

# The Oklahoma WinCharger

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## Oklahoma Wind Power Initiative

A collaborative project between the University of Oklahoma and Oklahoma State University based at the

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## Oklahoma Renewable Energy Legislation 2006 Update

**HB 2512**, which called for a state tax credit for the purchase of small wind, geothermal, and hydroelectric systems, made it into the special legislative session. However, it was defeated in the closing hours. We can expect to see this tax credit bill again next year in the 2007 session.

**HB 2469**, which calls for an amendment to the state Production Tax Credit (PTC) modifying it to be paid over ten years as well as reducing the size of projects eligible for the PTC from 50 MW to 1 MW or greater, was successfully passed and signed by the governor during the special legislative session. The original bill number, 2469, is no longer where the language can be found. The bill in which it passed is HB 1174, Section 10.

## Study Finds Economic Impacts of Wind Energy are Greater Than Gas or Coal

The National Renewable Energy Laboratory (NREL) conducted a study in three states – Arizona, Colorado, and Michigan – comparing the spending on three types of power plants. Investigators compared direct spending on the new construction and operation of a wind facility, a natural gas combined-cycle baseload plant, and a coal-fired power plant.

The study found that economic benefits such as job creation and tax revenue created by wind

farms were greater than the other two counterparts. Also, the percentage of dollars spent on coal and gas that leave the state was higher than that for wind. “Wind power will bring the highest direct benefit to the state,” the study concluded. The title of the study is “Comparing Statewide Economic Impacts of New Generation from Wind, Coal, and Natural Gas in Arizona, Colorado, and Michigan”, and it can be found on the Department of Energy’s Wind Powering America website at [www.eere.energy.gov/windandhydro/windpoweringamerica/](http://www.eere.energy.gov/windandhydro/windpoweringamerica/) under the Publications link.

*Editor’s Note: The above is a summary from AWEA’s Wind Energy Weekly #1194.*

## Texas Leads the Nation in Wind Power

As the U.S. wind industry continues to expand and see record-breaking installations, Texas leads the way as the “windiest” state. Since the beginning of 2006, Texas has installed 375 MW. This has increased their total capacity to 2,370 MW of installed wind power. California, the historical leader in wind energy, is now second in the nation with 2,323 MW. For close to 25 years, California led the wind industry and was once home to more than 80% of the wind energy in the entire world. The U.S. currently has 9,971 MW installed.

*Editor’s Note: The above is a summary from AWEA’s Quarterly Market Report, July 25, 2006.*

## **University of Central Oklahoma Ranks 5<sup>th</sup> on EPA Green Power Partnership List**

As of June 26, the University of Central Oklahoma (UCO) is ranked 5<sup>th</sup> in the top 10 college and university partners of the EPA Green Power Partnership. The university purchases 26 million kWh annually from the Edmond Electric wind power program. This represents 100% of the university's electricity consumption. The 'green' electricity comes from the FPL Energy Sooner Wind Farm in Woodward, OK.

FPL Energy Sooner Wind Farm



Photo Courtesy of Mr. Tomas Izo

The EPA Green Power Partnership keeps track of and identifies all universities, colleges and conferences in the U.S. that have the highest green power purchases. Rounding out the top 5 college and university EPA Green Partners are:

- 1.) University of Pennsylvania  
(112 million kWh)
- 2.) Duke University  
(54 million kWh)
- 3.) Northwestern University  
(40 million kWh)
- 4.) Western Washington University  
(35 million kWh)
- 5.) University of Central Oklahoma  
(26 million kWh)

For more information and to join the Partnership please visit [www.epa.gov/greenpower](http://www.epa.gov/greenpower).

