CU's solar home featured biobased furniture and wall panels made from recycled newsprint, sunflower, and soy. The team used Phenix "Environ Biocomposite" panels made from soy and newsprint in their interior windowsill material. The material is 1½ times harder than oak. The CU team also used particleboard made from recycled wheat straw and an alternative binder (or adhesive) board called WheatSheet. The binder they chose is called MDI Rubinate which replaces formaldehyde, creating an emission-free board (EFB). WheatSheet may be used for cabinets, shelving, countertops, closets, etc.

There are other ways to use biobased products in the home. As demonstrated by the CU home design, the BioS(h)IP used blankets made from cornstarch fiber and manufactured by Faribault Mills, and towels made from bamboo fibers, produced by Metaefficient. The cornstarch fiber is from America's corn fields, and it requires less fossil fuel in its production than traditional towels. The ultra-soft bamboo towels are made from 100 percent bamboo fiber. Bamboo is the fastest growing plant on earth, and requires no fertilizers, pesticides, or chemical treatments. There are even more biobased products one can use in one's household. For more information check out the University of Colorado team's website at <http://solar.colorado.edu/design/green.shtml>.

After three years of designing, constructing, testing and documenting their work, the CU solar team and their BioS(h)IP have shown the American public and Washington DC that "natural materials and innovative technologies" are the winners. During the two weeks that the Solar Decathlon was on the National Mall, Rep. Mark Udall (D-CO), Rep. Lamar Smith (R-TX), Sen. Maria Cantwell (D-WA) and Sen. Carl Levin (D-MI) and Secretary of Energy Sanuel W. Bodman visited the decathlon; five Members of Congress issued statements in support of their respective teams, and more than 120,000 visitors toured this interactive demonstration of American innovation.

The sponsors for this event were: US Department of Energy's Office of Energy Efficiency and Renewable Energy, National Renewable Energy Laboratory, American Institute of Architects, National Association of Home Builders, BP, DIY Network, and Sprint. These sponsors say they are not only investing in the event but in these students and in America's future.

Sources: FB4P website: [http://www.biobased.oce.usda.gov/public/about\\_us.cfm](http://www.biobased.oce.usda.gov/public/about_us.cfm)  
Solar Decathlon's home page: [http://www.eere.energy.gov/solar\\_decathlon/](http://www.eere.energy.gov/solar_decathlon/)  
University of Colorado's home page: <http://solar.colorado.edu/design/green.shtml>

## LEGISLATIVE UPDATES

### **Fuel Security and Consumer Choice Act (S. 1994)**

On November 11, Senator Harkin (D-IA), along with Senators Obama (D-IL) and Lugar (R-IN), introduced the *Fuel Security and Consumer Choice Act (S. 1994)* which was then referred to the Committee on Commerce, Science, and Transportation. This bill requires that automobile manufactures produce flex-fuel vehicles in increasing numbers after the enactment of the bill. A timetable with target percentages of flex-fuel vehicles production for each year is provided, increasing to 100 percent of vehicles produced as flex-fuel vehicles within ten years. Furthermore, the bill creates a credit program, whereby manufacture's who exceed their mandatory number of flex-fuel vehicles will receive a credit which may be sold to other vehicle manufacture's.

To view the text of the bill, go to: <http://thomas.loc.gov/>

### **Budget Reconciliation – A Major Scare for the Farm Bill's Energy Programs**

The Senate passed the *Deficit Reduction Act of 2005 (S. 1932)* 51 to 50 calling for the Vice President's vote as the tie breaker. Five Republican senators, including Senators Chafee (R-RI), Collins (R-ME), DeWine (R-OH), Smith (R-OR) and Snowe (R-ME) and Sen. Jeffords (I-VT) voted with Senate Democrats in opposition of the deficit bill. Through the efforts of Senate Democrats, the House will have to vote on the deficit bill again before it is signed by the President. Though passage of the bill is almost certain, the absence of House Members on account of the holiday break may allow room for change. Despite numerous efforts on the part of Environmental and Energy Study Institute (EESI) and other organizations across the country funding for both the Sec. 9006 Renewable Energy & Energy Efficiency Program and Sec. 6401 Value-Add Grant Program is in jeopardy. The original package passed by the House eliminated support for both of these popular programs. Had the House position been enacted, it would have significantly derailed both successful programs and eliminated their baseline going into the reauthorization of the farm bill in 2007.

