

BCO Newsletter

Bioenergy – Climate Protection – Oil Reduction



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UPCOMING EVENTS

LEGISLATIVE INITIATIVE UPDATES

New Federal Legislation

S.280 – Climate Stewardship and Innovation Act of 2007

On January 12, Senators Lieberman (I-CT), McCain (R-AZ), Lincoln (D-AR), Snowe (R-ME), Obama (D-IL), Collins (R-ME) and Durbin (D-IL) introduced the **Climate Stewardship and Innovation Act of 2007**. The bill would establish a market-based trading system for Green House Gas (GHG) emissions in order to accelerate reduction of emissions and support the deployment of new climate change-related technologies.

H.R.635 - To amend the Clean Air Act to require that, after the year 2012, all gasoline sold to consumers in the United States for motor vehicles contain not less than 10 percent renewable fuel

On January 23, Rep. Upton (R-MI) introduced H.R.635, which is cosponsored by 20 other Representatives. This bill requires that all gasoline sold after the year 2012 include 10 percent renewable fuel. This would most likely be in the form of E10, a blend of 10 percent ethanol and 90 percent gasoline.

H.R.670 - DRIVE Act

On January 24, Rep. Engel (D-NY) and 78 cosponsors introduced the **Dependence Reduction through Innovation in Vehicles and Energy Act or the ‘DRIVE Act’** to promote the national security and stability of the US economy by reducing the dependence of the US on foreign oil through the use of alternative fuels and new vehicle technologies. Provisions of the bill cover oil savings targets; vehicle efficiency technologies and practices; fuels production and use; and electricity for transportation (including a plug-in hybrid prize). The fuels portion of the bill includes a mandate to produce 15 billion gallons/year of renewable fuel by 2015 and an additional mandate for 30 million gallons/year of cellulosic biomass fuel by 2008 growing to 1 billion gallons/year by 2015.

H.R.682 – Adds Alternatives to SPR

On January 24, Rep. Kaptur (D-OH) introduced bill H.R.682, cosponsored by Rep. Cleaver (D-MO). The bill seeks to expand the US Strategic Petroleum Reserve by including alternative fuel. The bill would define the term “fuel products” to include petroleum, ethanol and biodiesel and change the name of the Strategic Petroleum Reserve to the Strategic Fuel Reserve. The bill has been referred to the House Committee on Energy and Commerce.

H.R.683 – Investment in Energy Independence Act of 2007

On January 24, Rep. Lewis (R-KY) introduced the **Investment in Energy Independence Act of 2006**, cosponsored by Representatives Capito (R-WV), Davis (R-KY), Davis (D-TN), McCotter (R-MI), Nunes (R-CA), Pickering (R-MS), Poe (R-TX), Rogers (R-KY), Shimkus (R-IL) and Whitfield (R-KY). The bill seeks to promote energy independence by creating tax incentives for coal-to-liquid, biomass and oil shale technology.

S.386 – Cellulosic Ethanol Incentive Act of 2007

On January 24, Sen. Chambliss (R-GA) introduced the **Cellulosic Ethanol Incentive Act of 2007**. The bill would amend the Clean Air Act to require 33.33 billion gallons of renewable fuel by 2030, and of that a minimum requirement of 20.33 billion gallons must be derived from cellulosic biomass.

S.411 – Removes the Reduction in the rate of the production tax credit for certain technologies

On January 26, Sen. Smith (R-OR) introduced S.411. The bill would eliminate the reduction in the rate of the production tax credit for electricity produced from open-loop biomass, small irrigation power, landfill gas, trash combustion, and hydropower facilities, maintaining the same credit for all renewable resources after 2006. (Currently these technologies are allowed half of the credit allowed for closed-loop biomass, wind, geothermal.)

S.425 - Expands the resources eligible for the renewable energy credit to kinetic hydropower, and for other purposes.

On January 29, Senators Smith (R-OR) and Wyden (D-OR) introduced bill number S.425. The bill seeks to establish kinetic hydropower as a renewable energy resource eligible for the production tax credit. Kinetic hydropower is defined as 1) ocean free flowing water derived from flows from tidal currents, ocean currents, waves, or estuary currents; (2) ocean thermal energy; or (3) free flowing water in rivers, lakes, manmade channels, or streams.

S.426 – Biofuels Investment Trust Fund Act

On January 29, Sen. Nelson (D-NE) introduced the **Biofuels Investment Trust Fund Act**. The bill would collect all funds from the tariff on imported ethanol and use the funds for research and development of renewable biofuels, particularly cellulosic ethanol.

H.R.729 – Home Energy Generation Act

On January 30, Rep. Inslee (D-WA) introduced the **Home Energy Generation Act**, cosponsored by 22 other Representatives. The bill would require that unregulated state public electricity utilities meet with a regulatory authority to determine and adopt a net metering standard. It would also require that electric retailers make metering available to customers, as well as prescribes: (1) net energy measurement; (2) billing practices; (3) ownership of credits; (4) safety and performance standards; (5) interconnection and model standards; and (6) consumer-friendly contracts.

H.R.765 – Extends certain alternative vehicle tax credits

On January 31, Rep. Weller (R-IL) introduced bill number H.R.765, which would extend and increase some alternative vehicle tax credits for flexible-fuel hybrid vehicles. It was referred to the House Committee on Ways and Means.

H.R.791 – Increases the renewable fuel standard and provides an extra incentive for E85

On January 31, Rep. Weller (R-IL) introduced H.R.791. The bill seeks to increase renewable fuel content to 25 billion gallons by the year 2025. The bill also provides that 1.0 gallon of a fuel blend containing 85 percent ethanol and 15 percent gasoline shall be considered to be the equivalent of 1.5 gallons of renewable fuel.

