



The Economics of Clean Energy in Massachusetts

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

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Jobs

- There were 26,678 clean-energy jobs and 1,912 clean-energy businesses in Massachusetts 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 Massachusetts grew by 4.3 percent between 1998 and 2007, while jobs overall shrank by 4.4 percent.
- Massachusetts will see \$3.5 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 38,410 net new clean-energy jobs in Massachusetts—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- Massachusetts needs these good-paying, private sector jobs—the state’s unemployment rate was at 9.1 percent as of August 2009.
- Green jobs in Massachusetts were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 65.1 percent
 - Environmentally friendly production: 2.6 percent
 - Training and support: 11.8 percent
 - Energy efficiency: 9.6 percent
 - Clean energy: 10.8 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 Bay Staters \$2.8 billion between 2012 and 2020.
- The average household in Massachusetts will see a monthly savings of \$5.50 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in Massachusetts will also save \$12.75 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 Massachusetts. Private companies in Massachusetts invested \$1.3 billion in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$3.5 billion of public and private investment would flow into clean energy and energy efficiency in Massachusetts under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- Massachusetts' 1,912 clean-energy businesses patented 384 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 Massachusetts and the nation.
- In Watertown, clean-energy company A123 develops and manufactures a range of batteries for electric utilities, transportation, and portable electronics.

American competitiveness and energy independence

- The people of Massachusetts spent more than \$8.7 billion on imported crude oil in 2007 alone—more than \$1,339 per person.
- Without comprehensive clean-energy reform, Massachusetts taxpayers will spend \$1 billion 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 Northeast. Temperatures and sea levels will rise, inducing severe flooding and extreme heat over the course of the 21st century.
- Changes in water quality and water temperature on the coasts may negatively affect the \$63 billion ocean economy sector, which employs 1.1 million people in the Northeast.
- Estimates for evacuating the Northeastern coastal region ranges from nearly \$2 billion to over \$6.5 billion.