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## South Carolina Ready to Lead in Green Engineering

Mention South Carolina to an out-of-stater, and he may think of the beach, terrific golf courses, or lamentably low SAT scores. What he might not know is that South Carolina is a world class center of engineering that is uniquely positioned to contribute to and benefit from the outcome of the current energy and environmental legislative debate. This legislation could bring thousands of jobs and billions of dollars to the Palmetto State.

Democrats in Congress are calling for tough new standards on carbon-based fuels purported to cause global warming. Republicans are concerned about the high cost and controversial benefits, but recognize that we must develop new sources of energy for both economic and national security reasons.

Senator Lindsey Graham made waves recently by teaming with John Kerry to support climate change legislation. They make the case that now is the time to develop the blueprint for a clean-energy future that will revitalize our economy, safeguard our national security, reduce pollution, protect current jobs and create new ones. No matter your political stripe, we can all agree that these are critical goals.

Clearly, there is much to be done. South Carolina engineers are ready to step up to our drawing boards, roll up our sleeves, and get to work.

There are over 200 engineering firms employing over 75,000 engineers in South Carolina. These experienced professionals are world class in terms of energy technology, design, and construction project management. South Carolina engineering firms generate over \$3 billion in revenue for South Carolina's economy and are recognized leaders in supporting energy, infrastructure, and technology initiatives anywhere in the world.

South Carolina is particularly well poised to take advantage of any new legislation because these engineers and firms are already organized through the New Carolina Engineering Cluster. This organization, led by industry volunteers, is dedicated to promoting the engineering industry, supporting current engineering jobs, and preparing students for future engineering and technology employment. Membership of the Cluster is made up of both industry and academia: Clemson, USC, SC State, the Citadel, as well as our community colleges and prep schools are all active participants.

As professional engineers living in the Upstate, we see a South Carolina that is ready and qualified to take the lead in carrying out the necessary projects across the country and around the world. These projects will implement equipment for carbon capture and sequestration, design and install more efficient manufacturing processes, replace old inefficient lighting, heating and cooling equipment, and design and construct better highways and high speed railways. A nuclear "renaissance" that results in the design and construction of nuclear power plants will need the specialized expertise of these engineers.

All of these projects will employ many thousands of other skilled South Carolina workers; not just engineers, but craftsmen of all types. The effects of these high-paying jobs will ripple through our economy, benefiting many while providing welcome relief to our tax coffers.

The stars are in alignment: We have the people, the education, and the commitment. We must work together to develop this energy and environmental legislation in a way that recognizes and capitalizes on South Carolina's wealth of engineering resources.