For more information see:

[http://www.eesi.org/publications/Press%20Releases/2005/12.21.05\\_budget\\_reconciliation\\_senatevote.htm](http://www.eesi.org/publications/Press%20Releases/2005/12.21.05_budget_reconciliation_senatevote.htm)

To view the text of the bill, go to: <http://thomas.loc.gov/>

### **Energy and Water Appropriations Act**

In the Department of Energy's (DOE) FY06 appropriations bill, the DOE biomass R&D program received a little over \$91.6 million, however, this includes more than \$52.3 million in earmarks, making more than 57 percent of the funds already pegged for 'special' projects as opposed to core program R&D.

To view the text of the bill, go to: <http://thomas.loc.gov/home/approp/app06.html>

### **10 by 10 Act**

On November 17, Rep. Salazar (D-CO), Oberstar (D-MN), Hoekstra (R-MI), Evans (D-IL), Kennedy (R-MN), Kline (R-MN), McCollum (D-MN), Herseth (D-SD), Goode (R-VA), Weldon (R-FL), Tiahrt (R-KS), Terry (R-NE), Kingston (R-GA), Tancredo (R-CO), Wamp (R-TN), Gerlach (R-PA) and Kaptur (D-OH), under the leadership of Rep. Gutknecht (R-MN), introduced the '*10 by 10 Act (H.R.4357)*' which was referred to the Committee on Energy and Commerce. This bill would amend the Clean Air Act to require all gasoline sold for use in motor vehicles to contain 10 percent renewable fuel in the year 2010 and thereafter.

To view the text of the bill, go to: <http://thomas.loc.gov/>

### **Fuel Choices for American Security Act of 2005**

The *Fuel Choices for American Security Act of 2005*, (H.R.4409, S.2025), introduced by Rep. Kingston (R-GA) and co-sponsored by more than 25 other Members of Congress was also introduced on the Senate side by Senator Bayh (D-IN) and co-sponsored by nine other Senators. The purpose of the bill is “to promote the national security and stability of the United States economy by reducing the dependence of the United States on foreign oil through the use of alternative fuels and new vehicle technologies, and for other purposes.”

For more information see the Clean Bus Update: [www.eesi.org](http://www.eesi.org)

To view the text of the bills, go to: <http://thomas.loc.gov/>

### **Automatic One-year Extension to 2002 Farm Bill Introduced**

An amendment to the *Farm Security and Rural Investment Act of 2002* ( P.L. 107-171) was introduced on November 15 by Rep. Peterson (D-MN) and co-sponsored by Representatives Costa (D-CA), Salazar (D-CO), Holden (D-PA), Butterfield (D-NC), Etheridge (D-NC), Herseth (D-SD), Baca (D-CA), Scott (D-GA), McIntrye (D-NC), Davis (D-TN), Pomeroy (D-ND), Melancon (D-LA), Cuellar (D-TX), Marshall (D-GA), Barrow (D-GA) and Boswell (D-IA). The bill was referred to the Agriculture Committee. If passed, this bill will extend all authorizations of appropriations and direct spending programs (except for peanut storage costs) until 2008. Furthermore, if the President submits to Congress implementing legislation with respect to the Doha Development Round of World Trade Organization negotiations by January 15, 2008, all authorizations of appropriations and direct spending programs (except for peanut storage costs) will be extended through 2009.

To view the text of the bills, go to: <http://thomas.loc.gov/>

### **Simultaneous Health Care for Hybrids Legislation**

The *Health Care for Hybrids Act* (H.R. 4370, S2045), introduced by Rep. Inslee (D-WA) on the House side and Senator Obama (D-IL) on the Senate side, will provide incentives to the auto industry to accelerate efforts to develop more energy-efficient vehicles to lessen US dependence on oil. A program will be created whereby the Federal government will cover health care cost of manufacture’s who are enrolled in the program on the condition that the manufacturer spend at least 50 percent of that health care original costs on commercialization of petroleum fuel reduction technologies, including alternative or flexible fuel vehicles, hybrids, and other state-of-the-art fuel saving technologies.

