## CLEAN ENERGY JOBS IN WEST VIRGINIA

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

## **CLEAN ENERGY JOBS**

## The Clean Energy Economy:

By 2007, 332 businesses had generated more than <u>3,000 West Virginia jobs</u> in the clean energy economy, according to the <u>Pew Charitable Trusts</u>. Venture capitalists have invested nearly \$6 million in West Virginia's clean energy businesses.<sup>1</sup>

### The Future of the Clean Energy Economy:

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 10,000 jobs for West Virginia's workers.<sup>2</sup>

### **OPPORTUNITIES FOR INDUSTRY AND BUSINESS**

The Department of Energy has identified significant, untapped opportunities for key industries in West Virginia to prosper under a clean energy economy. There are at least 1,162 ways for small-and medium-sized industrial plants in West Virginia to <u>earn savings from efficiency</u>, with an average payback of only 1.6 years. Only 56% of these opportunities have been implemented.<sup>3</sup> Additional information on West Virginia clean energy jobs is available from the <u>National</u> Wildlife Federation.<sup>4</sup>

#### **COSTS OF INACTION**

According to a <u>June 2009 report</u> released by the National Oceanic and Atmospheric Administration, inaction on global warming will cause significant harm to the region. Warming temperatures will increase the spread of tick-borne diseases like Lyme disease. Early snowmelt will lead to winter flooding, and high temperatures will induce summer drought.<sup>5</sup> These effects have heavy economic consequences for West Virginia.

- West Virginia's 23,000 farms—which produce over \$590 million annually for the state<sup>6</sup>—will lose ground to droughts and agricultural pests. Heat stress will reduce milk output from dairy farms.<sup>7</sup>
- West Virginia's forest industry—worth about \$4 billion annually<sup>8</sup>—relies on tree species vulnerable to climate change. West Virginia's valuable spruce forests could disappear.<sup>9</sup>
- And the <u>National Wildlife Federation</u> shows how global warming will damage the 29,604 jobs provided by West Virginia's \$1.2 billion <u>hunting</u>, <u>wildlife watching</u>, <u>and angling</u> industries.<sup>10</sup>

# START THE CLEAN ENERGY ECONOMY NOW

A nationwide cap on greenhouse gas emissions would jumpstart a new energy economy in West Virginia and accelerate the growth of good-paying, clean jobs. If we fail to act soon, the new markets for clean energy will grow overseas instead.

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

www.edf.org/CleanEnergyJobs

<sup>&</sup>lt;sup>1</sup> Susan Urahn, Joshua Reichert, et. al.: The Clean Energy Economy: Executive Summary. June 2009. The Pew Charitable Trusts. p. 8. http://www.pewcenteronthestates.org/uploadedFiles/Clean\_Economy\_Report\_Web.pdf

<sup>&</sup>lt;sup>2</sup> 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.

<sup>3</sup> Industrial Technologies Program - Industrial Assessment Centers Database. Rutgers, The State University of New Jersey. http://www.iac.rutgers.edu/database/state.php

<sup>4</sup> National Wildlife Federation: "Charting a New Path for West Virginia's Electricity Generation and Use." http://www.nwf.org/globalwarming/statefactsheets.cfm

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

<sup>&</sup>lt;sup>6</sup> State Fact Sheets: West Virginia. USDA Economic Research Service. Updated June 30, 2009. http://www.ers.usda.gov/StateFacts/WV.htm

<sup>&</sup>lt;sup>7</sup> Unified Synthesis Product: Ğlobal Climate Change Impacts in the United States. Report by the US Climate Change Šcience Program. http://www.globalchange.gov/usimpacts

<sup>&</sup>lt;sup>8</sup> Randall A. Childs: West Virginia's Forests. Bureau of Business and Economic Research, West Virginia University. West Virginia Division of Forestry. June 2005. http://www.wvforestry.com/Economic%20Impact%20Study.pdf

<sup>&</sup>lt;sup>9</sup> "Climate Change and West Virginia." Environmental Protection Agency. September 1998. http://yosemite.epa.gov.

<sup>10</sup> National Wildlife Federation: Global Warming and West Virginia. 2009. http://www.nwf.org/globalwarming/pdfs/WestVirginia.pdf