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Governor Steve Beshear announced this month that Taggart Solar LLC will locate a new manufacturing operation in Edmonson County, creating 30 new, full-time jobs. The company plans to lease a 10,000-square-foot building in the Edmonson County Industrial Park in Park City and will invest \$440,000 as a result of the project.

"Kentucky is thrilled to welcome Taggart Solar, a company that is providing its customers with cleaner, greener energy applications with its solar technology," Gov. Beshear said. "Taggart Solar's presence in Edmonson County and the addition of 30 jobs in the area will provide a positive economic boost to the region. The Commonwealth is pleased to have played a role in making this project possible."

Taggart Solar produces solar panels for industrial and residential use. The two-megawatt Edmonson County facility is expected to be operational by May and will assemble photovoltaic (sunlight into electricity) modules for distribution across the United States, Canada, as well as other countries.

"We're extremely excited to announce our plans to locate in Edmonson County," said Dagney Johnson, president of Taggart Solar. "We've been very impressed with the community, the leadership of the elected officials and the assistance that everyone has provided to make this project happen. I'm confident that south central Kentucky is going to be a place of success for Taggart Solar."

To encourage the investment and job growth in Edmonson County, the Kentucky Economic Development Finance Authority preliminarily approved the company for tax incentives up to \$300,000 through the Kentucky Business Investment program. The performance-based incentive allows a company to keep a portion of its investment over the term of the agreement through corporate income tax credits and wage assessments by meeting job and investment targets.

"I applaud today's announcement and what it can mean to our local economy," said Rep. Michael Meredith, of Brownsville. "Hopefully these 30 jobs will serve as a boost to those seeking employment and serve as a building block to bring more opportunities to our region."

"We're very pleased that Taggart Solar has chosen to do business in Edmonson County," said Edmonson County Judge-Executive N.E. Reed. "This company's announced capital investment and expected total job creation are great news for our community, and it's exciting to know that a green-energy company will be bringing their technology and innovation to South Central Kentucky."

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25x'25 Free Webinar: Reaping the Rewards of Energy Efficiency: Money-Saving Measures for the Livestock Sector

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Renewable Energy Posts Remarkable Gains

From 25 x '25 REsource. Renewable energy advocates have spent the past several months operating in a defensive mode against an onslaught of naysaying and criticism that has more basis in political theater than in reality.

However, the value of renewable energy was never better demonstrated than in the March monthly energy review issued late last week by the DOE Energy Information Administration. The report, which lists U.S. energy production and consumption data up through Dec. 31, 2011, offers both a respite from the bluster of short-sighted critics and a ringing response to those who deny the benefits of renewable energy.

The EIA analysis shows that renewable energy sources have expanded rapidly in the United States over the past three years, far outpacing the growth rates of fossil fuels and nuclear power.

Between January 1, 2009 and the end of last year, renewable energy sources — biofuels, biomass, geothermal, solar, water and wind — grew by more than 27 percent. Over the same period, total domestic energy production increased by just 6.7 percent. Natural gas production grew 13.7 percent and crude oil production in the United States grew 14.3 percent.

At the same time, nuclear power declined by about 2 percent and coal dropped by more than 7 percent.

When examining all energy use sectors, including electricity, transportation and thermal, renewable energy sources accounted for almost 12 percent of domestic energy production last year, compared to less than 10 percent in 2008. While nuclear power still provides a larger share of the electricity used in the United States, renewable electricity sources, including biomass, solar power and wind energy, generated nearly 11 percent more energy in 2011 than nuclear power.

Renewables also grew on the consumption side of the ledger, climbing to almost 9.3 percent of all energy used in the United States last year, compared to a little less than 8.3 percent in 2010, and 7.2 percent in 2008.

Other facts gleamed from the EIA analysis include the consistent growth or renewable energy by virtually every sector over the three-year period, include a 15.3-percent rise in geothermal energy, a 26-percent increase in hydropower, a 28-percent jump in solar power, a 47-percent hike in biofuels and a whopping 114-percent spike in wind energy. While biomass energy production dropped, it only fell by a percentage point, leaving it as one a stable source of new electricity.

One of the consequences of this dramatic growth in renewable energy is the steady decline in U.S. petroleum imports, which have fallen from 9.3 million barrels per day to what the EIA estimates will be 7.8 million barrels per day through 2012. That is driving down the share of America's petroleum products coming from foreign sources to less than 43 percent, an incredible drop when remembering that imports represented more than 60 percent of our oil supply in 2005.

The remarkable growth of all renewables over the past three years shows the viability of these clean and sustainable energy solutions. These burgeoning industries create jobs and boost our economy. By reducing imports, they improve our energy security, which, the U.S. military reminds us, is our national security. And they provide cleaner options in meeting our electricity and transportation needs.