To view the text of the bills, go to: <http://thomas.loc.gov/>

### **New York Governor Mandates Biodiesel Use for State Buildings**

New York Governor George Pataki has issued an executive order requiring at least five percent of the fuel used to heat state buildings to be biodiesel by 2012. Additionally, Pataki directed state agencies to maximize the use of vehicles that burn biofuels. The executive order calls for a minimum of two percent of biodiesel in the state’s motor fleet by 2007, with an increase to at least 10 percent by 2012. The governor claims that the development of “home-grown” biofuel products will help the state rely less on foreign oil and revitalize farming. Incentives through New York’s Energy Research and Development Authority will target companies willing to create biorefineries in the state. It is estimated that there are as many as two million acres of “underutilized” farmland in New York; and crops from these lands alone could be used to sustain the new biofuel refineries. Governor Pataki is taking the initiative to lead support for the ethanol

industry by recently joining the Governors' Ethanol Coalition. He is the first governor from the Northeastern to join the group. The Coalition includes governors from 31 states.

Source: The Business Review: <http://albany.bizjournals.com/albany/stories/2005/11/21/daily1.html>,  
<http://albany.bizjournals.com/albany/stories/2005/09/26/daily31.html>

### **Government of India Announces a Biodiesel Purchase Policy**

The petroleum minister of India announced a national biodiesel purchase policy that will allow farmers and biodiesel producers to receive a support price of Rs 25, Indian Rupees, (Rs 25 in India's currency is the equivalent of 55 cents in US dollars) per liter for jatropha oil. The policy was created to bring one million hectares of land under jatropha cultivation to supply blended diesel over the next few years. DiMohan Oils, subsidiary of the Di Oils Plc (biodiesel manufacturing company of the UK), plans to set up an 8,000 tonne per annum capacity refinery at Chennai that will produce biodiesel in the country. Mr. Steve Douty, executive regional director of Di Oils, stated "We will invest \$2 million in India to set up a biodiesel refinery at Chennai likely to be commissioned by 2007."

Source: Tribune News Service: <http://www.tribuneindia.com/2005/20051010/biz.htm#1>

### **Replacing Imported Oils with a New Crop called Cuphea**

A new oilseed crop called cuphea has been in development for 20 years and now has the potential to help reduce US dependence on some petrochemicals while providing the US agriculture sector with greater diversity and added profits. Cuphea has the possibility to become a major oil seed crop. It produces a tiny oilseed containing lauric acid and other natural fatty acids that can be used by companies producing detergent, soap, cleaning products and diesel.

Research has led to interest and involvement of certain companies, such as Procter & Gamble, in the development of cuphea. These companies feel that the direct connection between a producer and a processor offers many benefits for everyone in the process. Procter & Gamble would like to produce a competitively-priced raw material grown here in the United States, and they believe that cuphea can play a large role in reaching this goal. Cuphea also provides a replacement for biodiesel products. Certain properties of Cuphea will help biodiesel overcome some of its challenges, for instance, oil from cuphea can raise a fuel's freezing point.

Cuphea is starting to be commercialized, even though only 100 acres have been cultivated this year. It is expected to be grown over thousands of acres in the near future. Technology Crops International, a company which is leading commercialization efforts for cuphea, is seeking qualified growers who are interested in taking on the commercialization of this crop at the farm level. This crop can be mechanically harvested and can serve as a rotational crop with corn.

Dr. Terry Isbell, research leader in USDA's new crops and processing technology unit in Peoria, Illinois stated, "First-year corn simply has better vigor when cuphea has been in the ground the previous year. We have proven that rotating cuphea with corn reduced root worm infestation, which can reduce the need for insecticide use and save growers as much as \$20 to \$30 per acre in input costs."

