

RENEWABLE ENERGY MEANS JOBS FOR SOUTH CAROLINA

By John Clark

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Many of our state's leaders say we should focus on economic development and job creation as the best solution for many of our problems, including resources to meet our educational, social and infrastructure needs. I agree.

In this regard, we should seize the opportunity for a clean energy policy that would create 6,000 new jobs and more than \$6 billion in new economic activity. According to the University of Tennessee's Bio-based Energy Analysis Group, these numbers are achievable for South Carolina if we adopt legislation, such as that introduced by Senator John Matthews in S. 719, requiring or strongly encouraging our electric utilities to derive a reasonable amount of their power from renewable energy. These results were recently released by 25x'25 Alliance, a group of energy, environmental, business, labor and civic groups promoting policies and innovations that will allow America's farms, ranches, forestlands and other working lands to meet 25 percent of our nation's energy needs with renewable resources by 2025.

South Carolina produces no coal, oil or natural gas. When we buy these fuels, we send money out of the state to help economic development elsewhere. We send over a billion dollars a year to Kentucky and other states for coal to fuel our power plants. At the same time, we have such vast resources of biomass (plants, trees, waste) here and in neighboring states that the Southeast could become the Saudi Arabia of biomass energy if we give renewable energy the same friendly public policy treatment that we have given in the past to nuclear and fossil fuel energy production.

South Carolina alone has over 12 million acres of forestlands that produce 3 million tons annually of logging residues, processing residues and urban wood waste. Additionally, the potential for dedicated energy crops such as switch grass is enormous, and the Tennessee study indicates that energy crops could be developed with no significant changes to current levels of food crops. Biomass energy resources, and thus biomass job opportunities, are most abundant in the counties that are most economically depressed, such as those in the I-95 corridor. We need to enhance the value of our own energy resources and devalue fossil fuel energy resources, such as coal, that harm our environment and send our money to other states.

Thirty-six states have already adopted Renewable Energy Standards that require or encourage electric utilities to move toward the use of renewable energy (biomass, solar, wind) for greater proportions of their power production. South Carolina should do the same and not be left behind.

We are already making some impressive headway. Over **2500** megawatts of biomass energy production are in operation or under construction at **43** sites around the state. That is equivalent to the capacity of about eight coal-fired power plants. Additionally, existing and planned solar energy generating capacity is about one megawatt, and efforts are underway for a **40** megawatt **demonstration** offshore wind facility.

Offshore wind offers huge potential for the future; solar opportunities will grow as installations increase and prices continue to decrease. The opportunity for cost-effective biomass energy production, however, is now.

Energy efficiency is an option we need to continue to aggressively pursue, but energy efficiency alone cannot meet our needs, and South Carolina will only be bringing up the rear if we do not follow a dual track of energy efficiency and renewable energy. In order to replace aging coal-fired power plants and meet future needs of South Carolina's growing population and growing economy, we absolutely need new sources of electricity generation. Nuclear energy is a good bet for meeting much of that need, in addition to renewable energy. Indeed, we could look at a "Clean Energy" standard or goal that includes nuclear and energy efficiency, along with renewable energy sources.

We cannot meet all of our needs from biomass, but whatever proportion we can meet with biomass will be beneficial to our state. Future biomass electricity generation will likely be cheaper than both nuclear and whatever "clean coal" technology evolves; biomass energy keeps dollars in the state and produces jobs for South Carolinians; and biomass energy is far cleaner than the existing coal-powered generation that it replaces. Aging coal plants can be retrofitted to utilize biomass solely, or biomass mixed with coal. Biomass power generation is base-load generation available 24/7. Production can vary as needed, and, in the future, complement and supplement the intermittent power provided by offshore wind and solar.

A Renewable or Clean Energy Standard or Goal is not the only way to maximize the economic value of our state's biomass and other renewable energy resources, but such a mechanism is the most effective way. However we get there, it is imperative that that renewable energy resource development be a major component of any South Carolina economic development strategy. We need renewable energy jobs, and we need to keep energy dollars in South Carolina, benefitting South Carolinians.