



The Economics of Clean Energy in West Virginia

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

Last updated on: October 6, 2009

Jobs

- There were 3,065 clean-energy jobs and 332 clean-energy businesses in West Virginia
 as of 2007. This only counts direct jobs and not the many indirect jobs in industries that
 support the clean energy economy.
- West Virginia will see \$800 million 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 10,334 net new
 clean-energy jobs in West Virginia—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- West Virginia needs these good-paying, private sector jobs—the state's unemployment rate was at 9 percent as of August 2009.
- Green jobs in West Virginia were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 90.7 percent
 - Environmentally friendly production: 1.6 percent
 - Training and support: 6 percent
 - Energy efficiency: 1.3 percent
 - Clean energy: 0.5 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 West Virginians \$362 million between 2012 and 2020.
- The average household in West Virginia will see a monthly savings of \$9.00 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in West Virginia will also save \$12.43 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 West Virginia. Private companies in West Virginia invested \$5.7 million in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$800 million of public and private investment would flow into clean energy and energy efficiency in West Virginia under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- West Virginia's 332 clean-energy businesses patented 14 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 West Virginia and the nation.
- When a 6,600 acre strip mine was proposed in the region, local citizens joined together
 to create their own counter proposal: a 440 megawatt wind farm called the Coal River
 Mountain Wind Project. The project would create 200 construction jobs and 50 permanent on-site jobs, and produce enough electricity for 150,000 homes. Unlike the strip
 mine, this project would not destroy the mountain and would create sustainable energy
 for countless years.

American competitiveness and energy independence

• The people of West Virginia spent more than \$3.6 billion on imported crude oil in 2007 alone—more than \$1,984 per person.

Without comprehensive clean-energy reform, West Virginia taxpayers will spend \$100
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.
- The 1999 growing season was the driest on record in the Eastern United States, causing West Virginia's agriculture sector more than \$80 million in losses for the season.
 Warmer, dryer conditions—as well as droughts—are expected to become more frequent and severe due to climate change.
- A June 2009 report from the National Oceanic and Atmospheric Administration found
 that inaction on global warming will cause significant harm to the region. Warming
 temperatures will increase the spread of tick-borne diseases such as Lyme disease. Early
 snowmelt will lead to winter flooding, and high temperatures will induce summer
 drought. These effects have heavy economic consequences for West Virginia.
- West Virginia's 23,000 farms—which produce over \$590 million annually for the state—will lose ground to droughts and agricultural pests, and heat stress will reduce milk output from dairy farms.
- West Virginia's forest industry—worth about \$4 billion annually—relies on tree species
 vulnerable to climate change. West Virginia's valuable spruce forests could disappear.