Source: [http://www.farmandranchguide.com/articles/2005/10/13/ag\\_news/regional\\_news/news11.txt](http://www.farmandranchguide.com/articles/2005/10/13/ag_news/regional_news/news11.txt)

## NEWS BRIEFS

### Value-Added Producer Grant Application Deadlines

“The Rural Business- Cooperative Service (RBS) announces the availability of approximately \$19.475 million in competitive grant funds for fiscal year (FY) 2006 to help independent agricultural producers enter into value-added activities. Of this amount, \$1.5 million is set aside for applicants requesting \$25,000 or less. Awards may be made for planning activities or for working capital expenses, but not for both. The maximum grant amount for a planning grant is \$100,000 and the maximum grant amount for a working capital grant is \$300,000.

You may submit completed applications for grants on paper or electronically according to the following deadlines: Paper copies must be postmarked and mailed, shipped, or sent overnight no later than March 31, 2006, to be eligible for FY 2006 grant funding. Late applications are not eligible for FY 2006 grant funding. Electronic copies must be received by March 31, 2006 to be eligible for FY 2006 grant funding. Late applications are not eligible for FY 2006 grant funding.”  
–Federal Register: Wednesday, December 21, 2005

You may obtain application guides and materials for a VAPG at <http://www.rurdev.usda.gov/rbs/coops/vadg.htm>

### Portland Recognizes Biodiesel Milestone

On October 14, the Department of Energy announced as part of their Clean Cities Initiative that fueling stations across the United States have collectively pumped one billion gallons of biodiesel. This amount could fuel two million cars for a year. Portland is one of the 88 cities that are part of the Clean Cities Initiative which invest in alternative fuels strategies to offset dependence on foreign oil and support local fuels like ethanol and biodiesel. This initiative is helping to improve the nation’s economy, energy, and national security. When Portland’s office of Sustainable Development released Biodiesel Milestone: Billionth Gallon Pumped on its web page, oil was \$68 per barrel. That is about \$300 billion a year spent on oil which if replaced by biodiesel could be invested locally, according to Portland Clean Cities Coordinator Chuck Wallace.

Oregon’s transportation fleets support biodiesel produced locally; for example, private and public fleets including Organically Grown Grocers and FMI Trucking are using alternative fuels. Portland aims to run all government operations on 100 percent renewable energy sources. To accomplish this goal, the city is currently investing largely in biodiesel. Because of the demand created by the city, a biofuels marketing and distribution company, SeSequential Biofuels, LLC, is currently expanding its fleet and retail market for biodiesel throughout the Pacific Northwest.

Source: <http://www.sustainableportland.org/>

### Wal-Mart is Going Green

Wal-Mart is adopting an environmentally friendly packaging strategy by switching from petroleum-based plastic packaging to corn-based plastic packaging. This transition will result in 100 million biobased plastic containers made per year. The corn-based products are not only competitively priced with petroleum-based products but are environmentally friendly because they can be composted and recycled. Wal-Mart’s first transition to biobased packaging is in the clear plastic containers that hold cut fruit, herbs, strawberries and brussels sprouts. Wal-Mart will then expand this packaging

for use in cards, gifts and the windows in cake and doughnut boxes the latter of which will benefit from the corn-based plastics ability to breathe, allowing for no condensation on the inside of boxes. Wal-Mart has been working with NatureWorks LLC over the past year to test this packaging. The Environmental Protection Agency states that these products will reduce the 32 percent of municipal solid waste that currently comes from packaging materials every year.

This seemingly small step toward corn-based packaging will “save the equivalent of 800,000 gallons of gasoline and reduce more than 11 million pounds of greenhouse gas emissions,” says Matt Kistler, a Wal-Mart executive. Other large and small companies including Starbucks Coffee Co. are joining this campaign for more environmentally friendly and efficient packaging. This trend will only increase as industries realize the value of environmentally-friendly packaging materials and as they start paying the increasing cost of petroleum-based packaging.

