(OK) In the wake of rising energy costs, many states, including Oklahoma, have passed laws that require new public buildings to comply with energy-saving regulations.

In June, Gov. Brad Henry approved a piece of legislation that aspires to improve energy efficiency in some of Oklahoma's public buildings. HB 3394, by Rep. Lance Cargill, R-Harrah, and Sen. Tom Adelson, D-Tulsa, requires the Department of Central Services to adopt a high performance certification program for public buildings, aimed at improving energy efficiency and decreasing resource consumption. The bill also establishes requirements and procedures for the program.

According to the bill, DCS is responsible for implementing the certification program to evaluate the efficiency of all new public buildings in the state.

"The intent of this bill is to ensure that we have building structures that are as energy efficient as possible," said Gary Smedley, public information officer for DCS. "It's something we have been striving to do for years because it's the responsible thing to do for both the environment and the economy."

Most of the new building laws being passed across the nation follow guidelines set forth by the United States Green Building Council's Leadership in Energy and Environment Design (LEED). According to the U.S. Green Building Council's Web site, the number of states that are establishing green building policies is continually increasing each year. This year alone, Florida, Indiana, Maryland, New Jersey, Oklahoma and South Dakota have adopted laws that require buildings meet new energy efficient standards.

LEED has established a green building rating system that aims to hasten the adoption of green building development. The certification program gives building
designers guidelines for building structures with the intention of decreasing the negative impact on the environment and the economy.

Smedley said that initially the measure was written to get the department to use standards set forth by the U.S. Green Building Council's LEED. Smedley said that the LEED standards are very specific, and the final draft of the measure allowed for the use of other standards set forth by entities other than LEED.

"LEED is the primary set of standards that we use, but there are other standards we utilize, as well," said Smedley. "The main objective is to make sure that we are creating buildings that are as efficient as possible."

According to the Green Building Council Web site, U.S. public buildings account for the following energy and resource consumption:

• 70 percent of all electricity;
• 39 percent of energy use;
• 39 percent of carbon dioxide emissions;
• 40 percent of raw materials use;
• 30 percent of waste output; and
• 12 percent of potable water consumption.

The Web site also states that the benefits of a green building include the enhancement and protection of ecosystems, improvement of air and water quality, reduction of solid waste and the conservation of natural resources. Buildings that are built to be energy efficient also have reduced operating costs, according to the Web site.

According to the council's Web site, an upfront investment of 2 percent in green building design results, on average, in life cycle savings of 20 percent of the total construction costs. Tenants of green buildings can save about 50 cents per square foot each year through strategies that cut energy use by 30 percent, which can represent a savings of more than $50 thousand in a five-year lease on 20,000 square feet.

LEED buildings also consume 30 to 50 percent less energy than conventional buildings, save 40 percent of potable water, reduce carbon emissions by 39
percent and have a 70 percent savings on waste output, according to the council's Web site.

Oklahoma's green building law will go into effect on Aug. 21.