H.R.792 - Growing Responsible Energy and Environment Nationally through Federal Energy Decisions Act

On January 31, Rep. Weller (R-IL) introduced the **Growing Responsible Energy and Environment Nationally through Federal Energy Decisions Act**. The bill would require that Federal agencies that use gasoline in areas where ethanol is available and competitively priced use a 10 percent ethanol blend of gasoline. The bill has been referred to the House Committee on Oversight and Government Reform.

H.R.793 – Makes the PTC permanent for certain technologies

On January 31, Rep. Weller (R-IL) introduced bill number H.R.793, which would make the renewable electricity production tax credit permanent for certain technologies. The bill has been referred the House Committee on Ways and Means.

S.485 – Global Warming Reduction Act of 2007

On February 1, Senators Kerry (D-MA) and Snowe (R-ME) introduced the **Global Warming Reduction Act of 2007**. The bill would establish a cap-and-trade program for emissions that contribute to global warming, while taking into account communities, companies and consumers that may be affected by increased energy costs. The bill increases the Renewable Fuel Standard with benchmarks for 2010 (10 billion gallons), 2020 (20 billion gallons), and 2030 (60 billion gallons) with a requirement that EPA determine the volume for each year not specified annually. The bill directs the Secretary of Energy to ensure that major oil companies that sell gasoline in the United States through wholly-owned or branded stations provide pumps that dispense E85 fuel at specified percentages. Furthermore, the bill creates a Renewable Portfolio Standard which requires 20 percent of electricity sold by each retail electric supplier be renewable by 2021.

S.696 – Energy Research Act of 2007

On February 27, Sen. Baucus (D-MT) introduced the **Energy Research Act of 2007**. The bill would create an Advanced Research Projects Administration-Energy to accelerate innovative but high-risk research to promote US energy independence.

S.541 – Rural Opportunities Act of 2007

On February 8, Sen. Feingold (D-WI) introduced the **Rural Opportunities Act of 2007**. The bill would amend the 2002 Farm Bill to increase grants and funding for the purpose of promoting bioenergy, biobased products, extension, education, applied research and development activities at institutions of higher education. This would include extending the renewable energy systems and energy improvements program and increasing funding to \$40 million for FY08-FY13 as well as the value-added grants program, among others.

H.R.927 – Increases tax credit for biodiesel

On February 8, Rep. Burgess (R-TX) introduced H.R.927. The bill seeks to increase the tax credit for biodiesel as fuel.

H.R.931 – America’s Domestic Fuels Act

On February 13, Rep. Costello (D-IL) introduced **America’s Domestic Fuels Act**. The bill would provide funding for research and demonstration of coal gasification as an energy source in ethanol production. Cosponsors include Representatives Cubin (R-WY), Lincoln Davis (D-TN), Hare (D-IL), Holden (D-PA), Jackson-Lee (D-TX), Timothy Johnson (R-IL), LaHood (R-IL), Murphy (R-PA), Musgrave (R-CO), Rahall (D-WV), Ross (D-AR), and Shimkus (R-IL).

H.R.969 – Establishes a Federal Renewable Energy Portfolio

On February 8, Representatives Udall (D-NM), (R-PA), Pallone (D-NJ), Udall (D-CO), Shays (R-CT), Degette (D-CO), McNerney (D-CA), and Doggett (D-TX) introduced H.R. 969. The bill would amend Title VI of the Public Utility Regulatory Policies Act of 1978 to establish a Federal renewable energy portfolio standard that requires 20 percent of electricity generated to be renewable energy by 2020. The bill has 50 cosponsors.

H.R. 1300 - PROGRESS Act

On March 1, Rep. Hoyer (D-MD) introduced the **Program for Real Energy Security Act**, with 104 cosponsors. The bill would strengthen national security and promote energy independence by reducing the Nation’s reliance on foreign oil, improving vehicle technology and efficiency, increasing the distribution of alternative fuels, bolstering rail infrastructure, and expanding access to public transit. The bill establishes a National Commission on Energy Security and Transition to New Fuels.

H.R.1331 – Provides a tax credit for plug-in hybrids

On March 6, Rep. Doggett (D-TX) introduced H.R.1331, which now has 77 cosponsors. The bill would amend the Internal Revenue Code of 1986 to provide tax credits for new qualified plug-in hybrid motor vehicles.

S. 822 - EXTEND the Energy Efficiency Incentives Act of 2007

On March 8, Sen. Snowe (R-ME) introduced the **EXTEND the Energy Efficiency Incentives Act of 2007**, cosponsored by Senators Feinstein (D-CA), Kerry (D-MA), Bunning (R-KY), Bingaman, (D-NM), Salazar (D-CO), Coleman (R-MN), Smith (R-OR), Allard (R-CO), and Cornyn (R-TX). The bill would amend the Internal Revenue Code of 1986 to improve and extend certain energy-related tax provisions.

S.828 - On-farm Energy Production Act of 2007

On March 8, Sen. Baucus (D-MT) introduced the **On-Farm Energy Production Act**, cosponsored by Senators Harkin (D-IA) and Tester (D-MT), a bill to amend the Food Security Act of 1985 to require the Secretary of Agriculture to make cost-share payments for on-farm energy production including windmills, solar panels and renewable fuel under the Environmental Quality Incentives Program.

H.R. 1451 - New Options Petroleum Energy Conservation Act of 2007

On March 9, Representatives Lungren (R-CA) and Costa (D-CA) introduced the **New Options Petroleum Energy Conservation Act**. The bill provides incentives to reduce dependence on foreign oil by creating a Climate Neutral Combustion Credit; extending solar and energy efficiency tax credits; creating a prize for vehicle technologies; and by amending provisions pertaining to the expensing of property used in the refining of ethanol, methanol, and biodiesel.

