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## Reminder - Register Now to Attend KREC's March Quarterly Meeting



Join us at KREC's March 30 Quarterly Meeting in Louisville. Come to the meeting to hear from a variety of speakers and join in the discussion about renewable energy initiatives such as biomass, agricultural and commercial economic development, state incentives, renewable energy research and environmental sustainability.

KREC's March Quarterly Meeting will feature speakers from the National 25x'25 Alliance, Kentucky Department for Energy Development and Independence and updates from KREC-funded researchers on progress toward their project goals.

The meeting will be held on March 30, 2011, from 1:00 p.m. to 2:30 p.m. ET at the Founders Union Building on the University of Louisville's Shelby Campus.

[Register](#) for the KREC Quarterly Meeting or call (502) 852-0965 for more information.

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Wind Powering America - Free Webinar Series



The U.S. Department of Energy's Wind Powering America is a nationwide initiative designed to increase the use of wind energy across the United States by working with regional stakeholders. Through its state Wind Working Groups, programs at the National Renewable Energy Laboratory and partnerships, this initiative will establish new sources of income for American farmers, Native Americans and other rural landowners and meet the growing demand for clean sources of electricity.

To learn more, join upcoming sessions of the Wind Powering America 2011 free webinar series:

- [Radar and Wind Systems](#), April 20, 3:00-4:00 p.m. ET
- [Transmission and Wind](#), May 18, 3:00-4:00 p.m. ET

Visit the [Wind Powering America website](#) for state-by-state breakdowns of wind resource potential, success stories, installed wind capacity, news, events and other resources which are updated regularly.

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## USDA Funds Available for Biorefinery Projects

USDA's Rural Business-Cooperative Service and Rural Utilities Service is accepting applications to fund projects related to constructing, retrofitting and operating biorefineries for Fiscal Year 2011.

- **Notice of Funds Availability (NOFA) Biorefinery Assistance Program**  
Applications are being accepted to provide guaranteed loans for the development and construction of commercial-scale biorefineries or for the retrofitting of existing facilities using eligible technology for the development of advanced biofuels. For Fiscal Year 2011, there is approximately \$129 million in mandatory budget authority available to support guaranteed loans. Applications must be received no later than 4:30 p.m. ET on May 10, 2011. For details, [see the Federal Register](#).
- **Notice of Funding Availability (NOFA) for Repowering Assistance Payments to Eligible Biorefineries**  
Applications are being accepted for payments to eligible biorefineries to encourage the use of renewable biomass as a replacement fuel source for fossil fuels used to provide process heat or power in the operation of these eligible biorefineries. To be eligible for payments, biorefineries must have been in existence on June 18, 2008. At least \$25 million is available to make payments to eligible biorefineries in Fiscal Year 2011, in addition to any carry-over funds from Fiscal Year 2010. Applications will be accepted from March 11 through June 9, 2011. For details, [see the Federal Register](#).

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## ACORE Releases Updated State-by-State Report on Renewable Energy for 2011

The [American Council On Renewable Energy](#) (ACORE) recently released the 2011 update and redesign of its report, [Renewable Energy in America: Markets, Economic Development and Policy in the 50 States](#), as an online resource and a product of ACORE's mission to scale-up renewable energy in America. Compiling updated financial, market, resource potential and policy information in a single easily-accessed resource, the report is intended to be an executive summary for all who are interested in the highlights of the renewable energy sector in every state.

"The U.S. is blessed with an abundance of domestic renewable energy resources, and the states through effective policies and industry through investment and development are leading the way in harnessing these resources for productive use," says Todd Foley, Senior Vice President of Policy and Government Relations. "This report captures the highlights of an incredible scope of activity that is changing our energy future and paving the way for continued economic growth."

The report shows that in 2010, the total installed base of new renewable electricity exceeded 50 GW in the United States. Texas, California and Iowa led in renewable energy generation capacity, while Iowa, Nebraska and Illinois led in renewable fuels capacity.