Wal-Mart, the nation’s largest retailer, is pairing up with General Electric, the nation’s largest manufacturer, to become more energy and environmentally conscious by including goals and policies that are made visible to their shareholders and customers. These companies are trying to adopt environmentally conscious business practices, and encouraging those they deal with – over 60,000 suppliers – to adopt these practices as well. As part of Wal-Mart’s actions to secure energy sustainability, the company said it would invest \$500 million in technologies that will reduce greenhouse gases from its stores and distribution centers by 20 percent over the next seven years. Its goal is to double this number within ten years and design a store within four years that is at least 25 percent more energy-efficient. A part of this initiative is to improve energy efficiency of its 1,876 supercenters. The public is waiting to see if Wal-Mart sticks to its initiatives; nonetheless, this is a positive step for such a powerful corporation.

Source: The Philadelphia Inquirer: <http://enn.com/biz.html?id=1170>

The New York Times:

<http://www.nytimes.com/2005/10/25/business/25walmart.html?pagewanted=2&ei=5040&en=9979139e8af5f6f7&ex=1130817600&partner=MOREOVERNEWS>

EERE Network News: Wal-Mart: Launches Second Energy-Saving Store in Colorado:

<http://www.eere.energy.gov/news/enn.cfm?>

### **Missouri’s First Large-Scale Biodiesel Plant to Begin Production in 2006**

On October 24, the National Biodiesel Board (NBB) congratulated Mid-Atlantic Biofuels, LLC, on breaking ground for the largest soy biodiesel plant in Missouri. This plant, owned by nearly 400 farmers (almost a majority in ownership) is Missouri’s first large scale biodiesel plant with an estimated production capacity of 30 million gallons. The president of Mid-Atlantic Biofuels, LLC said he believes Missouri is the right place to produce biodiesel and fill the rising demand for biofuels.

Joe Jobe, chief director officer of NBB, said that “biodiesel is an American soybean farmer success story,” and that the national effort started in Missouri and has gone full-circle throughout the country. There are more than 600 nationwide pumps that offer B20, and more than 500 fleets are using this fuel. The Mid-America Biofuels plant will begin operating fully in about a year. There are currently 45 plants operating across the United States.

Source: National Biodiesel board:

[http://nbb.grassroots.com/NBBNewsRelease/Mid\\_Am/?lk=4441026-4441026-0-18929--0mdrzODcDgyPGmh3k5eDlzImT95lFn2](http://nbb.grassroots.com/NBBNewsRelease/Mid_Am/?lk=4441026-4441026-0-18929--0mdrzODcDgyPGmh3k5eDlzImT95lFn2)

### **Biodiesel Creates Big Savings for ComEd**

It was more than four years ago when Electric Utility Commonwealth Edison (unit of Chicago-based Exelon Corporation) started to use soybean-based biodiesel fuel in its utility vehicles. Bill Pettit, director of fleet services at Exelon Co., stated they save roughly \$200,000 to \$300,000 per year because of their transition to biodiesel. Biodiesel was priced in Chicago (at the end of October) at \$3.14 per gallon, and regular diesel was priced at \$3.56, according to Bell Fuels Inc. The main reason for this price gap is tax exemptions provided by the state. Illinois additionally has a well-established biofuels infrastructure with approximately 100 fuel stations that sell biodiesel, contributing to ComEd's successful switch to biodiesel. Other states including Pennsylvania have tax incentives for using biofuels. These incentives allow the price for transportation of the biofuel to be offset by the tax incentives in these states that lack a biofuels infrastructure.

Part of the savings that ComEd calculated are due to the longevity of engines using biodiesel because B20 burns at a higher octane rate, resulting in fewer engine problems. In addition to financial benefits, ComEd recognizes the safety of the soybean blend which is less combustible than regular diesel. ComEd mentioned that biodiesel remains a cheaper alternative regardless of the tax exemptions because of the current high oil prices. ComEd consumed 6 percent of the nation's biodiesel fuel last year and is looking to expand its use in the Northeast.

