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Cleaner coal would bolster our economy

By: U.S. Congressman Jerry F. Costello

As a member of the U.S. House of Representatives, I serve as a senior member of the Science and Technology Committee, where my legislative focus has been to promote the research, development, and demonstration (RD&D) of clean coal technologies to bolster the economy of Southwestern and Southern Illinois and ensure our nation continues to use coal in an environmentally friendly manner.

Coal provides nearly \$1 billion a year to the state of Illinois, and our state's coal resources hold more BTUs than the oil reserves of Saudi Arabia and Kuwait. According to the U.S. Department of Energy (DOE), coal accounts for more than 94 percent of the proven fossil energy reserves in the U.S. and supplies more than 50 percent of the electricity. In addition, at present rates of U.S. energy consumption we should have a 250-year supply of coal, and it is an extremely cost-effective fuel. According to the Energy Information Administration, for the month of May it cost an electric utility \$1.73 per million BTU to use coal, \$7.53 to use natural gas, and \$7.66 for oil. Simply put, given its abundance and low cost, coal needs to remain an integral part of our national energy policy.

Recently, greater attention has been paid to climate change and the need to reduce the emission of greenhouse gases. In order to use coal as cleanly as possible, the deployment of advanced clean coal technology is critical. In March, the Massachusetts Institute of Technology (MIT) reported that levels of worldwide coal use depend on the successful deployment of technology that captures the carbon dioxide emissions from power plants and injects it into carefully chosen geologic formations where the carbon dioxide is permanently stored deep underground. This cutting-edge clean coal technology is referred to as carbon capture and sequestration (CCS).

In addition to a plentiful supply of coal, Illinois' geology is well suited to store carbon dioxide emissions from coal plants safely underground. The Illinois Geological Survey estimates that our state can store 80 to 325 years worth of carbon dioxide in saline reservoirs alone because we have billions of metric tons of storage capacity. This is equivalent to a line of eighteen wheel over-the-road tank trucks, each carrying 20 tons of carbon dioxide stretching the circumference of the Earth between 1.5 and 5.3 times.

Recently, the Committee on Science and Technology's Subcommittee on Energy and Environment held a hearing on CCS technology that emphasized how important this technology can be for the future of coal and our environment. According to Intergovernmental Panel on Climate Change (IPCC) reports, CCS technology has the capability to contribute around a quarter of the emission reductions needed to get to environmental stabilization. Further, the Electric Power Research Institute (EPRI), a non-profit, collaborative research and development (R&D) organization, documents that geologic sequestration of carbon dioxide has been proven effective, as evidenced by the numerous natural underground carbon dioxide reservoirs in Colorado, Utah, and other western states.

Several of the witnesses at the hearing emphasized the need for government and private industry to pursue RD&D projects aggressively through significant public policy and funding support. I agree, and authored provisions to increase funding for clean coal technology in the energy bill that became law in 2005. In addition, I have led the effort to locate the FutureGen project a public/private partnership to build an emission-free clean coal power plant in Illinois. Working together, and with the assistance of our university research centers, such as the Clean Coal Center at Southern Illinois University Carbondale, government and industry are moving us closer to achieving the goal of maximizing low-cost, reliable, and clean energy for the nation.