



The Economics of Clean Energy in Colorado

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

Last updated on: October 6, 2009

Jobs

- There were 17,008 clean-energy jobs and 1,778 clean-energy businesses in Colorado 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 Colorado grew by 18.2 percent between 1998 and 2007, while jobs overall grew by 8.2 percent.
- Colorado will see \$2.6 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 28,149 net new clean-energy jobs in Colorado—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- Colorado needs these good-paying, private sector jobs—the state’s unemployment rate was at 7.3 percent as of August 2009.
- Green jobs in Colorado were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 59.8 percent
 - Environmentally friendly production: 8 percent
 - Training and support: 7.5 percent
 - Energy efficiency: 9.2 percent
 - Clean energy: 15.5 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 Coloradans \$778 million between 2012 and 2020.
- The average household in Colorado will see a monthly savings of \$4.50 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in Colorado will also save \$5.08 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 Colorado. Private companies in Colorado invested \$622.4 million in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$2.6 billion of public and private investment would flow into clean energy and energy efficiency in Colorado under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- Colorado's 1,778 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 Colorado and the nation.
- Fiberfoqe, an environmentally friendly producer in Glenwood Springs formerly known as Hypercar, designs and produces advanced composite materials used in lightweight and energy efficient vehicles.

American competitiveness and energy independence

- The people of Colorado spent more than \$6.7 billion on imported crude oil in 2007 alone—more than \$1,356 per person.
- Without comprehensive clean-energy reform, Colorado taxpayers will spend \$570 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.
- Shorter winters will erode Colorado's \$2 billion skiing and snowboarding industry and cause losses of more than \$375 million by 2017. The changes will also undermine Colorado's \$42 billion insurance, real estate, and leasing sectors, which often rely on vacationers and homeowners buying homes near resorts.
- Colorado's foresters—whose industry accounts for 63,000 jobs and \$2 billion—will lose ground to increased pests and wildfires. Outbreaks like the 2002 Hayman fire, which cost \$39 million, will only increase.
- More frequent droughts will damage the tourism and agriculture industries—a 2002 reservoir shortage cost Colorado's citizens \$1 billion. Rising temperatures will induce heat stress in Colorado's dairy cows, causing \$28 million in annual industry losses.
- Western trout will decline by as much as 64 percent, hurting the \$1 billion hunting and angling industry.