



Posted on Wed, Oct. 21, 2009

Carbon dioxide study funded

By WAYNE WASHINGTON

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The University of South Carolina will use a \$4.95 million grant from the U.S. Department of Energy to study the feasibility of storing carbon dioxide underground in the Lowcountry, the school announced Tuesday.

"Carbon dioxide is a major greenhouse gas," said John Shafer, director of USC's Earth Sciences and Resources Institute and the grant's principal investigator. "If we can find a viable way to capture carbon dioxide and store it safely underground for centuries, then we can perhaps reduce the amount of (carbon dioxide) in our atmosphere."

Shafer's team will get federal grant money over the next three years. Those funds will be augmented by money from the S.C. Geological Survey, the university and the University of Illinois for a project that will cost about \$6 million.

The Southeast produces more carbon dioxide than any other region of the country, Shafer said.

Most of the carbon dioxide produced in South Carolina - a combined 73 percent - comes from electric power and transportation, according to figures from the U.S. Energy Information Administration.

Shafer and his team of researchers will explore the feasibility of storing carbon dioxide in underground sites in Colleton, Beaufort and Jasper counties.

"Based on what we've seen, we believe that this could be a viable area for the storage of (carbon dioxide)," Shafer said. "We already have a good idea of what we will find."

Researchers will focus on abandoned wells, coal beds and underground reservoirs of salt water commonly referred to as deep saline aquifers.

One goal of the research will be to determine whether the carbon dioxide could be stored in a way that prevents it from seeping into groundwater supplies.

The potential impact of hurricanes and earthquakes on an underground storage site also would be studied.

Shafer said any sites considered would be "well below and protected from any fresh water aquifers in the region."

The grant - one of 11 national awards made by the Department of Energy - was announced by USC's new vice president for research and graduate education, Stephen Kresovich.

Kresovich said USC's research tentacles are a big part of what drew him to the university.

"I was impressed by the breath and the depth of the comprehensive science going on at the University of South Carolina," he said, adding the grant is in keeping with the university's environmental sustainability efforts.

"Sustainability is a way of life at the University of South Carolina, and our efforts to reduce carbon dioxide emissions unite faculty, students and staff," Kresovich said.

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