



The Economics of Clean Energy in Hawaii

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

Last updated on: October 6, 2009

Jobs

- There were 2,732 clean-energy jobs and 356 clean-energy businesses in Hawaii 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 Hawaii grew by 43.6 percent between 1998 and 2007, while jobs overall grew by 7.3 percent.
- Hawaii will see \$620 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 7,146 net new clean-energy jobs in Hawaii—even assuming some potential job losses in the fossil fuel sector as workers transition into the clean energy economy.
- Hawaii needs these good-paying, private sector jobs—the state’s unemployment rate was at 7.2 percent as of August 2009.
- Green jobs in Hawaii were distributed among the following sectors in 2008:
 - Conservation and pollution mitigation: 71.7 percent
 - Environmentally friendly production: 3.3 percent
 - Training and support: 11.4 percent
 - Energy efficiency: 7.1 percent
 - Clean energy: 6.5 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 Hawaiians \$915 million between 2012 and 2020.
- The average household in Hawaii will see a monthly savings of \$8.20 on their electricity bill by 2020 due to ACES' consumer protection and energy-efficiency provisions.
- Households in Hawaii will also save \$7.08 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 Hawaii. Private companies in Hawaii invested \$12.3 million in clean energy from 2006 – 2008 through venture capital funds.
- An additional \$620 million of public and private investment would flow into clean energy and energy efficiency in Hawaii under the clean-energy investment provisions in the ACES bill and the ARRA stimulus package.
- Hawaii's 356 clean-energy businesses patented 16 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 Hawaii and the nation.
- The Puna Geothermal Venture facility on the Big Island currently produces approximately 30 megawatts of geothermal power. This is enough energy for 30,000 people a year, and amounts to 20 percent of the island's total energy needs. Hawaii is poised to become one of the nation's top green energy users by taking advantage of more geothermal energy, investing in other renewables, and increasing energy efficiency.

American competitiveness and energy independence

- The people of Hawaii spent more than \$3.7 billion on imported crude oil in 2007 alone—more than \$2,872 per person.

- Without comprehensive clean-energy reform, Hawaii taxpayers will spend \$120 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.
- Climate change is likely to enhance peak wind intensities and near-storm precipitation from future tropical cyclones, leading to an increased loss of life, damage to infrastructure and property, and contamination of freshwater supplies.
- Increased rainfall in the Pacific Islands during the summer months will likely lead to more flooding, reduced drinking water quality, and smaller crop yields.