



# The Economics of Clean Energy in New York

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

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#### Jobs

- There were 34,363 clean-energy jobs and 3,323 clean-energy businesses in New York as of 2007. This only counts direct jobs and not the many indirect jobs in industries that support the clean energy economy.
- Despite an overall job decline of 2.6 percent between 1998 and 2007, clean-energy jobs in New York shrank by only 1.9 percent during the same period.
- New York will see \$10.0 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 109,441 net new cleanenergy jobs in New York—even assuming some potential job losses in the fossil fuel
  sector as workers transition into the clean energy economy.
- New York needs these good-paying, private sector jobs—the state's unemployment rate was at 9 percent as of August 2009.
- Green jobs in New York were distributed among the following sectors in 2008:

- Conservation and pollution mitigation: 67.2 percent

- Environmentally friendly production: 3.1 percent

Training and support: 10.2 percent

- Energy efficiency: 9.6 percent

- Clean energy: 10 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 New Yorkers \$7.3 billion between 2012 and 2020.
- The average household in New York will see a monthly savings of \$5.60 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in New York will also save \$8.00 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 New York. Private companies in New York invested \$209.6 million in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$10.0 billion of public and private investment would flow into clean energy and energy efficiency in New York under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- New York's 3,323 clean-energy businesses patented 909 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 New York and the nation.
- In New York City, clean-energy company Verdant Power designs and manufactures underwater turbines to generate energy from water currents.

## American competitiveness and energy independence

- The people of New York spent more than \$20.4 billion on imported crude oil in 2007 alone—more than \$1,047 per person.
- Without comprehensive clean-energy reform, New York taxpayers will spend \$2.8 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.
- Sea level rise, more violent storms, and flooding will damage New York's 2,500 miles of
  coastline. Flooding in New York City will cost \$300 million annually by the end of the
  century. More intense hurricanes will impair New York City's transportation infrastructure, which includes 48 transit centers and four major airports less than 10 feet above sea
  level. A single hurricane could cost the state up to \$66 billion.
- Northern New York's winter season will be cut in half by 2100, and snowmobiling will disappear from the state.
- New York farmers—who produce nearly \$4 billion annually for the state—will lose ground to droughts and agricultural pests. And New York's agricultural yields will fall by 40 percent if temperatures rise beyond crops' tolerance levels.