



The Economics of Clean Energy in Oklahoma

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

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Jobs

- There were 5,465 clean-energy jobs and 693 clean-energy businesses in Oklahoma 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 Oklahoma grew by 6.8 percent between 1998 and 2007, while jobs overall grew by just 2.4 percent.
- Oklahoma will see \$1.8 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 27,684 net new cleanenergy jobs in Oklahoma—even assuming some potential job losses in the fossil fuel
 sector as workers transition into the clean energy economy.
- Oklahoma needs these good-paying, private sector jobs—the state's unemployment rate
 was at 6.8 percent as of August 2009.
- Green jobs in Oklahoma were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 77.1 percent
 - Environmentally friendly production: 2.9 percent
 - Training and support: 5.6 percent
 - Energy efficiency: 9.7 percent
 - Clean energy: 4.7 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 Oklahomans \$633 million between 2012 and 2020.
- The average household in Oklahoma will see a monthly savings of \$5.00 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in Oklahoma will also save \$14.60 on gasoline each month by 2020 due to lower oil prices and more fuel-efficient vehicles under ACES.

Investment and innovation

- The clean energy economy is already growing in Oklahoma. Private companies in Oklahoma invested \$5.2 million in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$1.8 billion of public and private investment would flow into clean energy and energy efficiency in Oklahoma under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- Oklahoma's 693 clean-energy businesses patented 36 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 Oklahoma and the nation.
- Bergey Windpower of Norman designs and manufactures small-scale wind turbines for commercial and residential use.

American competitiveness and energy independence

- The people of Oklahoma spent more than \$17.2 billion on imported crude oil in 2007 alone—more than \$4,722 per person.
- Without comprehensive clean-energy reform, Oklahoma taxpayers will spend \$280 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.
- A June 2009 report from the National Oceanic and Atmospheric Administration found that inaction on global warming will cause significant harm to the Great Plains. Global warming will cause higher temperatures, more droughts, and more wildfires.
- The southern Great Plains agricultural sector lost \$5.81 billion due to drought in 1995. Droughts will become more frequent and severe due to climate change.
- Water supplies will become increasingly scarce. Oklahoma farmers—who produce nearly \$6 billion annually for the state—will lose ground to droughts and agricultural pests. Heat stress will decrease livestock productivity, and rising temperatures will reduce Oklahoma's wheat yields by as much as 37 percent.