

PENNSYLVANIA

Carbon Cap Critics Predict Healthy Economy under Cap-and-Trade

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The debate over global warming has prompted a number of attempts to forecast the effects of a carbon cap on the overall economy, despite the near impossibility of producing reliable forecasts. It is well documented that the actual costs to U.S. businesses of complying with the Clean Air Act, the Acid Rain Act and other environmental laws have been dramatically lower than what had once been estimated by opponents of these measures.

One study of the potential costs of a carbon cap-and-trade measure produced by the American Council on Capital Formation and the National Association of Manufacturers (ACCF/NAM) offers a new twist on this pattern. ACCF/NAM forecasts that the effects of a cap-and-trade law similar to that proposed by the Obama administration are significantly more negative than similar exercises conducted by the U.S. Environmental Protection Agency, the U.S. Energy Information Administration, and a range of private organizations. However, according to ACCF/NAM's own forecasts, a carbon cap will have only a minor impact on the U.S. economy. This is true even under the worst-case scenario that they present, what they term the "high-cost case" forecast.

With a carbon cap in place, Pennsylvania's economy would experience healthy economic growth.

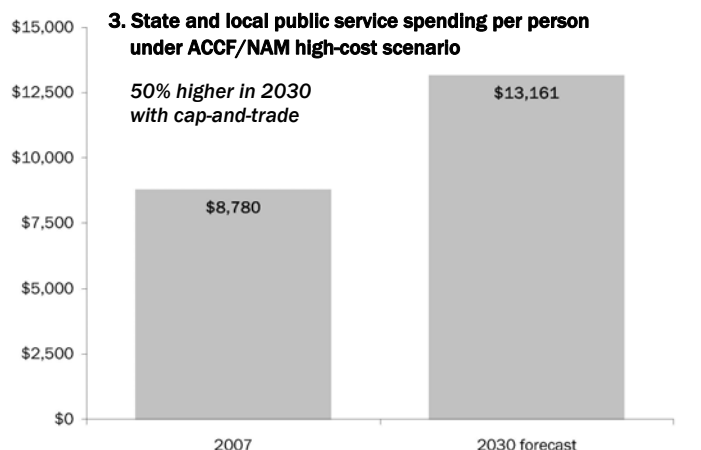
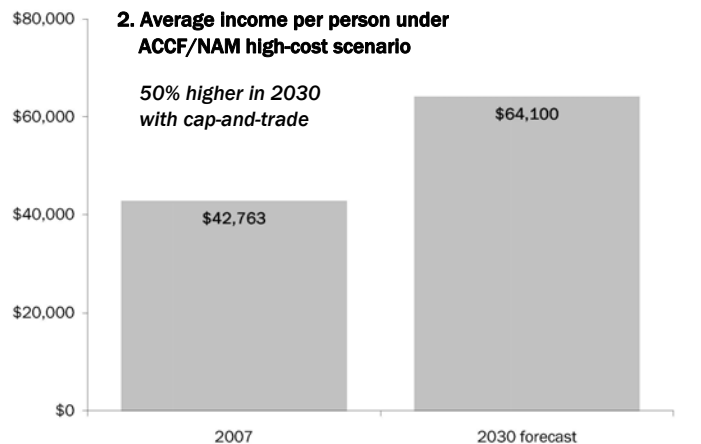
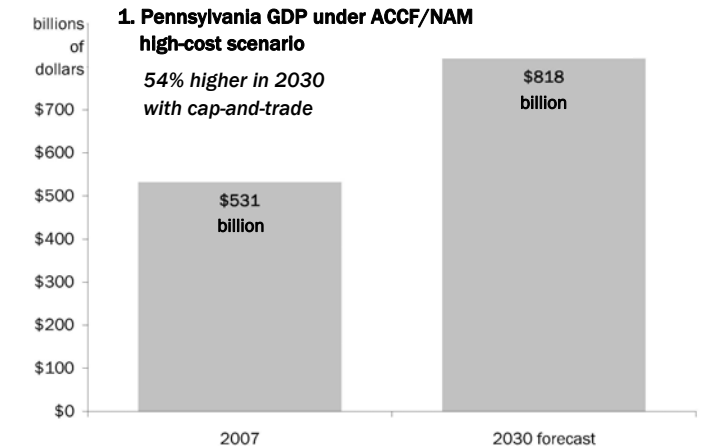
According to the ACCF/NAM "high-cost case," Pennsylvania's economy would grow 54%, while carbon emissions would fall by 36%.