S. 859 - Ethanol Infrastructure Expansion Act of 2007

On March 13, Senators Harkin (D-IA) and Lugar (R-IN) introduced the **Ethanol Infrastructure Expansion Act**, which requires the Secretary of Energy to award funds to study the feasibility of constructing dedicated ethanol pipelines to increase US energy, economic, and environmental security.

H.R. 1551 - Healthy Farms, Foods, and Fuels Act of 2007

On March 15, Rep. Kind (D-WI) introduced **Healthy Farms, Foods, and Fuels Act**, which now has 86 cosponsors. The bill would reauthorize Department of Agriculture conservation and energy programs and certain other programs of the Department, to modify the operation and administration of these programs.

Johanns Acknowledges Cattle Feed Challenge, Commits to Cellulosic Ethanol

Addressing the National Cattlemen's Beef Association in Tennessee on February 2, U.S. Agriculture Secretary, Mike Johanns acknowledged ranchers' concerns over increasing corn prices as ethanol competes with feed for livestock. "That is why the Farm Bill proposes a very strong federal commitment to accelerating our research into cost-effective ways of producing cellulosic ethanol from biomass," Johanns said referring to the President's proposed bill.

The proposed 2007 Farm Bill would provide \$1.6 billion for cellulosic ethanol development over the next ten years and \$2.1 billion in loans for cellulosic projects in rural areas. Johanns said, "This constitutes a strong commitment to nailing down the knowledge and building the infrastructure we must have to meet a much larger share of our energy needs."

Source: <http://www.planetark.org/dailynewsstory.cfm?newsid=40154>

National Renewable Energy Lab Discouraged by President's FY08 Budget Proposal

Backtracking on earlier promises to increase renewable energy funding, President George W. Bush's proposed budget sets aside less for Colorado's National Renewable Energy Lab (NREL) than his FY2007 request, a difference of \$6 million from present funding. Congress must now act on FY08 appropriations.

Rep. Udall (D-CO) asked, "Where is the balance in this budget, and where is the dedication to energy independence? The president needs to walk his talk, and if he will not, I will work with the new Congress to increase funding for renewable energy and energy efficiency programs. Energy independence is so critical to our national security, our energy security and our economy that we cannot afford to shortchange programs that will move us forward."

Sources: <http://www.thedenverchannel.com/news/10941792/detail.html>
http://cbs4denver.com/topstories/local_story_037190429.html

Democratic Rural Working Group Criticizes President's Budget

The House Democratic Rural Working Group studied the Bush Administration's FY2008 Budget and came up with a number of critiques concerning its treatment of rural development and communities. Evaluation of the budget proposal for renewable energy found that though there would be funding increases they would not be sufficient to reach the President's gasoline displacement goal. Concerns were raised upon review of the farm bill proposal which left out biodiesel and cut value-added grants by 25 percent for start-up energy companies. Questions were also expressed as to whether the President sufficiently addressed the need of increased

renewable fuel infrastructure. Besides just energy, the Rural Working Group was concerned about future funding cuts to farm conservation programs such as the Conservation Security Program (CSP) and the Environmental Quality Incentives Program (EQIP).

Source: http://democraticwhip.house.gov/rural_working_group_report_on_rural_families.html

USDA Accepting Applications for Renewable Energy Systems & Energy Efficiency Improvements Grants and Guaranteed Loans

On March 21, 2007 Secretary of Agriculture Mike Johanns announced the solicitation for proposals for the Renewable Energy Systems and Energy Efficiency Improvements Program (Section 9006) authorized under Title IX of the 2002 Farm Bill.

This year's solicitation makes \$11.4 million available in competitive grant funds and approximately \$176.5 million in guaranteed loan authority for the purchase of renewable energy systems and energy efficiency improvements for agriculture producers and rural small businesses. After August 1, 2007 any guaranteed loan funds that are not obligated will be pooled and revert to the National Office reserve for grants under this notice.

Grant applications must be completed and submitted to the appropriate USDA State Rural Development Office **postmarked no later than May 18, 2007**. Guaranteed loans and combined guaranteed loan and grant packages will be awarded on a continuous basis. Loan Guarantee applications are due to appropriate USDA State Rural Development Office for funding consideration by July 2, 2007.

[PDF of Federal Register Solicitation](#)

[USDA News Release](#)

[Click here for the USDA site on Sec. 9006](#) or [See Farmenergy.org](#)

[Click here for PDF of EESI Release](#)

US Forest Service Awards 26 Biomass Utilization Grants

On March 20, 2007, Secretary of Agriculture Mike Johanns announced awards of \$6.2 million in grants to small businesses and community groups for research and innovation in the utilization of woody biomass, including renewable energy. Applications received by the Forest Service totaled 93 and more than \$20 million in funding support. Awards will help groups turn low-valued trees (small-diameter) and forest residues into energy and marketable products while reducing the risks of forest fires.

The US Forest Service awarded 26 grants ranging from \$125,000 – \$250,000 to organizations spread from PA to NC and WA. Recipients provided 20 percent of the total project cost, and non-federal funding for all 26 projects was near \$12 million. The grant program will be administered by the Forest Service's State and Private Forestry, Technology Marketing Unit at the agency's Forest Products Laboratory in Madison, WI.

