

The Live Wire EmPowered E³ (Extension's Energy Exchange)

By Leigh Fortson, Extension Regional Communications Coordinator and REA (Renewable Energy Advocate)

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Extension's Growing Role – Leading the Way

CSU has entered the national spotlight regarding researching technology and policy development for renewable energy opportunities. [CSU now has a seat on the board of directors for the National Renewable Energy Lab \(NREL\)](#) in Golden, along with its partners in the Colorado Renewable Energy Collaboratory which include CU – Boulder and the Colorado School of Mines. Two other universities were invited to the table: Stanford University and the Massachusetts Institute of Technology. The purpose of NREL's partnership with this elite academic collective is to leverage resources and provide solutions to clean energy technology and effective policies that can be taken to the marketplace.

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Eagle County prepares to walk the walk when it comes to its own ECO-build program. The program was implemented in 2006 for residential buildings and in 2008 for commercial buildings. Beginning in July 2008, the County began revamping its administrative offices in downtown Eagle to keep with the requirements it imposes through the ECO-build program.

[Laurel Potts, Extension Horticulture Agent for Eagle County](#), has been instrumental in guiding the [Xeriscape Task Force](#) in collaboration with a landscape architect to develop a xeriscape plan that

reflects the ECO-build regulations. Primary project goals are to reduce water use by 50% and to serve as a demonstration to educate the public about how to landscape responsibly and illustrate a wider pallet of mountain adapted native and ornamental plant materials. Go Laurel!

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On July 31st, [CSU researchers were awarded a 1.5 million grant](#) from the U.S. Department of Energy and the U.S. Department of agriculture to develop new crops for cellulosic biofuels. The focus of the research will be to identify plant genes, specifically from rice, that optimize productivity. In the end, they won't be promoting rice as a biofuel crop; rather, they are hoping to learn from the genes found in rice to more effectively develop feedstock from switchgrass and other plants.

Alternative Fuel Update

According to the Environmental and Energy Study Institute, [America is progressing nicely in the way of producing cellulosic biofuels](#). There are, in fact, 55 cellulosic biorefineries that are either complete, under construction or being planned. The plants cover territory in 31 states that will reportedly yield 629.5 million gallons of alternative oil per year. That figure is expected to grow as more plants open by 2010.

One of the feedstocks that make cellulosic biofuels possible comes from forest biomass harvested from both privately owned and public lands. To learn more about the study, the laws that impact this industry, and how forest biomass in your community could contribute to clean fuels, go to <http://www.eesi.org>.

Gas Saving Facts – It Doesn't Pay to be Idle

It's a habit that's familiar to all of us. You need to buy a single item at a store, or quickly drop something off at a friend's house or business. You put the car in park, leaving it to idle. Your intension is to be right back, and urban legends say that it saves more gas to leave the car idling than to turn it off and restart it. But the line in the store is long, or your friend or business colleague feels like chatting and before you know it, ten minutes pass before you find yourself behind the wheel again. Which means you've just chewed through more of that precious gas and idled away the almighty dollars that pay for it.

Consumer Reports offers these myth busters and simple tips that can help you save gas—and consequently, reduce carbon emissions:

- **Don't idle.** Restarting the engine is the same as idling for only 8 seconds. To read about anti-idle laws by State go to: <http://www.scribd.com/doc/2170989/2008-Idle-Laws-by-State> Several Colorado communities, such as Aspen and Denver, have anti-idling ordinances.



- **Go the speed limit.** Every five mph over 60 mph reduces fuel efficiency by about seven to ten percent.
- **Keep your vehicle maintained.** A dirty air filter can result in up to 20% fewer miles per gallon.
- **Keep tires properly inflated.** One tire under inflated by 20% (8psi) can cost more than ½ mile per gallon.
- **Avoid driving during peak,** congested hours.
- **Lighten your load.** Every 250 lbs = one mile per gallon. If you don't need to carry something, consider leaving it off the vehicle.
- **Reduce drag.** Remove racks if no longer needed. Half of a vehicle's energy is expended overcoming wind resistance.
- Buy gas during the **coolest times of the day.**
- **Use the right octane** for your car.
- **Don't top off your tank,** it contributes to ground ozone.
- **Tighten your gas cap.** Improperly seated caps waste 147 million gallons of gas per year.
- **Drive at a constant, moderate speed.** Accelerate slowly and brake over a longer distance.
- **Use cruise control** when possible.

Legislative Updates

According to 25x25, a bipartisan coalition of senators recently unveiled a sweeping energy proposal known as the [New Energy Reform Act of 2008 that advocates say will reduce gas prices, lessen the nation's dependence on foreign oil and strengthen America's economy](#). The bill would extend renewable energy production and investment tax credits, transition the nation's vehicle fleets to fuels other than gas or diesel, and would provide consumer tax credits for alternative fuel vehicles.



If passed, the bill would also open up offshore drilling off of the eastern seaboard, while maintaining the ban on drilling off of the West Coast and Arctic National Wildlife Refuge. There's much more to the bill which will be debated behind closed doors at a legislative energy Summit held in September. Meanwhile, it's gaining more bi-partisan support every day.

To read and download the New Energy Reform Act, go to http://landrieu.senate.gov/news/08.08.01_New_Energy_Reform_Act.pdf. To view the bipartisan press conference announcing the legislation proposal, go to <http://www.c-span.org/>.

GEO Update (www.colorado.gov/energy)

Governor Ritter has elected to participate in the Climate Registry where the state will report levels of greenhouse gas (GHG) emissions starting in 2009.