*Editor's Note: The above is a summary from the EPA's Green Power Partnership website, July 10, 2006.*

## **Wind Energy Works! Anniversary**

The national coalition, Wind Energy Works!, is celebrating its one year anniversary. The organization has almost 70 members today, an increase from the 23 members it had when it was first formed. The members range from

national, regional, local agricultural, economic development, environmental, and faith-based groups. Susan Williams Sloan, AWEA and Wind Energy Works! Coordinator, comments on the organization, "Wind Energy Works! increases the dialogue among the wind industry, advocates, and those who want to bring wind power to their communities." Dan McGuire, Wind Energy Works! Steering Committee member and American Corn Growers Foundation CEO, commented that, "Wind energy works for our economy, our environment, and our energy security." More information can be found on the coalition at [www.windenergyworks.org](http://www.windenergyworks.org).

*Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1199.*

## **New Energy Legislation Introduced in Washington**

In May, the Senate Democrats introduced new energy legislation. The Clean EDGE (Clean Energy Development for a Growing Economic) Act – Senate Bill 2829 – would call for the creation of an Advanced Research Projects Agency for Energy. The agency would be in charge of developing technologies that would reduce American oil consumption, reduce greenhouse gasses and other pollutants, and improve energy efficiency and reliability. Other major goals outlined by the new legislation are as follows:

- Renewable Portfolio Standard of 10% by 2020
- Extension of the PTC until 2014
- By 2010, 25% of all new vehicles sold in the U.S. would be flex-fuel capable and rising to 50% by 2020
- Alternative fueling stations at 10% of American gas stations by 2015

Senator Cantwell from Washington commented that "it's time to stop simply talking about energy independence and start running toward a future that will make America more competitive, more innovative, and more secure."

*Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1192.*

## **States Level Policies Promote Renewable Energy**

A new report from the Pew Center on Global Climate Change gives credit for much of the nation's growth in renewable energy to state-level

policies, such as the renewable portfolio standard (RPS). States are using RPSs to stimulate economic development and create a local, reliable source of electricity. Many are also implementing this policy to help in the reduction of greenhouse gases and other harmful emissions. The report includes case studies on five different states: Texas, Pennsylvania, Colorado, Massachusetts, and Nevada. Design successes and pitfalls are examined in each of the states as well as the driving forces behind the successful policies. Barriers to a successful program are also discussed, such as transmission problems, siting concerns, and favoritism towards certain renewable energy sources in different states.

The report concludes with a discussion of cooperation that is needed between state and federal representatives. This is needed if a national RPS is to be implemented. The complete report can be found at the Pew Center's website, [www.pewclimate.org](http://www.pewclimate.org).

*Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1196.*

### **Community Wind Projects Gain Popularity**

The interest level for community wind projects is growing just as fast as the wind industry here in the United States. Local farmers, landowners, schools, and businesses in rural areas are looking to wind energy to supply their electricity as well as an extra income. Community wind projects are often on a smaller scale, and the investors in the project are local community members. There has been a steady increase in the interest of community wind projects here in Oklahoma, especially in the panhandle. In 2005, when the total new installed wind capacity in the U.S. was 2,431 MW, approximately 3% - 7% could be considered community wind related depending on the definition used. Susan Williams Sloan of AWEA writes, "Supplying 20% of the nation's electricity from wind power, which President Bush acknowledges is possible, will take a combination of projects that are large, small, and everything in between."

*Editor's Note: The above is a summary from AWEA's WINDLETTER, Vol. 25, Issue 5.*

Community Wind Project: MinWind Energy, LLC  
Beaver Creek, Minnesota



Photo Courtesy of Fagen Inc.

### **Wind Farms & Property Values**

Ben Hoen, a graduate student at the Bard Center for Environmental Policy at Bard College in southeastern New York, conducted a study to analyze the affects of wind farms on the property value of the land surrounding the farm. During the study, each home in the study area, Madison County, New York, was surveyed to determine whether or not the turbines from a 20 turbine farm could be seen and to what degree. Although it is thought that wind farms decrease the value of the land, Hoen's study shows that affects to property values are negligible. To continue research, Hoen recommends that further studies be conducted across the nation at different sites. The report is being released by the Fenner Renewable Energy Education Foundation (FREE).

*Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1193.*

### **U.S. Department of Defense to Increase Green Power Usage**

The federal government's largest consumer of electricity, the Department of Defense (DOD), must now receive 25% of its electricity from renewable energy. This goal must be accomplished by 2025. Currently, the DOD represents 55% of the federal government's total electrical consumption. Senator Robert Mendez from New Jersey stated that, "The federal government must lead by example if more American businesses and families are to increase their usage of renewable energy."