Source:

[USDA Release](#) or [US Forest Service Woody Biomass Utilization Web Page](#) or [PDF of EESI Release](#)

Six Cellulosic Ethanol Plants to Receive Up to \$385 Million in Federal Funding From DOE

On February 28, 2007, Department of Energy (DOE) Secretary Samuel W. Bodman announced that DOE will fund six biorefinery projects over the next four years with up to \$385 million in federal funds, which combined with the industry cost share will result in investment of more than \$1.2 billion in these projects. The biorefineries are expected to produce more than 130 million gallons of cellulosic ethanol annually and a number different biobased products, including: power, methanol, hydrogen, and ammonia. Each biorefinery will use more than 700 tons of feedstocks per day – feedstocks include agriculture residues such as corn stover, wheat and rice straw; wood residues, wood-based energy crops; and landfill organic wastes.

These funds, authorized by Congress in the Energy Policy Act of 2005 (P.L.109-58, Sec. 932(d)) in the **Integrated Biorefinery Demonstration Projects**, were announced last year in a solicitation for three biorefineries and for only \$160 million for up to 4 years. To bring this initiative in line with the President's Advanced Energy Initiative, the Secretary said, "I thought it would be best to front-end some more funding now, so that we could all reap the benefits of the President's vision sooner."

The following six projects were selected (click on the link to go to a one-page summary of each project):

- [Abengoa Bioenergy Biomass of Kansas, LLC of Chesterfield, Missouri, up to \\$76 million.](#)
- [ALICO, Inc. of LaBelle, Florida, up to \\$33 million.](#)
- [BlueFire Ethanol, Inc. of Irvine, California, up to \\$40 million.](#)
- [Broin Companies of Sioux Falls, South Dakota, up to \\$80 million.](#)
- [Iogen Biorefinery Partners, LLC, of Arlington, Virginia, up to \\$80 million.](#)
- [Range Fuels \(formerly Kergy Inc.\) of Broomfield, Colorado, up to \\$76 million.](#)

[Click here for PDF of EESI Press release](#) Or [Click here for DOE Press release](#)

Five Ethanol Fermentative Organisms Conversion Projects Receive \$23 Million in from DOE

On March 27, 2007, Department of Energy Assistant Secretary for Energy Efficiency and Renewable Energy Alexander Karsner announced funding for five projects focused on developing highly efficient fermentative organisms to convert biomass into ethanol. The DOE's \$23 million for the five projects will be matched with industry cost-share making the total investment more than \$37 million for FY2007 through FY2010, subject to appropriations.

Research in fermentative organisms will help decrease the cost of converting lignocellulosic biomass into liquid fuels. Assistant Secretary Karsner said, "Ultimately, success in producing cost-competitive cellulosic ethanol could be a key to breaking our nation's addiction to oil. By relying on American farmers and ingenuity for fuel, we will enhance our nation's energy and economic security." These awards build on the President's goals of making cellulosic ethanol cost-competitive by 2012.

Source: <http://www.doe.gov/news/4896.htm>

STATE INITIATIVE UPDATES

Governor of Colorado Proposes Renewable Energy Plan

Governor of Colorado Bill Ritter, true to his 2006 campaign, made renewable energy a focus of his January State of the State address. Governor Ritter established plans to construct more high voltage transmission lines to connect wind generated electricity across Colorado, the 11th windiest state. Other proposals included switching the state car fleet to flex-fuel or hybrid vehicles as well as requiring higher building energy efficiency for new and renovated state buildings. The Governor also requested that the state legislature double the electricity from renewable energy benchmark to 20 percent in 2015.

Governor Ritter also proposed the creation of a Colorado Clean Energy Fund to provide for researching renewable energy alternatives.

"This is our chance to build a New Energy Economy in Colorado," said Governor Ritter. "Energy is today's version of the space race of the '60s and technology race of the '80s and '90s. If we miss this opportunity, we miss the opportunity of a lifetime."

Sources: <http://www.colorado.gov/governor/speeches/2007/state-of-state-jan11.html>
<http://www.renewableenergyaccess.com/rea/news/story?id=47179>

Alabama Governor Promotes E85

Governor of Alabama Bob Riley praised the use of renewable fuel at the State's Motor Pool. A 12,000 gallon E85 tank with two fueling pumps began construction at the State Motor Pool facility. Nearly two thirds of the Motor Pool fleet, as well as that of the Alabama Department of Transportation, are flexible fuel vehicles capable of running on both E85 and regular gasoline. The new E85 pumps come after an earlier announcement in October 2006 that six new E85 stations and five new B20 fueling stops would be added to Interstate 65 as part of a 'clean fuels corridor' from the Great Lakes to the Gulf of Mexico. "Promoting and using E-85 is simply the right thing to do for our environment, our economy and our national security," Governor Riley said.

Source: <http://www.brewtonstandard.com/articles/2007/02/05/news/news08.txt>

Tennessee Governor Makes \$3.5 Million Available for Alternative Fuel

Governor Phil Bredesen of Tennessee approved \$3.5 million in loans and grants for alternative fuel research, development and implementation. Feedstock Processing Demonstration Loans, Alternative Fuel Innovations Grants and the Green Island Corridor are three major programs funded by a \$4 million investment approved last year by the general assembly.

Governor Bredesen expressed his approval saying, "I believe we're at a critical point in which Tennessee can be a national leader in the development of the alternative fuels market. It's a smart energy strategy, a smart economic strategy and a smart environmental strategy. Most importantly, it helps create new markets and new opportunities for Tennessee farmers."

Source: <http://www.renewableenergyaccess.com/rea/news/story?id=47342>

Winner of Idaho Governor's Clean Energy Award Announced

Intrepid Technology and Resources, Inc. (ITR) was named the winner of the Governor's Clean Energy Award on February 6, 2007 during the 7th Annual Harvesting Clean Energy Conference in Boise. ITR, based in Idaho Falls, Idaho, was given the award for their entrepreneurial anaerobic digester fueled by animal waste from the Whitesides Dairy. The digester processes the dairy's waste, turning it into clean natural gas which is fed into the town's pipeline system.