In 2005, Colorado's GHG emissions were 35% higher than in 1990. If things continue this way, it's projected that emissions will increase to 80% of the 1990 levels by 2020. [Colorado state government has three important roles to play in facing the climate change challenge:](#)

- Enact "bridge strategies" that immediately reduce greenhouse gas emissions while we pursue technologies to generate cleaner energy.
- Provide leadership to ensure that long-term solutions, such as renewable energy and clean coal technologies, are fully developed and broadly implemented.
- Prepare the state to adapt to those climate changes that cannot be avoided.

The Climate Registry is a non-profit organization established to measure and publicly report GHG emissions in a common, accurate and transparent manner consistent across industry sectors and borders. Reports from the Registry will provide non-biased information so the public can know the real deal about GHG emissions in their state.

Governor Ritter has established the Colorado Climate Action Plan that outlines his plans to deal with climate change. To read it, click here: [Colorado Climate Action Plan](#) (PDF, 1.1MB).

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The Homeowner's Association (HOA) bill went into effect on August 6, 2008. This will [free up residents to move forward with plans to go green](#), regardless of the HOA restrictions. The law protects your right to install on your property renewable energy devices such as:

- Photovoltaic (PV) solar electric panels
- Solar thermal systems (solar water heaters)
- Solar lighting systems
- Wind-electric generators



It also protects your right to take energy efficiency measures such as:



- Awnings, shutters, trellis, ramada, or other energy reducing shade structures
- Garage or attic fans
- Evaporative coolers
- Energy-efficient outdoor lighting
- Retractable clotheslines

Any and all of these devices and measures must meet all building code, electrical and bona fide safety requirements. For more information, go to: <http://www.colorado.gov/energy/policy/hoa-homeowners.asp>.

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Grant funding totaling \$500,000 is now available through the [Advancing Colorado's Renewable Energy \(ACRE\) program to promote agricultural energy related projects](#).

Funds will be allocated in three categories: feasibility studies, project participation, and research. Interested applicants are required to provide a matching contribution of at least 10 percent of the total project budget, and funds may not be utilized for paying down current debt, general administrative expenses or for indirect institutional overhead costs. Applications and a \$50 nonrefundable application fee must be received by September 17, 2008.

Applicants are encouraged to visit www.colorado.gov/ag/energy for full details on how to apply as well as a listing of current and completed projects since the program began. Visitors are able to search for current ACRE projects by renewable energy type such as biofuel, biogas, wind and solar among others, or by county.

Did you know that...

75% of electricity used by electronic devices is used when they are turned off? Unplug cell phone chargers, hair dryers and iPod chargers, blenders, toasters and any other electronic devices that you only use occasionally. Install a power strip to conveniently control devices such as computers, TV's and game consoles.



Upcoming Events

The University of Nevada at Las Vegas is hosting a **Renewable Energy Symposium**, presented by the Office of Strategic Energy Programs and co-sponsored by the Division of Research and Graduate Studies.

The event is free and will focus on renewable energy production in Nevada, the US Southwest, and renewable research projects nationwide. This is a great opportunity for anyone working on renewable projects to collaborate with others in this field and exchange information.

Plan on attending this event on Wednesday, August 20th from 8:30 am until 6:00 pm. For more information and to register, [click here](#) or call (702) 895-5883.

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The Colorado Renewable Energy Society (CRES) is hosting "The Road from Fossil Fuels to a Sustainable Energy Economy: The Strategy in Iceland as a Model" on Thursday, August 21st.

It will take place at the [Jefferson Unitarian Church](#), 14350 W. 32nd Avenue (just west of I-70) in Golden. To find out more, go to: <http://www.cres-energy.org>.

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CSU is co-sponsoring The **Green Frontier Fest** during the Democratic National Convention on August 24th. The Green Frontier Fest will showcase everything from major renewable energy technologies to everyday products and services, aiming to create an engaging, educational, and empowering view of greener living.

Everyone is invited to participate in interactive and educational exhibits, a farmer's market of local and organic produce, a children's area, eco-carnival games, music and entertainment and special presentations by guest speakers, among other activities.

Go to <http://www.greenfrontierfest.com/map.htm> and find out when and where these activities are occurring.

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The 18th Annual Crestone Energy Fair will take place August 31st – September 3rd. If you or your clients are interested in bees, this will be an especially good fair to attend. For more information, go to: http://www.crestonepeak.org/Crestone_Energy_Fair.html

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Colorado State University, with support from Governor's Energy Office, is now offering a **Green Homes Certificate Program**. The program will consist of thirteen sessions on sustainable residential buildings with meetings on Mondays from 5:30 to 9:00 pm (plus one Saturday site visit).

The program runs from September 15 through December 15, 2008, and takes place at the CSU campus in Fort Collins. Visit the [CSU website](#) for more information or call 970-491-3260.

Solar Energy International's summer workshops still having openings. If you'd like to learn about straw bale construction, solar hot water, biodiesel, or implementing projects in the developing world, check out the workshops below.

[Renewable Energy for the Developing World](#)

Carbondale, CO • August 25 - 29

[Straw Bale Design & Natural Plaster](#)

Paonia, CO • September 15 – 19

CSU Energy Website

To learn more about wind, solar, geothermal, and biofuels, visit our energy website at:
<http://www.ext.colostate.edu/energy>.

Furthermore

Go to <http://hes.lbl.gov/hes/db/zip.shtml> and you can do an online calculation of your own energy use and carbon footprint. It's easy to use. Tell your communities about it.

Send me anything that's newsworthy that you're doing in the world of clean energy and renewables. We need to keep our colleagues up to date on what's going on in Extension and the value of our role!