



# The Economics of Clean Energy in North Carolina

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

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### Jobs

- There were 16,997 clean-energy jobs and 1,785 clean-energy businesses in North Carolina as of 2007. This only counts direct jobs and not the many indirect jobs in industries that support the clean energy economy.
- The number of clean-energy jobs in North Carolina grew by 15.3 percent between 1998 and 2007, while jobs overall grew by just 6.4 percent.
- North Carolina will see \$4.3 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 51,210 net new clean-energy jobs in North Carolina—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- North Carolina needs these good-paying, private sector jobs—the state’s unemployment rate was at 10.8 percent as of August 2009.
- Green jobs in North Carolina were distributed among the following sectors in 2008:
  - Conservation and pollution mitigation: 74.4 percent
  - Environmentally friendly production: 3.8 percent
  - Training and support: 9.8 percent
  - Energy efficiency: 7.9 percent
  - Clean energy: 4.2 percent

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## 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 North Carolinians \$1.3 billion between 2012 and 2020.
- The average household in North Carolina will see a monthly savings of \$4.60 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in North Carolina will also save \$18.45 on gasoline each month by 2020 due to lower oil prices and more fuel-efficient vehicles under ACES.

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## Investment and innovation

- The clean energy economy is already growing in North Carolina. Private companies in North Carolina invested \$82.5 million in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$4.3 billion of public and private investment would flow into clean energy and energy efficiency in North Carolina under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- North Carolina's 1,785 clean-energy businesses patented 179 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 North Carolina and the nation.
- Accredited Solar & Wind on Emerald Isle installs solar, hydro, and wind energy systems.

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## American competitiveness and energy independence

- The people of North Carolina spent more than \$12.6 billion on imported crude oil in 2007 alone—more than \$1,366 per person.
- Without comprehensive clean-energy reform, North Carolina taxpayers will spend \$730 million more over the next 10 years to subsidize wealthy oil and gas companies, and this is on top of their already record profits.

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## 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.
- Eroding coastlines and vanishing beaches will put \$5.5 billion worth of coastal property at risk and likely harm North Carolina's tourism industry, which brings in \$600 million annually and employs 10,000 people. Hurricanes already batter North Carolina: Hurricane Fran caused \$6.7 billion in losses for North Carolina, and North Carolina's crop damages from hurricanes totaled \$2.5 billion between 1996 and 2006. The rise in hurricane intensity resulting from climate change will only increase these damages.
- North Carolina farmers—who produce nearly \$11 billion for the state—will lose ground to droughts and rising temperatures. Drought caused \$631 million in economic losses in 2002 and affected 4,337 jobs. Heat stress in poultry currently causes losses of \$2.6 million every year.
- Foresters in North Carolina will battle increasing pests. The most recent beetle outbreak cost the southern lumber industry \$1 billion.
- North Carolina's angling industry could lose \$17 million every year from the reduction in fish.