The benefits of renewable energy are too important to be used as a political football. Even in a time of fiscal restraint, it is hoped that reports like the EIA's analysis bring some reason back to the debate and lawmakers recognize that policies, funding mechanisms and tax benefits that sustain the renewable energy sector will go a long way toward bringing the United States back to its rightful place as the leader in an emerging global energy economy.

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Kentucky Center Plans Louisville's Largest Green Roof



From WFPL. The Kentucky Center

for the Performing Arts is seeking funding to replace its 15-year-old roof with something more environmentally friendly.

The Kentucky Center's roof is about 76,000 square feet, and architects are studying how to best cover two-thirds of that area with plants. Green roofs are typically done on flat roofs, and the Kentucky Center's roof features a notable curve. If the whole space is converted to a green roof, it would be Louisville's largest.

The green portion could add an additional \$1.5 million to the cost of roof replacement, but executive projects director Abby Shue says the potential savings are significant.

"Just the warranty alone of a living roof versus a regular roof is double in time," she said. "And additionally there will be energy savings over time. So it is an additional upfront cost, but we really feel that the long term benefits to the center over time will make that worthwhile."

Cash Moter is an architect with Louisville firm Joseph and Joseph. He says covering both the flat parts of the roof and the distinctive sloped barrel vault will help raise awareness of the benefits of green roofs.

"It would be a great example to show," he said. "The visibility of it—the flat portions, with the tall buildings around, of course, will get good visibility, but the barrel vault itself will be something that will definitely be eye-catching. And it'll be innovative. Whatever solution we come up with, it's going to be new."

Green roofs are expensive, but advocates say they save money in the long term by reducing heating costs and rainwater runoff. The funding for the Kentucky Center's new roof is still unknown. The center—which is owned by the state—is seeking money from the General Assembly, and the Metropolitan Sewer District has pledged some support.

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Carbon Manual for Landowners released by Georgia Forestry Commission

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The Georgia Forestry Commission has produced a new report on forest carbon sequestration offsets entitled *Generating Value through Forest Carbon: An Introduction for Forest Owners in the U. S.*

The report provides:

- An overview of carbon offsets
- Description of the carbon offset markets
- Steps for developing a forestry carbon offset project
- Descriptions of the three major forestry carbon offset standards
- Examples of forestry carbon projects
- A conclusion that provides guidance to landowners considering carbon management

Access the report on the Commission's website.

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Algae Biofuels: The Wave of the Future

From ScienceDaily. Researchers at Virginia Bioinformatics Institute have assembled the draft genome of a marine algae sequence to aid scientists across the US in a project that aims to discover the best algae species for producing biodiesel fuel. The results have been published in Nature Communications.

Scientists in VBI's Data Analysis Core (DAC), Robert Settlage, Ph.D., and Hongseok Tae, Ph.D., assisted in the assembly of the genome of Nannochloropis gaditana, a marine algae that may be capable of producing the lipid yields necessary for a viable fuel source.

"Getting the data is now the easy part. What we're doing in the DAC is enabling researchers to move beyond informatics issues of assembly and analysis to regain their focus on the biological implications of their research," said Settlage.

Further analysis revealed that with fairly straightforward genetic modification, N. gaditana should be capable of producing biofuel on an industrial scale, which may be the wave of the future in fuel research and production.

Read the full article.

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25x'25 Free Webinar: Reaping the Rewards of Energy Efficiency: Money-Saving Measures for the Livestock Sector

The national 25x'25 Initiative is presenting a free webinar on Tuesday May 1, 2012 from 12:00 pm to 1:30 pm ET. The webinar will feature experts in the energy field who will explain how taking advantage of on-farm energy efficiency improvements can not only bring us closer to achieving the 25x'25 goal, but also benefit livestock and dairy producers by providing real money-saving measures while making contributions to reducing our dependence on foreign oil, protecting the environment and public health, and providing economic gains for rural America.

Energy efficiency has always been the option of first choice for 25x'25 in achieving a clean energy future. The energy derived from efficiency measures and

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conservation is one of the most affordable, available and reliable forms of energy, and for farmers, it can mean big savings. According to the American Council for an Energy Efficient Economy (ACEEE), the potential energy and cost savings achieved through technology and production practices that are already commercially available amount to a conservative estimate of more than 34 trillion Btus and 1 billion dollars per year.

Our farms, ranches and forests hold the keys to a more sustainable energy future. They also have the opportunity to play a key leadership role in seizing energy efficiency opportunities provided that we maintain stable policies that support efficiency and innovation.

Register for this free 25x'25 webinar.

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Submit 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. 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.

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