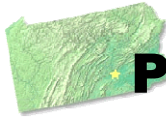
In terms of personal income, the ACCF/NAM forecasts imply that the average U.S. resident's income will grow at an annual rate of 1.7 percent between 2007 and 2030 under their baseline forecast, versus 1.6 percent under their high-cost case with cap-and-trade.

The various documents published by ACCF/NAM that report their forecasts focus exclusively on the minor differences between their baseline and high-cost cases. This fact sheet works directly from the ACCF/NAM's own model and data. We restate their forecasts and draw out some implications, in particular, by directly comparing their high-cost case forecasts for 2030 relative to actual economic conditions in 2007. As will be clear, our presentation of the ACCF/NAM's own forecast results provides a sharply different perspective from that offered by ACCF/NAM itself.

PENNSYLVANIA GDP

In 2007, Pennsylvania's level of total economic output—its GDP—was \$531 billion. According to the ACCF/NAM high-cost case forecast under a carbon cap program, as of 2030, Pennsylvania's GDP will have risen to \$818 billion, an increase of 54 percent (Figure 1).





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INCOME PER PERSON

In 2007, the average income for residents of Pennsylvania (GDP per capita) was \$42,763. According to the ACCF/NAM high-cost case with a carbon cap, in 2030, the average income for Pennsylvania residents will be \$64,100 (Figure 2), 50 percent higher than 2007.

PUBLIC SERVICES

In 2007, state and local revenues in Pennsylvania were \$109 billion. Under the ACCF/NAM high-cost case with a carbon cap, as of 2030 state and local revenues will be \$168 billion, an increase of 54 percent. Per person, the average Pennsylvania resident received \$8,780 from state and local services in 2007 and will receive \$13,161 in 2030, a 50 percent rise (Figure 3). This rise in services in 2030 occurs entirely through the benefits of a growing economy, with no changes from 2007 tax rates.

PUBLIC SCHOOLS

This rise in spending per resident in Pennsylvania will create major new opportunities for the state's educational system. For example, Pennsylvania could choose to reduce the average classroom size in its K-12 public school system by 20 percent, from 22.8 in 2007 to 18.2 in 2030, and still increase support for all other state and local services by 49 percent. This is after assuming salary increases for teachers and all other employees throughout Pennsylvania's public sector proportional to the state's overall economic growth (Figure 4).

EMPLOYMENT OPPORTUNITIES

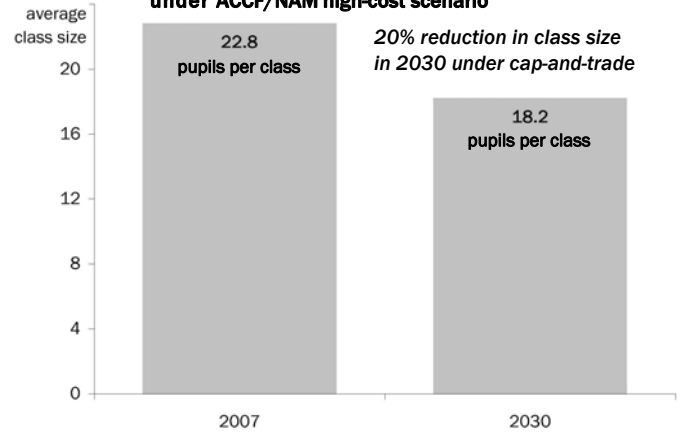
In 2007, about 6.02 million people were employed in Pennsylvania. Under the ACCF/NAM high-cost case forecast, 6.75 million people will have jobs in 2030, a 12 percent increase. This forecast takes no account of the increased job opportunities that will result through investments in energy efficiency and renewable energy such as those included in the Obama stimulus program. Clean energy investments produce roughly 3.5 times more jobs per dollar than spending on oil, coal, and natural gas, because they require relatively more spending on people and less on equipment, and because they require fewer imports. If we assume that 25 percent of Pennsylvania's energy spending shifts from fossil fuels to clean energy as of 2030, this would likely increase Pennsylvania's employment by about 67,000 relative to the ACCF/NAM high-cost case forecast, for a total of about 6.81 million jobs (Figure 5).