With its ongoing development of diverse renewable energy sources, California saw the most value from disclosed asset finance transactions over the past two years for newly-built projects. Meanwhile, Washington State surpassed California as the state with the most venture capital and private equity investment over the past two years, funding early stage technologies and companies. From the federal government, Texas and Illinois received the most funding from Recovery Act competitive grant and tax credit programs (1603 and 48C) to fund renewable energy projects and manufacturing facilities.

State-level policy commitments remained strong, with 36 states plus the District of Columbia having state-run renewable portfolio standards, and 17 states plus the District having state funds for renewable energy. Further information particular to each state is detailed under its two-page executive summary in the report.

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## New Advance in Biofuel Technology Announced

The U.S. Department of Energy announced this month that a team of researchers at the Department's [BioEnergy Science Center](#) (BESC) have achieved yet another advance in the drive toward next generation biofuels: using bacteria to convert plant matter directly into isobutanol, which can be burned in regular car engines with a heat value higher than ethanol and similar to gasoline. This research is part of a broad portfolio of work the Department is doing to reduce America's dependence on foreign oil and create new economic opportunities for rural America.

The work was conducted by researchers at the BESC, led by Oak Ridge National Laboratory. Using consolidated bioprocessing, a research team led by James Liao of the University of California at Los Angeles for the first time produced isobutanol directly from cellulose. The team's work, published online in *Applied and Environmental Microbiology*, represents across-the-board savings in processing costs and time. Also, isobutanol is a higher grade of alcohol than ethanol.

"Unlike ethanol, isobutanol can be blended at any ratio with gasoline and should eliminate the need for dedicated infrastructure in tanks or vehicles," said Liao, chancellor's professor and vice chair of chemical and biomolecular engineering at the UCLA Henry Samueli School of Engineering and Applied Science and a partner in BESC. "Plus, it may be possible to use isobutanol directly in current engines without modification."

More [details are available online](#).

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## Alltech Cuts Ribbon on \$200 Million Algae Facility in Kentucky



Alltech, a global leader in natural animal nutrition, cut the ribbon on its \$200 million Alltech Algae plant in Winchester, Kentucky last month. Alltech Algae is a state-of-the-art algae fermentation facility that was acquired in 2010 from Martek Bioscience Corporation for approximately \$14 million and has been renovated in the past few months to begin in April as one of the largest algae production sites in the world.

“For Alltech, algae fermentation presents the latest technological frontier from which we expect incredible opportunities in the areas of food, feed and fuel to arise,” said Dr. Pearse Lyons, founder and president of Alltech. “We have already been working in this area for several years and see it playing a major role in both human and animal health and nutrition.”

The primary focus of the facility will be the development of products derived from algae. The algae will be used for value-added feed products, algae-derived bio-fuel and the production of ethanol.

Algae capture CO<sub>2</sub> and release it as pure oxygen. It also creates 70 percent of our atmosphere’s oxygen, more than all forests and fields combined. Algae are the fastest growing plants in nature and have the ability to convert large amounts of carbon dioxide into oxygen, a characteristic that makes it particularly interesting in today’s environmentally conscious world.

A [ribbon cutting ceremony](#) at the plant was attended by local and state government officials as well as the 60 global attendees of the first Annual Algae Conference hosted by Alltech.



## Join KREC on Facebook

Please join KREC members and friends at [www.facebook.com/KyKREC](http://www.facebook.com/KyKREC) to share information, discuss ideas, ask questions or post items of interest to the renewable energy community and help get the word out about what's happening in renewable energy and energy efficiency in Kentucky.

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## Contribute an Article to *REnews!*

KREC would like to publish your thoughts on renewable energy and energy efficiency in Kentucky in the "Members' Forum". Please send your opinions, articles or news about RE happenings in the Commonwealth to [KREC@kppc.org](mailto:KREC@kppc.org). A short piece is preferable (300 or fewer words work best).

Make your voice heard – we want to give KREC members a forum to spread the word about renewable energy efforts and issues.



*KPPC is Kentucky's primary resource to help businesses, industries and other organizations develop environmentally sustainable, cost-saving solutions for improved efficiency. Based at the University of Louisville J.B. Speed School of Engineering, KPPC provides technical information and assistance that is free, confidential and non-regulatory.*

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