



The Economics of Clean Energy in Vermont

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

Last updated on: October 6, 2009

Jobs

- There were 2,161 clean-energy jobs and 311 clean-energy businesses in Vermont 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 Vermont grew by 15.3 percent between 1998 and 2007, while jobs overall grew by just 7.4 percent.
- Vermont will see \$300 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 4,270 net new clean-energy jobs in Vermont—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- Vermont needs these good-paying, private sector jobs—the state’s unemployment rate was at 6.8 percent as of August 2009.
- Green jobs in Vermont were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 49.2 percent
 - Environmentally friendly production: 4.2 percent
 - Training and support: 15.2 percent
 - Energy efficiency: 15.2 percent
 - Clean energy: 16.4 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 Vermonters \$607 million between 2012 and 2020.
- The average household in Vermont will see a monthly savings of \$5.30 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in Vermont will also save \$18.83 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 Vermont. Private companies in Vermont invested \$53.7 million in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$300 million of public and private investment would flow into clean energy and energy efficiency in Vermont under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- Vermont's 311 clean-energy businesses patented 12 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 Vermont and the nation.
- In Middlebury, Brighter Planet enables individuals to calculate their carbon emissions and manages credit cards that fund renewable energy with each purchase.

American competitiveness and energy independence

- The people of Vermont spent more than \$1.2 billion on imported crude oil in 2007 alone—more than \$1,932 per person.
- Without comprehensive clean-energy reform, Vermont taxpayers will spend \$60 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.
- Vermont's 2,000 maple syrup producers made an estimated 37 percent of the nation's supply in 2002. But maple syrup sap flow is predicted to fall by 17 to 39 percent across the Northeast due to rising temperatures, inflicting a loss of \$5.3 to \$12.1 million in annual revenue to this \$31 million industry.
- The dairy industry is the most important agricultural sector in the Northeast, with annual production worth \$3.6 billion. Yet heat stress in dairy cows—exacerbated by global warming—depresses milk production and birth rates for weeks to months. All but the northern parts of Maine, New Hampshire, New York, and Vermont are projected to suffer declines in July milk production by late century under a higher emissions scenario.