ITR President Jacob Dustin said, "ITR is honored to receive this award from the governor. ITR's hope is to show how Idaho is leading the nation in taking anaerobic digestion of dairy waste to the next level of commercialization and sophistication."

Source: <http://www.marketwire.com/mw/iwprf?id=211478>

RECENT STUDIES

December GAO Report on Department of Energy

GAO released a report in December titled [Department of Energy: Key Challenges Remain for Developing and Deploying Advanced Energy Technologies to Meet Future Needs](#). Though the report encompassed the entire DOE, there was a strong focus on renewable energy, especially ethanol. The GAO found that research and development efforts have resulted in a steady reduction of renewable energy costs, however challenges still remain. One of the larger challenges that brought forth in the report regarded current funding. The report said that in real terms, adjusting for inflation, renewable energy funding by the DOE has dropped nearly \$5.5 billion from 1978 levels, a decline of 85 percent.

Tax credits were shown to be effective in promoting renewable energy, particularly the Production Tax Credit from the 1992 Energy Policy Act.

Lastly, the GAO found that state efforts have been particularly productive. Establishing portfolio standards has yielded a proven increase in state renewable energy technologies and investments, key examples focused on Minnesota, California and Texas. There are currently 45 states that offer tax credits for renewable energy equipment purchasing.

Source: <http://www.gao.gov/htext/d07106.html>

NACEPT: Thoughts on EPA and Biofuels

In recognition of the role ethanol and other biofuels will play in the nation's energy consumption and their potential benefit or harm to the environment, the National Advisory Council for Environmental Policy and Technology (NACEPT) submitted a letter of suggestions to the Environmental Protection Agency of how it should be involved in this new industry. The EPA currently regulates emissions and fuel quality, mainly through its Office of Air and Radiation, for all fuels including biofuels.

According to the letter, NACEPT's "interaction with leaders of biofuels efforts in other Federal agencies made it clear that they are expecting and need EPA to play a broader role that goes beyond what the EPA is required to do." This would include a focus on keeping biofuel production environmentally sound and sustainable, as well as on conducting studies on the impact of biofuel use.

Key recommendations include appointing someone to the Interagency Biomass Research and Development Board, creating a Biofuels Coordinator position within the agency, and lastly developing an integrative biofuel strategy with strong support.

NACEPT will submit an official report later this year.

Source: http://www.epa.gov/ocem/nacept/pdf/2007_0220_final-biofuel-advice-letter.pdf

NREL: State-Level Renewable Fuels Standards

In January the National Renewable Energy Laboratory released a report titled "Understanding and Informing the Policy Environment: State-Level Renewable Fuels Standards." The report studies the way in which more market-oriented renewable fuels standards have affected biofuel production compared to "command and control policies," on the state level. The report also analyzes the role renewable fuel standards have played internationally. The NREL report not only looked at current policy, but proposed policy as well, presenting information that could help bring greater fuel self-sufficiency.

Source: <http://www.nrel.gov/docs/fy07osti/41075.pdf>

NEWS BRIEFS

BP Forges \$500 Million Research Partnership with UC Berkeley and University Illinois Urbana-Champaign

University of California Berkeley and Lawrence Berkeley National Laboratory partnered with the University of Illinois at Urbana-Champaign to beat out four other major research institutions for a 10-year \$500 million strategic partnership with BP. The joint effort will form the Energy Bioscience Institute (EBI) which will focus on developing technologies for converting biomass to biofuel. Referring to the project, Berkeley Chancellor Robert Birgeneau declared "this is our generation's moonshot."

The multidisciplinary EBI will host some 25 research teams, with the majority of teams housed at Berkeley and LBNL and the remainder located in Illinois. Initial efforts are expected to concentrate on improving cellulosic ethanol production processes. Other areas of research will include, the conversion of heavy hydrocarbons to clean fuels, improved recovery from existing oil and gas reservoirs, and carbon sequestration. The EBI is expected to launch this summer.

Sources: http://www.berkeley.edu/news/berkeleyan/2007/02/08_energy.shtml
<http://www.bp.com/genericarticle.do?categoryId=2012968&contentId=7028142>

Thermal-Chemical Biomass Ethanol Plant Planned for Georgia

Founded by Khosla Ventures (a California-based venture capitalist firm) Range Fuels, Inc., (formerly Kergy, Inc.) announced plans to build a cellulosic ethanol plant in Treutlen County Georgia. With plans to use a proprietary thermal-chemical process, referred to as the K2 system, the plant investors expect to cut conventional cellulose ethanol costs compared to those using expensive enzyme technology. The intended feedstock is the waste and woodchips from indigenous Georgia pine, which would otherwise have little commercial value. Khosla Ventures anticipates that the plant – combined with others to follow – will have an estimated annual capacity of 1 billion gallons.

Vinod Khosla, managing partner of Khosla Ventures, hopes to achieve low-cost cellulosic ethanol, claiming that within the next ten years prices could drop to as low as \$1 per gallon. The K2 system is modular and allows for a broad range of biomass feedstocks, which will further reduce cost through system and feedstock flexibility.

Source: <http://www.renewableenergyaccess.com/rea/news/story?id=47371>

Colorado Seeks Market for Wood Waste from Forest Thinning

As ethanol-from-wood biomass plants open in Georgia, the state of Colorado questions the choice of location. Colorado has been suffering from a pine beetle outbreak for the past four years with 42 percent of Colorado's lodgepole pines infected. One of the largest factors for the outbreak, and one that if addressed could help mitigate the problem, is the accumulation of biomass in Colorado's forests and tree overcrowding. The lowest bid to thin one acre of forests in Summit Count, CO is \$1600. Gary Severson, executive director for the Northwest Colorado Council of Governments, said "It's so expensive because there's no market for the wood. And at that price, there's simply not enough public money to thin the forests. The only way to do this is to find some way to add value to this material. With small-diameter lodgepole pine, there aren't a lot of options."

