



# The Economics of Clean Energy in North Dakota

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

Last updated on: October 6, 2009

---

### Jobs

- There were 2,112 clean-energy jobs and 137 clean-energy businesses in North Dakota as of 2007. This only counts direct jobs and not the many indirect jobs in industries that support the clean energy economy.
- The clean energy economy is already growing in North Dakota. The number of clean-energy jobs in North Dakota grew by 30.9 percent between 1998 and 2007, while jobs overall grew by 9.4 percent.
- North Dakota 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 4,257 net new clean-energy jobs in North Dakota—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- North Dakota needs these good-paying, private sector jobs—the state’s unemployment rate was at 4.3 percent as of August 2009.
- Green jobs in North Dakota were distributed among the following sectors in 2008:
  - Conservation and pollution mitigation: 30 percent
  - Environmentally friendly production: 36.4 percent
  - Training and support: 3.7 percent
  - Energy efficiency: 20.6 percent
  - Clean energy: 9.3 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 North Dakotans \$289 million between 2012 and 2020.
- The average household in North Dakota will see a monthly savings of \$-2.30 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in North Dakota will also save \$8.39 on gasoline each month by 2020 due to lower oil prices and more fuel-efficient vehicles under ACES.

---

## Investment and innovation

- \$300 million of public and private investment would flow into clean energy and energy efficiency in North Dakota under the combined clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- North Dakota's 137 clean-energy businesses patented five 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 North Dakota and the nation.
- In Fargo, Climate Control Inc. designs and installs energy management and automation systems for customers in health care, education, government, and business.

---

## American competitiveness and energy independence

- The people of North Dakota spent more than \$1.8 billion on crude oil in 2007 alone—more than \$2,806 per person.
- Without comprehensive clean-energy reform, North Dakota taxpayers will spend \$50 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.
- Temperatures will increase in the north Great Plains by 10°F or more by the end of the century. Extreme events such as heat waves, droughts, and heavy rainfall will become more frequent. North Dakota's farmers—who provide over \$6 billion for the state—will lose crops to insect pests and soil erosion.
- The drought of 2006 in North Dakota cost \$32 million in livestock damages, \$310 million in the form of crop insurance indemnity payments, and \$425 million in crop losses. Climate change will also exacerbate scab disease (*Fusarium head blight*), which caused over \$544.76 million in economic losses in 2005.