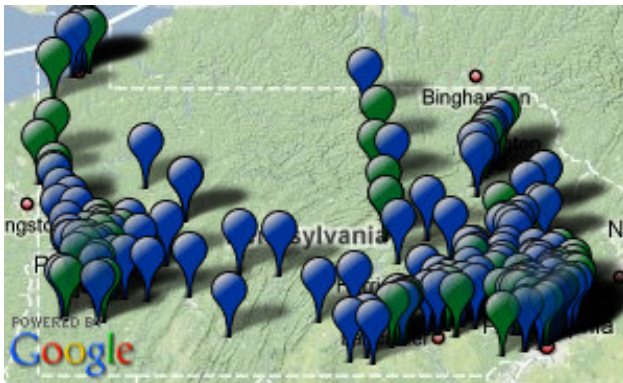


# PENNSYLVANIA WILL BENEFIT FROM CLEAN ENERGY LEGISLATION THAT LIMITS CARBON POLLUTION

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



Less Carbon, More Jobs: This map locates some of the thousands of clean energy businesses in Pennsylvania.

## CLEAN ENERGY JOBS IN PENNSYLVANIA

The website [LessCarbonMoreJobs.org](http://LessCarbonMoreJobs.org) tells the story of existing companies across Pennsylvania that will get new customers and create jobs with a cap on carbon. Researchers estimate that investments in clean energy will create more than 71,600 jobs for Pennsylvania.<sup>1</sup>

[Axion Power International](#) in Newcastle, [Aztec Solar Power](#) in King of Prussia, [Gamesa](#) in Langhorne, and [ImbuTec](#) in Pittsburgh are just four of the many businesses already flourishing from the rising interest in clean energy. Read their stories at [LessCarbonMoreJobs.org](http://LessCarbonMoreJobs.org).

## OPPORTUNITIES FOR INDUSTRY AND BUSINESS

Both the Department of Energy and McKinsey and Company have identified significant, untapped opportunities for Pennsylvania's industries to prosper in a clean energy economy.

- The U.S. steel industry can save \$97 million on low-hanging efficiency opportunities.<sup>2</sup>
- U.S. metal manufacturing companies can save \$17.5 million.<sup>3</sup>
- The chemical<sup>4</sup> and cement industries<sup>5</sup> can save by capturing waste heat and replacing inefficient motors.
- The Department of Energy has identified 3,117 ways for small- and medium-sized industrial plants in Pennsylvania to earn savings from efficiency, with an average payback of 1.1 years. Over 50% of these opportunities have *not* been implemented.<sup>6</sup>

## COSTS OF INACTION

The University of Maryland concluded that inaction on global warming will have dire economic consequences for PA.<sup>7</sup>

- Lower water levels in Pennsylvania's waterways and a rise in sea level on Pennsylvania's coast will cause shipping and manufacturing losses of nearly **\$1 billion** every year.
- More frequent and powerful flooding will inflict **\$9.2 billion in damages** more than once every ten years.
- Rising temperatures will induce heat stress in Pennsylvania's dairy cows, causing **\$480 million** in economic losses and affecting up to **5,300 jobs**.
- Pennsylvania farmers—who produce nearly **\$5 billion** for the state—will lose ground to droughts and agricultural pests.
- Pennsylvania's \$5.5 billion hunting, angling, and tourism industry could **lose \$181 million and 2,000 jobs** from the reduction in fish and game.

## START THE CLEAN ENERGY ECONOMY NOW

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

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

<sup>1</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>2</sup> Environmental Defense Fund: Mitigating industry costs and improving competitiveness with a carbon cap: Profile on Steel. Citing the Department of Energy: Save Energy Now Case Study: Steel. 2008. <http://www.edf.org/page.cfm?tagID=38444&taggedWith=38345>

<sup>3</sup> Environmental Defense Fund: Mitigating industry costs and improving competitiveness with a carbon cap: Profile on Metal Manufacturing. Citing the Department of Energy c/o Oak Ridge National Lab: Save Energy Now Program. 2009. <http://www.edf.org/page.cfm?tagID=38444&taggedWith=38345>

<sup>4</sup> Environmental Defense Fund: Mitigating industry costs and improving competitiveness with a carbon cap: Profile on Chemicals. Citing McKinsey and Company: Global GHG Abatement Cost Curve for the Chemicals Sector, Version 2.0, Societal Perspective, 2030 Timeframe. 2009. <http://www.edf.org/page.cfm?tagID=38444&taggedWith=38345>

<sup>5</sup> Environmental Defense Fund: Mitigating industry costs and improving competitiveness with a carbon cap: Profile on Cement. Citing McKinsey and Company: Global GHG Abatement Cost Curve for the Cement Sector, Version 2.0, Societal Perspective, 2030 Timeframe. 2009. <http://www.edf.org/page.cfm?tagID=38444&taggedWith=38345>

<sup>6</sup> Industrial Technologies Program - Industrial Assessment Centers Database. Rutgers, The State University of New Jersey. <http://www.iac.rutgers.edu/database/state.php>

<sup>7</sup> University of Maryland's Center for Integrative Environmental Research: Assessing the Costs of Climate Change: Pennsylvania. 2008. <http://www.cier.umd.edu/climateadaptation/>