When Range Fuels was asked about its location choice of Georgia for its cellulosic ethanol plant, CEO Mitch Mandich explained that it was the difference between the trees as plantation crops and the already developed timber infrastructure Georgia has to offer. Georgia rain and soil conditions allow trees to grow to ten inch diameters within ten years, much different from Colorado's position. Lynn Young, a retired U.S. Forest Service public information director, explained, "It's too dry here, the soil's not deep and the trees are small - usually 6 inches to 8 inches in diameter."

Severson sees two other options for the slash and small diameter trees of the Colorado forests. One is to turn wood chips into wood pellets to be used in biomass heating systems. One out-of-state investor has already expressed interest in opening a wood pellet facility in Colorado. With Colorado intent on cutting thinning costs, any investment interest is taken as a positive sign. The other option is to use wood for residential and commercial boilers, but this is currently not cost-effective because of the high price of diesel fuel needed to haul the wood chips to their destination and because natural gas currently being used in boilers is cheaper.

Sources: http://www.rockymountainnews.com/drmn/business_columnists/article/0,1299,DRMN_82_5358679,00.html
http://www.rockymountainnews.com/drmn/local/article/0,1299,DRMN_15_5356511,00.html

North Dakota Ethanol Facility Produces Hydrogen

The University of North Dakota's Energy and Environmental Research Center (EERC) is planning to create a large scale demonstration of hydrogen production at an ethanol plant. Though details remain undisclosed, the intention is to use an intermediate product in the ethanol refinement process to create hydrogen for fuel cells or to provide power for the ethanol plant. The demonstration will take place over a multi-year period and is hoped to work out commercial-scale problems making the technology more industry-friendly.

After two years of lab experimentation, EERC associate research director Tom Erickson said, "We have done significant experimentation. The next step is to scale up the process to a demonstration system."

Chad Wocken, EERC research manager, said "Hydrogen production integrated with an ethanol facility will provide an important source of renewable energy for both stationary and transportation fuel cell applications in a hydrogen-based economy. This technology will help facilitate regional and national growth in hydrogen utilization."

Sources: http://ethanolproducer.com/article.jsp?article_id=2659
<http://www.renewableenergyaccess.com/rea/news/story?id=47184>

Biodiesel Standards: An Explanation

Responding to a question concerning biofuel standards at the state and federal level, Meghan Murphy, acting president of Ithaca Biodiesel, endeavored to explain current U.S. biodiesel quality standards. Biodiesel standards are becoming more heavily relied upon as the industry grows due to the nature of the variable materials from which biodiesel is produced, ranging from soybean oil and other oilseeds to animal fat.

The official standard adopted by government, equipment manufacturers and other stakeholders is the American Society for Testing Materials (ASTM) standard titled ASTM D 6751. The voluntary BQ-9000 quality assurance program, created by the National Biodiesel Board, is also important. Producers in this quality control program undergo independent audits of their fuel quality. Half of U.S. states have adopted the ASTM D 6751 standard with more set to follow suit in the coming years.

Murphy said, "The majority of U.S. states regulate fuel quality for all types of fuels and have the authority to enforce compliance. Most routine enforcement measures are conducted by the state Weights and Measures bureaus." The Internal Revenue Service (IRS) also has a role in quality assurance. Petroleum companies that blend biodiesel into their product must meet ASTM D 6751 standards in order to receive the Biodiesel Tax Credit.

Source: <http://www.renewableenergyaccess.com/rea/news/story?id=47177>

Wilderness Conservation to Incorporate Biomass Power Plant

Environmental groups, the U.S. Forest Service, Pyramid Lumber and various others came together in Montana to present a plan to expand the Montana wilderness area as well as create a new biomass power generation plant. The project is looking for \$7.9 million in federal funding to add 87,000 acres of wilderness designation in western Montana; \$4.5 million of the funds would go towards the \$7 million biopower plant.

Bob Ekey, regional director for the Wilderness Society, said "The proposal fosters forest management, fuel reduction and restoration on lower elevation Forest Service lands that have already been roaded..."

The biomass power plant is intended to use debris from forest thinning and other woody debris for fuel. Most of the power generated would be used by Pyramid Lumber; however, any extra power could serve the Seeley Lake community, such as schools or the medical center.

Source: http://www.helenair.com/articles/2007/01/25/helena/a01012507_01.txt

Georgia Power Meets EPA Act Requirements Full Force

Georgia Power, a utility company that supplies most of Georgia's electricity, first sought to comply with Energy Policy Act requirements in 1995 through the purchase of electric vehicles. Forced by the vanishing electric vehicle market to change alternative energy sources, Georgia Power switched its focus to ethanol and biodiesel. A B20 blend of biodiesel currently supplies one fourth of Georgia Power's heavy-duty fleet, around 400 vehicles, and E85 is used in 80 flex-fuel vehicles, using 15,000 gallons of ethanol annually. Georgia Power is presently exploring the use of heavy-duty hybrid bucket trucks to run on B20, saving fuel use through battery power while promoting renewable energy.

Source:

http://nrelpubs.nrel.gov/Webtop/ws/nich/www/public/Record?rpp=25&upp=0&m=1&w=NATIVE%28%27TITLE_V+ph+words+%27%27State+and+Alternative+Fuel+Provider+Rule+Success+Story%27%27%27%29&order=native%28%27pubyear%2FDescend%27%29

Brazil Expected to Lead Global Biodiesel Market

Biodiesel has been steadily gaining use and popularity, a trend that is expected to continue indefinitely. *Emerging Markets Online* released a report in February with a number of impressive figures. Europe is currently the producer of 90 percent of the world's biodiesel; however, Brazil is on the fast track to surpassing not only Europe, but also the U.S., as early as 2015.