FIGHTING GLOBAL WARMING

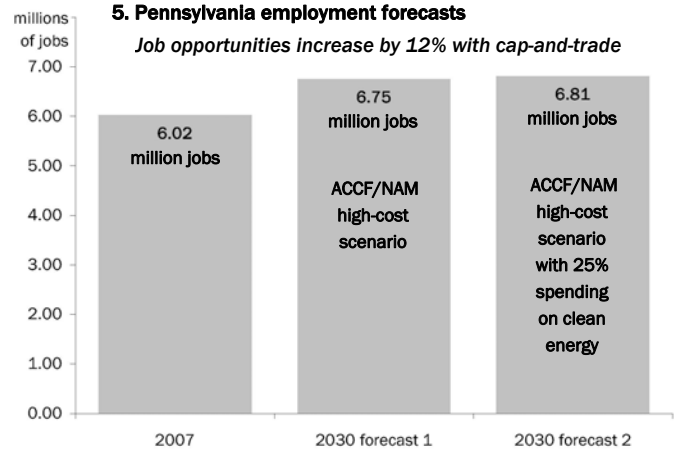
Under the ACCF/NAM high-cost case forecast under a carbon cap program, in 2030 average Pennsylvanians will be about 50 percent richer than in 2007. They will also enjoy substantial improvements in public services. They will gain these benefits while making major advances toward defeating global warming. The ACCF/NAM high-cost case assumes that greenhouse gas emissions in the United States will fall by 36 percent between 2007 and 2030 (Figure 6). Their forecast does not account for the economic benefits from this reduction in greenhouse gas emissions.

Details on all figures are presented in a technical appendix at www.peri.umass.edu/emissions.

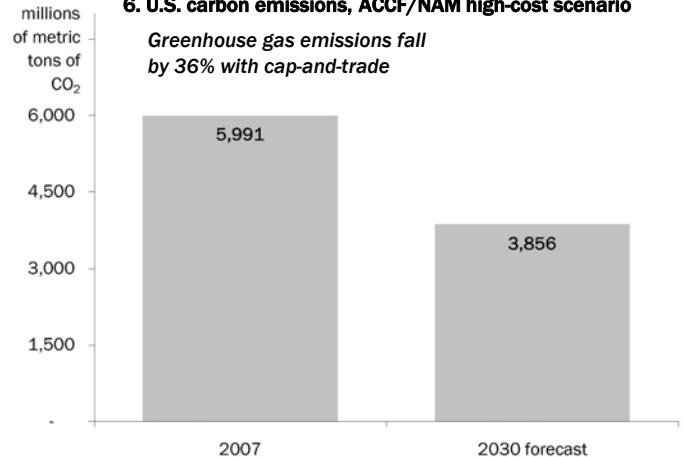
4. How Pennsylvania could improve public schools under ACCF/NAM high-cost scenario



5. Pennsylvania employment forecasts



6. U.S. carbon emissions, ACCF/NAM high-cost scenario



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More information on PERI can be found at www.peri.umass.edu. For more information on this research please contact PERI at peri@peri.umass.edu.