*Editor's Note: The above is a summary from AWEA's Wind Energy Weekly #1197.*

## **New Funding for Section 9006**

Earlier this June, the Renewable Energy Systems and Energy Efficiency Improvements Program – Section 9006 of the 2002 U.S. Farm Bill – was allotted \$25 million from the Senate Appropriations Subcommittee on Agriculture. The original budget for the program was \$23 million. The additional \$2 million is greatly appreciated due to the rise in popularity of this program. However, the House has funded this program at the original \$23 million; amendments will be made in conference to finalize the budget. The program financially assists landowners and local communities and business who want to install renewable energy projects or make energy efficiency improvements. For more information on the Section 9006 program, visit [www.rurdev.usda.gov/rbs/farmbill](http://www.rurdev.usda.gov/rbs/farmbill).

*Editor's Note: The above is a summary from Renewable Energy Access, June 23, 2006.*

## **WGA Energy Initiative**

“Clean Energy, a Strong Economy and a Healthy Environment” is a report issued by the Western Governors’ Association (WGA) that outlines an initiative for an additional 30,000 MW of clean energy by 2015, an increase in energy efficiency of 20% by 2020, and assurances that the western United States has secure and reliable transmission for the next 25 years. Governor Michael Rounds (S.D.) stated the following, “There is much we can do within our states, but federal action also is needed to reach our mutual goals for secure, reliable energy within our region and across the country. Western governors will work with Congress and the Bush Administration to see these recommendations are implemented.” Oklahoma’s Governor Brad Henry is also a part of the WGA and will work with the rest of the association to help achieve this goal of clean energy.

*Editor's Note: The above is a summary from Renewable Energy Access, June 13, 2006.*

## **WINDPOWER 2006 Summary**

AWEA’s WINDPOWER 2006, held in Pittsburgh, PA, on June 4-7 was a brilliant success. A record-breaking attendance of over 5,000 people came to the conference to learn,

network, and do business. Almost 300 exhibitors displayed their products, information and latest technology. The WINDPOWER 2006 website provides information from the conference such as opening remarks, final programs, and attendee lists. You can find it at [www.eshow2000.com/awea/index.cfm](http://www.eshow2000.com/awea/index.cfm).

Clayton Robinson, Program Manager for the Oklahoma State Energy Office, recaps his experience at WINDPOWER 2006.

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### **A Time to Work**

I had the pleasure of attending the 2006 annual American Wind Energy Association conference and expo this June. As an ardent supporter of wind power and as a program manager in the Oklahoma State Energy Office I was excited to be around so many experts in the field.

The speakers in the general session generally felt confident in an extension of the production tax credit (PTC), and were more worried about meeting the demand for new turbines. The governors of Pennsylvania and Iowa also addressed the general sessions, expressing their commitment to renewable energy sources and technology. Iowa was proud to boast getting the Clipper wind turbine manufacturing facility and Pennsylvania made similar boasts about Gamesa facilities. I was both heartened to hear the good news of the wind industry doing so well and more than a bit depressed that we are not hearing more about renewable energy from our own state leadership.

I attended several sessions on small wind as well. Almost every speaker on the small wind subject inserted some praise of Norman’s own Mike Bergey and the Bergey Excel. There are several new machines available from various manufactures that are working toward quieter machines with improved grid integration via net metering. Grid tied models are the trend in small turbines, with a shift away from off-grid/battery charging models. Most manufactures see this as an opportunity to engage more mainstream consumers. Unfortunately, wind power in general cannot compete with the largely subsidized coal and petroleum competition without some form of support. The PTC allows utility scale to compete, but small wind doesn’t qualify for the PTC. Again, I came away with mixed feelings,

knowing we need some state level commitment to small wind as well.