William Thurmond, director of management consulting at *Emerging Markets Online*, predicts that "It is possible that biodiesel could represent as much as 20 percent of all on-road diesel used in Brazil, Europe, China and India by the year 2020. If governments continue to aggressively pursue targets -- enact investor-friendly tax incentives for production and blending -- and help to promote research."

Europe expects biodiesel to represent 6 percent of all on-road transportation consumption in the next three years. In the United States demand is also growing quickly with 50 new production facilities currently underway and a tripling of the number of retail outlets from 2005 to 2006.

Source: <http://www.industryweek.com/ReadArticle.aspx?ArticleID=13536>

Canadian Government Funds Iogen Ethanol

On February 6, 2007, Canadian Minister of Industry Maxime Bernier announced a (CA) \$7.7 million repayable investment for research and development of cellulosic ethanol by Iogen Energy Corporation. The investment will contribute to a (CA) \$25.8 million ongoing project Iogen currently has to convert its cellulosic ethanol demonstration plant to produce at commercial levels.

Minister Bernier said, "Innovation in biofuels is an important step in meeting the challenge to reduce fuel emissions in Canada, and ultimately lessen the effects of climate change. Canada's New Government applauds Iogen for leading the pack in developing this environmental technology that is innovative and unique around the world."

Source: <http://news.gc.ca/cfmx/view/en/index.jsp?articleid=274389&categoryid=1&>

Renewable Fuels Education a Growing Field

As ethanol plants have increased, so too has demand for qualified operators and technicians to run the facilities. Some midwestern colleges have taken the lead in offering Associate of Applied Science degrees for the study of renewable fuels along with other certifications.

It is estimated that there are currently 72 new ethanol plants under construction, which will need around 3,200 trained individuals within the next one and a half years. Minnesota West and Bismarck State College, two of the handful of schools that have renewable fuel and energy programs, combined will graduate 75 students this year in their programs.

Interest is bound to keep growing as starting pay for technicians ranges from \$25,000-\$30,000. "It's the students, the parents, the high school guidance counselors, and teachers who haven't all caught on yet," said Bill Lee, general manager of the Chippewa Valley Ethanol Company. "The conventional wisdom is that high-paying, industrial and manufacturing-sector jobs are disappearing and don't exist any more, but the renewable energy industry represents a tremendous opportunity for just that kind of job. And we're in locations where people are looking for this kind of job."

Training has traditionally been accomplished onsite at ethanol production facilities, but companies appreciate individuals already knowledgeable in the subject. School and particularly online courses, provide opportunities for those already in the business to certify their knowledge and gain promotions. It is estimated that nearly half the students enrolled in the programs are non-traditional, returning students already working in the ethanol production field.

More schools are considering offering renewable energy programs, and Bismarck State College will begin a four-year degree program in the fall of 2007. Other schools with developed programs (besides the two previously mentioned) are Ellsworth Community College in Iowa, the Lake Area Technical Institute in South Dakota, and the Northeast Community College in Nebraska.

Source: Eisenthal, Jonathan. "E2, Ethanol Education: Midwestern Colleges Take up the Banner." *Ethanol Today*. V.4 iss.12. p.11-14. Feb 2007.

Biodiesel Production to Begin in President Carter's Neighborhood

Renewable energy advocate President Carter welcomed the start of construction on a new biodiesel plant in his hometown of Plains, Georgia. The plant, owned by the Alterra Bioenergy Corporation, plans to use peanuts as one feedstock, with some coming from President Carter's farm. He said he is "looking forward to making his family farm crop production available for the purpose of producing biofuels."

Peanuts will not be the only feedstock. The 15-30 million gallon/year plant will use other local crops such as soybeans, cotton, and winter rapeseed. Expected to open in November 2007, the plant will join 105 other biodiesel plants currently in operation nationwide and provide 25 jobs to the Plains community.

Alterra Bioenergy CEO Wayne Johns said, "We chose Plains because of its ideal position in the country's oil seed farm land. And, the fact that President Carter has spoken passionately about alternative fuels for more than 25 years makes his hometown a natural

choice. Access to the ports of Savannah and Brunswick by way of Heart of Georgia Railroad were also an important factor in our decision.”

Source: http://nbb.grassroots.com/07Releases/Carter_plant/

Construction Begun on Louisiana Cellulosic Ethanol Plant

Celunol, a cellulosic ethanol company, which recently merged with Diversa Corporation, announced that construction has begun on its demonstration cellulosic ethanol plant in Jennings, Louisiana. The plant, set to be completed in late 2007, will use sugarcane bagasse and specially developed energy cane for feedstock and enzyme technology. Annual capacity is estimated to be 1.4 million gallons, converting 95 percent of the biomass sugar into ethanol.

Celunol also opened its pilot facility in the same location. With an annual production capacity of 50,000 gallons, the plant will be used to further research cellulose biomass and will later be incorporated into the larger plant now under construction.

"It has become clear that we need to look to new feedstocks and technologies to increase the sources of supply of ethanol to meet the nation's rising demand for clean automotive fuel. The pilot plant we have inaugurated here illustrates the technical feasibility of producing ethanol on a high-yield basis from low-cost crops and agricultural residues," said Carlos Riva, President and CEO of Celunol.

