



Resources for a Clean-Energy Economy

The Economics of Clean Energy in South Carolina

Jobs, Savings, Investment, Competitiveness, and the Costs of Inaction

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Jobs

- There were 11,255 clean-energy jobs and 884 clean-energy businesses in South Carolina as of 2007. This only counts direct jobs and not the many indirect jobs in industries that support the clean energy economy.
- The clean energy economy is already growing in South Carolina. The number of cleanenergy jobs in South Carolina grew by 36.2 percent between 1998 and 2007, while jobs overall grew by just 2.2 percent.
- South Carolina will see \$2.0 billion in new public and private investment due to programs and incentives under the American Recovery and Reinvestment Act and American Clean Energy and Security Act. These investments will lead to 24,757 net new clean-energy jobs in South Carolina—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- South Carolina needs these good-paying, private sector jobs—the state's unemployment rate was at 11.5 percent as of August 2009.
- Green jobs in South Carolina were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 77.8 percent
 - Environmentally friendly production: 1.4 percent
 - Training and support: 2.8 percent
 - Energy efficiency: 3.3 percent
 - Clean energy: 14.7 percent

Consumer energy bill savings

- The average American family's annual spending on oil, gas, and electricity increased by \$1,100 under the Bush administration's energy policies. But American electricity and fuel bills would go down under the consumer protection provisions in the ACES bill.
- Emissions allowances allocated in the ACES bill for state efficiency programs alone will save South Carolinians \$661 million between 2012 and 2020.
- The average household in South Carolina will see a monthly savings of \$4.90 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in South Carolina will also save \$21.92 on gasoline each month by 2020 due to lower oil prices and more fuel-efficient vehicles under ACES.

Investment and innovation

- \$2.0 billion of public and private investment would flow into clean energy and energy efficiency in South Carolina under the combined clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- South Carolina's 884 clean-energy businesses patented 49 new clean-energy technologies in 2007 alone. Passing a strong clean-energy jobs bill this session is the best thing congress can do to unlock even more innovation and entrepreneurship across South Carolina and the nation.
- Santee Cooper is one of South Carolina's largest power companies and serves 2 million customers. The company is the first power company in the state to have a renewable energy program and continues to be a leader in renewable energy. The company has announced a goal to produce 40 percent of its electricity through non-greenhouse gas emitting sources by 2020. They plan to reach this goal by investing in biomass and other renewable resources, and are currently studying wind energy feasibility.

American competitiveness and energy independence

- The people of South Carolina spent more than \$7.3 billion on imported crude oil in 2007 alone—more than \$1,630 per person.
- Without comprehensive clean-energy reform, South Carolina taxpayers will spend \$320 million more over the next 10 years to subsidize wealthy oil and gas companies, and this is on top of their already record profits.

Costs of inaction

- The CBO predicted in May 2009 that climate change would cause decreases in future U.S. gross domestic product of between 3 and 5 percent, and global GDP of as much as 10 percent by the end of the century.
- Sea level rise endangers South Carolina's \$149 billion of coastal property, as well as the Port of Charleston, which is the busiest container port along the southeast and Gulf coasts and handles 727,000 tons of cargo worth \$46 billion annually. Twenty-two percent of the state's population lives on the coast, and sand replenishment alone will cost South Carolina up to \$9.4 billion by the end of the century. Insurers have already raised their rates dramatically due to increasing hurricane risk. Homeowner insurance premiums in South Carolina climbed an average of 56.4 percent between 2001 and 2006. Insurers have dropped more than 20,000 coastal policies, and only one insurance company still offers wind damage coverage in the state.
- A June 2009 report from the National Oceanic and Atmospheric Administration found that inaction on global warming will cause significant harm to the Southeast. Sea level will rise by two feet or more, hurricane intensity will climb, cattle production will decline, and pavement and railways will buckle from temperature increases.
- South Carolina farmers—who produce \$1.2 billion for the state—will lose ground to rising temperatures and parched soil. The EPA estimates that South Carolina's soybean and wheat yields will fall by 42 percent if temperatures rise beyond the crop's tolerance levels. Corn yields in the state could fall by 32 percent by the end of this century.
- The increase in hurricane intensity will harm South Carolina's infrastructure and forestry industry. Hurricane Fran caused \$2.5 billion in losses for South Carolina. Hurricane Hugo cost the forest industry in affected states \$100 million.