



The Economics of Clean Energy in Alaska

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

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Jobs

- There were 2,140 clean-energy jobs and 350 clean-energy businesses in Alaska 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 Alaska grew by 9.4 percent between 1998 and 2007.
- Alaska will see \$350 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 3,730 net new clean-energy jobs in Alaska—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- Alaska needs these good-paying, private sector jobs—the state’s unemployment rate was at 8.3 percent as of August 2009.
- Green jobs in Alaska were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 75.8 percent
 - Environmentally friendly production: 2.4 percent
 - Training and support: 17.3 percent
 - Energy efficiency: 3.8 percent
 - Clean energy: 0.6 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 Alaskans \$704 million between 2012 and 2020.
- The average household in Alaska will see a monthly savings of \$6.20 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in Alaska will also save \$5.48 on gasoline each month by 2020 due to lower oil prices and more fuel-efficient vehicles under ACES.

Investment and innovation

- \$350 million of public and private investment would flow into clean energy and energy efficiency in Alaska under the combined clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- Alaska's 350 clean-energy businesses patented one new clean-energy technology 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 Alaska and the nation.
- In Anchorage, clean-energy company Susitana Energy Systems sells a range of clean-energy products such as solar panels and small wind turbines.

American competitiveness and energy independence

- The people of Alaska spent more than \$3.9 billion on imported crude oil in 2007 alone—more than \$5,683 per person.
- Without comprehensive clean-energy reform, Alaska taxpayers will spend \$70 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.
- Alaska has warmed more than twice as fast as the rest of the United States over the last 50 years. Its annual average temperature has increased 3.4°F, and winters have warmed by 6.3°F. Thawing permafrost will cripple valuable public infrastructure as it subsides, damaging roads, runways, and water and sewer systems, costing an extra \$6.1 billion in repairs by 2030. The thawing ground also dramatically reduces the number of days the Alaska Department of Natural Resources allows travel on the tundra, an essential component of oil and gas exploration.
- Alaska's fishermen—who produce over \$5.8 billion annually for the state—will have their livelihoods threatened by shifting populations of pollock, salmon, halibut, herring, crab, and other commercial fish.
- Alaska's valuable white spruce forests are already declining due to extended drought stress, and increasing temperatures will lead to more devastating spruce beetle and spruce budworm outbreaks.
- The area burned by wildfires will double by the middle of the century and quadruple by the end of the century.