Source: http://www.agweb.com/get_article.aspx?pageid=134460&src=gennews and <http://www.renewableenergyaccess.com/rea/news/story?id=47496>

Pacific Northwest Seeks to Become Clean Energy Leader

Pacific Northwest energy ventures and other businesses numbering more than 240 companies in total have banded together to submit a letter to Northwest policymakers requesting stronger action concerning clean energy. The businesses, which account for nearly \$2.3 billion in annual revenue, would like to see more policies in Oregon and Washington making them leaders in clean energy.

The letter puts forward several actions it would like to see policy enact, such as specific clean energy targets, tax incentives, and carbon markets.

An excerpt from the letter reads, "We recognize that our region has a golden opportunity to generate wealth and create new jobs in the coming decade in clean energy technologies." The businesses urged policymakers to act soon saying, "But competition from other states, regions and countries will be fierce. To build a world class clean energy industry here in the Northwest we need to enact the nation's most comprehensive, forward-looking clean energy policy program."

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

Proposed for \$55 Million Biodiesel Plant Seeks Zoning in Illinois

Ewing Land Development Services is heading an effort to develop a 60-million-gallon biodiesel project near Quincy, Illinois. The proposed plant lies partially within a special enterprise zone, which offers tax incentives for construction of large projects and property tax abatement for up to 10 years. Despite exemptions in property taxes, the project is expected to increase the assessed value of land near the site location which would translate into immediate extra revenue for the Quincy School District. Developers are seeking to expand the zoning to include the entire project site. The project also includes plans for a railroad spur connecting the plant to the Burlington Line, which runs along the Illinois route 57 highway, and to barge shipments from the nearby Mississippi River.

Chuck Bevelheimer, city director of planning and development, believes the project "will be a great boost to the local economy." He expects the plant will create many construction jobs as well as 30 to 40 permanent jobs. Jim Mentesti, president of the Great River Economic Development Foundation, said the \$55 million project is the largest construction project he has seen in 21 years.

Source: <http://www.whig.com/288445335408692.php>

Montana School Becomes Fifth in State with Biomass Heating

A school in Townsend, Montana recently unveiled a new 680,000 BTU/hr wood pellet heating system, becoming the fifth biomass heating system in Montana public schools under the “Fuels for Schools and Beyond” program. The project was funded by the Montana DNRC, the U.S. Forest Service-Northern Region, the USDA Rural Development Program and the Headwaters Resource Conservation and Development Area.

The school will sell its carbon dioxide emission offsets for \$12,420 annually to The Climate Trust. Angela Farr, program director for the Montana DNRC, offered details on the emission offsets: “The school is selling over 130 tons per year of CO2 emission offsets gained from replacing their fossil fuels usage for the next 15 years.” Burning 250 tons of logging residue pellets, the wood pellet heating is expected to save the school district \$19,000 in heating costs annually and in excess of \$1 million over the 30-year life of the system.

Source: <http://www.billingsgazette.net/articles/2007/03/18/news/state/65-school.txt> and <http://dnrc.mt.gov/forestry/Assistance/Biomass/projectable.asp#underway>

EnergyWorks to Build Manure-to-Energy Plants on Three Pennsylvania Farms

EnergyWorks, headquartered in Annapolis, Maryland, has agreed to build an anaerobic digester plant on a family poultry farm in Lancaster County, Pennsylvania. This plant will be a part of an \$8 million investment in Lancaster County to build the first of three anaerobic digesters. The remaining plants will be placed on a pig farm and dairy farm and are yet to be finalized. The biogas produced at the plant will either be used onsite for energy generation or sold off-site.

Patrick Thompson, EnergyWorks president and chief executive, said the goal of EnergyWorks is to help clean up the Chesapeake Bay watershed and sustain local agriculture. The Chesapeake Bay Foundation published a report that Lancaster County was a manure hotspot that released about 12 percent of all nitrogen from manure in the watershed. Thompson said "the nutrients have been flowing into the Chesapeake Bay for some time. We're going at these projects with the intent of reaching a solution." The three facility project will be EnergyWork’s first effort with manure-to-energy technology.

Source: <http://local.lancasteronline.com/11/29713>

EVENTS

Calendar

Event	Date	Location	Further Information
Ethanol and Biodiesel Management	April 11-13, 2007	Chicago, IL	http://www.opisnet.com/ethbiomgmt/index.html
Energy Conservation and Generation for Farms and Food Processors	April 11-14, 2007	London, Canada	http://www.gtmconf.ca/welcome.htm
Australia 2007 Ethanol Trade Show	April 16-19, 2007	Southbank, Australia	http://www.bb biofuels.com/ethanol2007/tradeshows.html
California - BioEnergy: Waste-to-Energy, Combined Heat and Power, and Energy Efficiency for Farmers and Food Processors	April 18-20, 2007	Marriott Napa Valley Hotel 3425 Solano Avenue Napa, California 94558	http://www.cabioenergy.com/
BIO 2007	May 6-10,	Boston, MA	http://www.bio2007.org/Exhibitors/exhibitor_faq.html

	2007		
15 th European Biomass Conference and Exhibition	May 7-11, 2007	Berlin, Germany	http://www.conference-biomass.com
Biomass '07: Power, Fuels, and Chemicals Workshop	May 15-16, 2007	Grand Forks, ND	http://www.undeerc.org/biomass07 http://www.undeerc.org/biomass07
Epobio International Workshop – Products from Plants	May 15-17, 2007	Athens, Greece	http://www.epobio.net/
All-Energy 2007	May 23 - 25, 2007	Aberdeen, UK	http://www.all-energy.co.uk/
10th International Congress on Biotechnology in the Pulp and Paper Industry	June 10-15, 2007	Madison, WI	http://www.asabe.org/meetings/aim2007/index.htm
Ethanol Conference and Trade Show	August 7-10, 2007	St.Paul, MN	http://www.brdisolutions.com/default.aspx

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