



The Economics of Clean Energy in Tennessee

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

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Jobs

- There were 15,507 clean-energy jobs and 1,090 clean-energy businesses in Tennessee 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 Tennessee grew by 18.2 percent between 1998 and 2007, while jobs overall grew by just 2.5 percent.
- Tennessee will see \$3.0 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 39,128 net new clean-energy jobs in Tennessee—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- Tennessee needs these good-paying, private sector jobs—the state’s unemployment rate was at 10.8 percent as of August 2009.
- Green jobs in Tennessee were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 80.2 percent
 - Environmentally friendly production: 3.6 percent
 - Training and support: 3.7 percent
 - Energy efficiency: 5.6 percent
 - Clean energy: 6.9 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 Tennesseans \$858 million between 2012 and 2020.
- The average household in Tennessee will see a monthly savings of \$4.10 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in Tennessee will also save \$15.45 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 Tennessee. Private companies in Tennessee invested \$16.3 million in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$3.0 billion of public and private investment would flow into clean energy and energy efficiency in Tennessee under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- Tennessee's 1,090 clean-energy businesses patented 47 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 Tennessee and the nation.
- The Tennessee Valley Authority, the main power company in Tennessee, is leading the way for renewable energy in the state. The TVA wind farm produces 29 megawatts of power, and its 16 solar installations in and around Tennessee produce nearly 1 megawatt. These projects were completed in 2005 and were developed in response to rising energy costs and increased demand for renewable energy.

American competitiveness and energy independence

- The people of Tennessee spent more than \$10.5 billion on imported crude oil in 2007 alone—more than \$1,689 per person.

- Without comprehensive clean-energy reform, Tennessee taxpayers will spend \$510 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.
- Tennessee's \$500 million hunting industry could lose more than \$80 million per year from a significant decrease in game caused by climate change.
- Twelve percent of Tennesseans already suffer from asthma, and increases in asthma rates will cause \$187 million in health costs. Rising temperatures will induce heat stress in Tennessee's dairy cows, causing \$3.1 million in economic losses.
- Areas of the Midwest and Southeast were plagued by severe weather and tornadoes in April 2006—the worst damage occurring in Tennessee. The storms cost Tennessee roughly \$1.5 billion in damages and climate change will only increase the price tag of extreme weather events.