

MINNESOTA WILL BENEFIT FROM CLEAN ENERGY LEGISLATION THAT LIMITS CARBON POLLUTION

Clean energy already provides many thousands of Minnesota workers with good jobs during hard times. This fact sheet collects several sources of information showing how accelerating the clean-energy transition will benefit Minnesota's economy – and, conversely, the costs and consequences of failing to act.

CLEAN ENERGY JOBS

University of Massachusetts researchers conclude that the American Clean Energy and Security Act, coupled with the clean energy provisions passed in the ARRA stimulus package that Congress passed in February 2009, will drive \$150 billion of investment in clean energy nationwide. This investment will create **more than 30,000 jobs for Minnesota**.¹

OPPORTUNITIES FOR INDUSTRY AND BUSINESS

The Department of Energy has identified significant, untapped opportunities for key industries in Minnesota to prosper in a clean energy economy. There are at least 1,510 ways for small- and medium-sized industrial plants in Minnesota to **earn savings from efficiency**, with an average payback of only 1.1 years. Over 50% of these opportunities have *yet* to be implemented.²

COSTS OF INACTION

According to a June 2009 report released by the National Oceanic and Atmospheric Administration, inaction on global warming will cause significant harm to the Midwest. Extreme events such droughts and heavy rainfall will become more frequent. Severe heat waves will occur every other year across the Midwest, and disease-causing pathogens, insect pests, and invasive weeds will increase.³ These effects have heavy economic consequences for Minnesota.

- Minnesota's **81,000 farms** will lose ground to droughts, agricultural pests, and scorching heat.⁴ Heat stress will reduce milk output from dairy farms.⁵
- Minnesota's forest industry—worth over **\$7 billion dollars annually**⁶—relies on tree species whose habitat ranges are shifting out of the state.⁷
- Increased heavy downpours will lead to more floods like the Red River 1997 flood, which forced 60,000 people to evacuate from Minnesota and North Dakota.⁸
- The Duluth-Superior port is threatened as **Lake Superior water levels fall** by about 7 inches, requiring more dredging for shipping routes.⁹
- And the National Wildlife Federation shows how global warming will damage the 67,764 jobs provided by Minnesota's **\$3.66 billion** hunting, wildlife watching, and angling industries.¹⁰

START THE CLEAN ENERGY ECONOMY NOW

Comprehensive energy and climate legislation would jumpstart a new energy economy in Minnesota and accelerate the growth of good-paying jobs. If we fail to act soon, the new markets for clean energy will grow overseas instead.

Minnesota can't afford to miss out on one of the largest new economic revolutions.

¹ Robert Pollin, James Heintz, and Heidi Garrett-Peltier: The Economic Benefits of Investing in Clean Energy. Department of Economics and Political Economy Research Institute (PERI), University of Massachusetts, Amherst. June 2009.

² Industrial Technologies Program - Industrial Assessment Centers Database. Rutgers, The State University of New Jersey. <http://www.iac.rutgers.edu/database/state.php>

³ Unified Synthesis Product: Global Climate Change Impacts in the United States. Report by the US Climate Change Science Program. <http://www.globalchange.gov/usimpacts>

⁴ State Fact Sheets: Minnesota. USDA Economic Research Service. Updated June 30, 2009. <http://www.ers.usda.gov/StateFacts/MN.htm>

⁵ Unified Synthesis Product: Global Climate Change Impacts in the United States. Report by the US Climate Change Science Program. <http://www.globalchange.gov/usimpacts>

⁶ Minnesota Department of Natural Resources: Minnesota's Forest Resources Annual Report. December 2008. http://files.dnr.state.mn.us/forestry/um/forestresourcesreport_08.pdf

⁷ Unified Synthesis Product: Global Climate Change Impacts in the United States. *Op. cit.*

⁸ Melanie Fitzpatrick et. al.: Confronting Climate Change in the U.S. Midwest: Minnesota. Union of Concerned Scientists. July 2009. http://www.fresh-energy.org/images/pdf/ucs_06242009.pdf

⁹ Unified Synthesis Product: Global Climate Change Impacts in the United States. *Op. cit.*

¹⁰ National Wildlife Federation: Global Warming Fact Sheet: Global Warming and Minnesota. <http://www.nwf.org/Global-Warming/In-Your-State.aspx>