Source: [nwitem.com](http://www.nwitem.com):

<http://www.nwitem.com/articles/2005/10/21/business/business/7dcb9298cfc359a9862570a000764229.txt>

### **New Sustainable Packaging by Earthcycle**

Earthcycle has produced a new line of biodegradable and compostable palm fiber packaging that they displayed at the PMA Fresh Summit 2005 (November 4-8). Other booths including Oppenheimer Group, one of North America's top fresh produce companies also displayed these new compostable produce trays. The chairman, president and CEO of Oppenheimer, John Anderson, stated "we believe that this innovative, natural packaging solution will appeal to shoppers who are serious about sustainability."

The palm fiber comes from agricultural residue left over from the palm fruit. By using agricultural biomass waste that would normally be incinerated or put in a landfill, the new packaging will reduce waste and the negative impacts of burning and landfilling. When the consumer is done with the package, it can be put in the compost pile and, in 90 days, be returned to the earth naturally. Earthcycle reminds everyone that "if the 9.3 billion units of rigid pre-pack produce sold annually in the U.S. were packed in Earthcycle, more than 410 million pounds of waste could be diverted from the landfill to compost!"

Source: <http://enn.com/press.html?id=218>

### **Bill Gates Invests In Ethanol Company**

Billionaire Bill Gates, Chairman of Microsoft Corporation, is investing in a Fresno ethanol plant. Cascade Investment, LLC., a privately held company serving as Gates' investment agent, has purchased \$84 million of Pacific Ethanol stock. About \$80 million of Cascade's investment must be used to build or buy ethanol plants according to the deal's terms. Cascade will also have a right to appoint two board members to Pacific Ethanol's board of directors. Pacific Ethanol has plans to build four additional plants on the West Coast; and this investment gives the company a "much-needed boost" as it tries to bring large-scale ethanol production to California.

Most of the ethanol that California receives today is shipped from the Midwest; an advantage of producing the ethanol in California is that the distillers grains can be sold as cattle feed to the booming California dairy industry. Pacific Ethanol says that alternative fuel is gaining popularity in California as worldwide oil supplies wane. Gates is investing money into ethanol because it is an industry that is showing good profit potential and, "Gates is known for smart investments", explains David Hackett, an energy industry consultant at Stillwater Associates in Irvine.

Source: ENN, Environmental News Network, [http://enn.com/biz\\_PF.html?id=1240](http://enn.com/biz_PF.html?id=1240)

### **Sustainable Systems LLC and Sheridan Electric Cooperative to Expand Oilseed Plant in Montana**

Sustainable Systems, LLC and Sheridan Electric Cooperative signed a purchase agreement to acquire the oilseed crush and refining plant formerly owned and operated by Montola Growers, Inc. Sustainable Systems has created a new division, Montola, while focusing on the expansion of regional processing of oilseed crops into higher value biofuels, lubricants, and culinary oils. Many groups, including local investors, the state of Montana and local lenders, have provided financing the necessary for the expansion of Montola into a state-of-the-art processing facility. This facility is now positioned to capitalize on the emerging biofuels industry in the United States. Montana's Governor, Brian Schweitzer, has been a strong supporter of this project and feels that biofuel projects deserve government assistance. The crops that have been processed at the Montola plant include safflower, canola, sunflower, camelina, flax and crambe. Biodiesel fuel production is said to focus more on oils such as those from canola and camelina, which are being processed at Montola.

Paul Miller, president and managing member of Sustainable Systems, stated that Montola will provide a "launch pad from upon which to expand into the processing of biodiesel and other biofuels and biobased products- a vital new industry to the citizens of the United States." Sustainable Systems hopes, through its new division at Montola, to expand oilseed acres in the region and across the state of Montana, the Pacific Northwest, and the upper Midwest. Sustainable Systems believes it can increase demand for alternative crops among their expanding grower base and increase production for the processing facility. According to Neil Turnbull, Sustainable System's general manager of the Montola plant, "These positive changes will have beneficial effects to the local economy in terms of new jobs, increased production, and general activity for the area."