Radar issues were a hot topic in the utility scale sessions. The Department of Defense (DOD) is concerned with wind farms that could cause interference with many of their radar systems, as is the Federal Aviation Administration (FAA). There appear to be regional differences in the FAA's approach to wind farm development, with the strictest areas being in the upper Midwest, where FAA concerns have blocked several projects in the past year or so. DOD has appointed a so-called "bellybutton," a go-to, one-stop military radar/wind farm interface person, which will hopefully streamline the process, even though it might not reduce military objections to certain wind projects. Having several military bases in Oklahoma, we should keep an eye on this issue.

I have stated this twice thus far, and will state it again: I came away from WINDPOWER 2006 with mixed feelings. The conference had a great pep rally effect on me, and offered me a chance to see many different sides to this booming industry. I just wish we could have sent some of our state leadership to this conference, because we need to have this enthusiasm at the highest levels to keep us competitive in the 21<sup>st</sup> century energy landscape. So if you took the time to read this, please get out there and help us put Oklahoma on the renewable energy map!

Thanks,  
Clayton

*These are the opinions of the author and not necessarily the position of the Oklahoma Department of Commerce, the Oklahoma State Energy Office, or the Oklahoma Wind Power Initiative.*

Welcome & Opening Session



WINDPOWER Exhibition Hall



Poster Presentations



All Photos Courtesy of AWEA

### **Article Correction**

In the last issue of the WinCharger, the story "Another Record Year for Wind" stated that "Wind farms were the second largest source of electricity generating plants in 2005, following natural gas fired plants." It should have read that "wind farms were the second largest source of new power generation built in 2005." Please accept our apologies for any confusion. Thank you.

### **Distribution of the WinCharger**

Electronic distribution of The Oklahoma WinCharger is available. To sign up to receive your copy of the WinCharger by e-mail, go to the OWPI website at [www.ocgi.okstate.edu/owpi](http://www.ocgi.okstate.edu/owpi), click on the link on the left side that says "Subscribe to the Oklahoma WinCharger," and follow the instructions from there. Receiving your copy of the WinCharger by e-mail allows you to receive the newsletter faster and helps us keep our mailing costs down.

If you have recently moved or changed your e-mail address, please let us know. Address corrections or updates can be sent to Stephanie Buway at [sbuway@gmail.com](mailto:sbuway@gmail.com) or by phone at 405-447-8412. Thank you.

## Calendar of Events

- Aug 9** Meeting of the **Oklahoma Renewable Energy Council**, 10 am to noon, OK Department of Commerce, Gallery 1-2. See [www.ocgi.okstate.edu/orec](http://www.ocgi.okstate.edu/orec) for more information.
- Aug 10-11** **Women in Agriculture and Small Business Conference** hosted by the Great Plains RC&D and the USDA Risk Management Agency. Clarion Convention Center, Oklahoma City, OK. See [www.greatplainsrcd.org](http://www.greatplainsrcd.org) for more information.
- Sept 13** Meeting of the **Oklahoma Renewable Energy Council**, 10 am to noon, OK Department of Commerce, Gallery 1-2. See [www.ocgi.okstate.edu/orec](http://www.ocgi.okstate.edu/orec) for more information.
- Sept 15** **Smart Growth: Building a Sustainable Community** hosted by the Oklahoma Sustainability Network. Tulsa Convention Center, Tulsa, OK. For more information, please visit [www.oksustainability.org](http://www.oksustainability.org).
- Oct 3-4** **Governor's Conference on Biofuels**. University of Oklahoma – Oklahoma Memorial Union, Norman, OK. For more information, please call 1-800-203-5494.
- Oct 10-12** **Advancing Renewable Energy: An American Rural Renaissance** hosted by the USDA and DOE, St. Louis, MO. For more information please visit either [www.energy.gov](http://www.energy.gov) or [www.usda.gov](http://www.usda.gov).
- Oct 23-25** **Fall Technical Workshop Western Roundup of Wind Integration**, hosted by the Utility Wind Integration Group. Sheraton Hotel, Oklahoma City, OK. For more information please visit [www.uwig.org](http://www.uwig.org) or email [info@uwig.org](mailto:info@uwig.org).

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