

Lexington Herald-Leader (KY)

2008-02-11

**Section:** City&Region

**Edition:** Final

**Page:** B1

## UK one of 20 in national **solar** competition University Solicits Project Ideas

*Andy Mead*

*Amead@herald-Leader.Com*

In announcing the University of Kentucky's entry into a prestigious international competition this week, Greg Luhan joked that the state song could give the school a leg up: The sun shines bright on my old Kentucky home ... .

UK is one of 20 university teams chosen to compete in the federal Department of Energy's 2009 **Solar Decathlon**.

The competition requires students to build an 800- square-foot house that runs on **solar** energy, and that can be taken apart and moved to The Mall in Washington, D.C.

There, in the fall of 2009, the houses will be shown to the public and judged in 10 areas, including architecture, market viability, hot water and comfort.

UK's entry potentially will involve hundreds of students from six colleges and 16 departments and centers, said Luhan, an associate dean for research in the College of Design who is one of three faculty members leading the effort.

Other competitors include the 2007 winner, Technische Universitat Darmstadt from Germany, Virginia Tech, Pennsylvania State University and Cornell University.

The teams were chosen late last month; on Thursday, UK kicked off its project by asking for ideas on "native elements" that are "useful to sustainable development in Kentucky."

The title of the request for ideas is "What about Blue is Green? Open Ideas Competition." The deadline for submitting ideas is Feb. 18.

Provost Kumble R. Subbaswamy, who attended the announcement, said he already had suggested that hemp be included. Kentucky was once a leading producer of hemp.

Someone in the audience asked whether the coal industry would be involved. Hilary Bryon, a College of Design lecturer who also is a principal in the effort, suggested that carbon fibers -- "turning coal into something else" -- might be used in the house.

The idea behind the **Solar Decathlon**, organizers said, is to explore and popularize **solar** technology, while providing students with training that would be useful in a number of fields.

In the **Solar Decathlon** competitions in 2000, 2005 and 2007, the **solar** houses made electricity from the sun and stored it in batteries.

This time around, the houses will be hooked to an electrical grid. But the idea is that on sunny days they will send more electricity to the grid than they take on cloudy days.

The houses will have to produce enough electricity to pass several specific tests, such as drying towels each day and running televisions and computers.

Kentucky's entry will be called SMART BLUES, an acronym for (take a deep breath) Simple, Modular, Affordable, Renewable, Transportable, Building combining Living, Understanding, Energy-efficiency and Sustainability.

The project will be expensive. The Department of Energy started each team off with \$100,000, but Byron said that each of the houses in the 2005 competition cost at least \$500,000.

Making up the difference will mean a lot of fund-raisers, she said. It also will include in-kind contributions from companies that manufacture **solar** or other equipment or building materials.

Thursday's announcement was attended by Gregg Long of the Home Builders Association of Lexington, who said his group wants to be involved.

He later said that the **solar** energy ideas developed by students "help us also as homebuilders."

Most of Kentucky's electricity now comes from coal-fired generating plants. But coal is increasingly under attack because of pollution that gets into the air and water when it is burned.

Talina Mathews, executive director of the Governor's Office of Energy Policy, attended the UK announcement and said she is excited about **solar** energy.

"Looking down the pike at climate change legislation, Kentucky has to diversify its energy sources," she said.

Reach Andy Mead at (859) 231-3319 or 1-800-950-6397, ext. 3319

Do you have a bright idea about **solar** energy, or suggestions for Kentucky materials that could be used in a **solar** house? Go to [www.uky.edu/solarhouse](http://www.uky.edu/solarhouse).

Here are the 20 teams selected to participate in the 2009 **Solar Decathlon**:

- \* Boston Architectural College and Tufts University
- \* Cornell University
- \* Iowa State University of Science and Technology
- \* Missouri University of Science and Technology
- \* The Ohio State University
- \* The Pennsylvania State University
- \* Rice University
- \* Santa Clara University, and California College of the Arts
- \* Technische Universitat Darmstadt, Germany
- \* Universidad de Puerto Rico
- \* Universidad Politecnica de Madrid
- \* The University of Arizona
- \* University of Calgary, SAIT Polytechnic and Mount Royal College, Canada

- \* University of Illinois at Urbana-Champaign
- \* University of Kentucky
- \* University of Louisiana at Lafayette
- \* University of Minnesota
- \* University of Waterloo, Ryerson University and Simon Fraser University, Canada
- \* University of Wisconsin-Milwaukee
- \* Virginia Tech