Source: Paul Miller, Sustainable Systems, LLC: [www.sustainable-systems.com](http://www.sustainable-systems.com)

## EVENTS

### Harvesting Clean Energy Conference

(SPOKANE, WA) – Rural landowners and communities from throughout the Pacific Northwest can learn how to make renewable energy – like wind, biofuels and solar -- a profitable new crop at a conference February 27-28, 2006, in Spokane, Washington, at the Red Lion Hotel at the Park. Harvesting Clean Energy is the Northwest's premiere event bringing together the agriculture and energy industries to profitably participate in clean energy production and other bio-product markets.

Now in its sixth year, the Harvesting Clean Energy conference will feature experts and farmers with direct experience in successful clean energy projects. Speakers will walk through renewable energy feasibility and economic assessments, technical and financial resources, and finding markets. Harvesting Clean Energy attracts rural landowners and a variety of professionals from agriculture organizations, rural utilities, tribes, economic development agencies, lending institutions, energy developers and consultants, research institutions, and federal, state and local governments.

Technologies covered at Harvesting Clean Energy include utility-scale wind power, biofuels (ethanol, biodiesel and associated bio-based products), biopower (including biogas digesters), geothermal resources, and farm-scale renewable power technologies to enhance profitability. Discussions focus on the practical steps to successful project development, financing and marketing.

Thanks to the generous support of our sponsors, registration for the conference is remarkably affordable. Farmers, ranchers and other private individuals can register by February 6 for just \$50, professionals for \$100.

Register on-line at [www.harvestcleanenergy.org/conference](http://www.harvestcleanenergy.org/conference), or call 360-943-4241 for more information.

### National Biodiesel Conference and Expo

The National Biodiesel Board expects the 2006 National Biodiesel Conference and Expo, Feb. 5-8 in San Diego, to be the best conference yet. Legendary entertainer Willie Nelson –a biodiesel advocate and a partner in the company Willie Nelson's Biodiesel--will participate in a live broadcast of the Bill Mack trucking show on XM Radio during a general session at the conference. The production of biodiesel this year (2005) has been expected to triple 2004 production figures. Therefore, many claim this is a critical year to attend the conference. Sessions at the conference include: fuel quality standards, federal and state legislation, new marketing strategies, and production forecasts of biodiesel.

The chief executive officer of NBB, Joe Jobe, said "the exciting activities at the 2006 conference are testament to the fact that the biodiesel industry is becoming a meaningful part of the U.S. energy economy." A tentative schedule with more seminar details is available online at [www.biodieselconference.org](http://www.biodieselconference.org).

Source: National Biodiesel Board [www.biodiesel.org](http://www.biodiesel.org)

**Calendar**

<b>Event</b>	<b>Date</b>	<b>Location</b>	<b>Further Information</b>
NCSE's Energy for a Sustainable and Secure Future	Jan 26-27	Washington, DC	<a href="http://www.ncseonline.org/">http://www.ncseonline.org/</a>
National Biodiesel Conference and Expo	Feb 5-8	Las Vegas, NV	<a href="http://www.biodieselconference.org/2006/expo/schedule.asp">http://www.biodieselconference.org/2006/expo/schedule.asp</a>
NASEO Energy Outlook Conference	Feb 5-8	Washington, DC	<a href="http://www.naseo.org/">http://www.naseo.org/</a>
RFA National Ethanol Conference	Feb 20-22	Las Vegas, NV	<a href="http://www.ethanolrfa.org/industry/conference/">http://www.ethanolrfa.org/industry/conference/</a>
Harvesting Clean Energy Conference	Feb 27-28	Spokane, WA	<a href="http://www.harvestcleanenergy.org/index.html">http://www.harvestcleanenergy.org/index.html</a>
Biodiesel Finance and Investment Summit	Feb 27-28	New York City, NY	<a href="http://www.infocastinc.com/biodiesel.html">http://www.infocastinc.com/biodiesel.html</a>
Renewable Energy Finance and Investment Summit	Mar 8-10	Phoenix, AZ	<a href="http://www.frallc.com/project.asp#b319">http://www.frallc.com/project.asp#b319</a>
Biodiesel Fundamentals	Mar 28-29	San Francisco, CA	<a href="http://www.energyinstitution.org/">http://www.energyinstitution.org/</a>

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We welcome your suggestions, comments and questions.

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