

# VIRGINIA

## 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, Virginia's economy would experience healthy economic growth.**

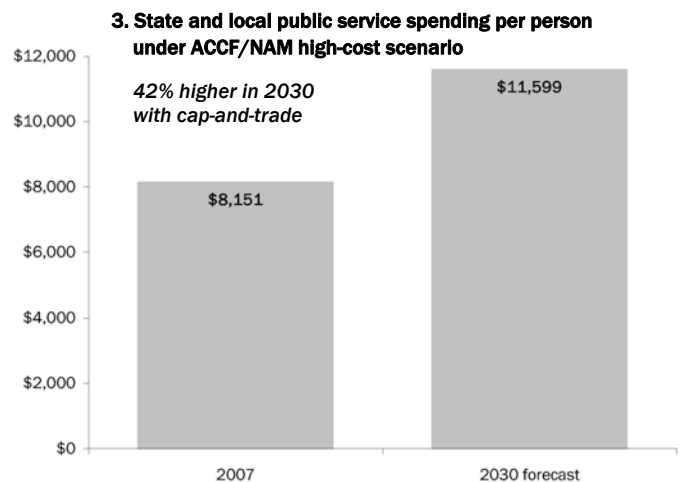
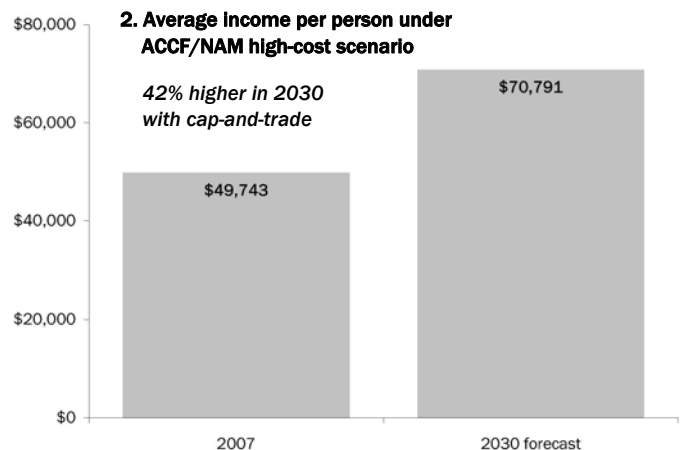
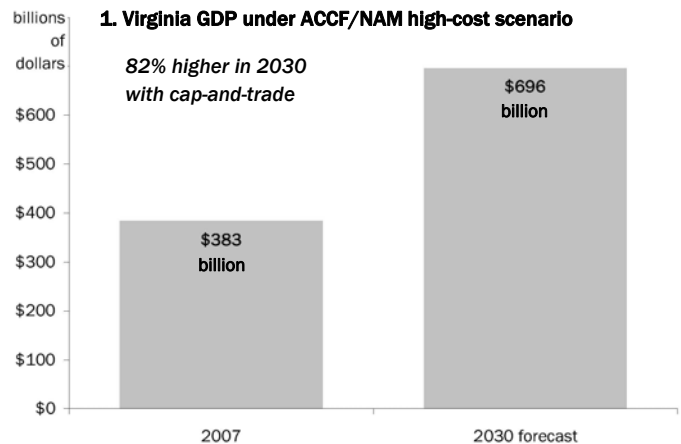
**According to the ACCF/NAM "high-cost case," Virginia's economy would grow 82%, while carbon emissions would fall by 36%.**

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.

### VIRGINIA GDP

In 2007, Virginia's level of total economic output—its GDP—was \$383 billion. According to the ACCF/NAM high-cost case forecast under a carbon cap program, as of 2030, Virginia's GDP will have risen to \$696 billion, an increase of 82 percent (Figure 1).



**INCOME PER PERSON**

In 2007, the average income for residents of Virginia (GDP per capita) was \$49,743. According to the ACCF/NAM high-cost case with a carbon cap, in 2030, the average income for Virginia residents will be \$70,791 (Figure 2), 42 percent higher than 2007.

**PUBLIC SERVICES**

In 2007, state and local revenues in Virginia were \$62.8 billion. Under the ACCF/NAM high-cost case with a carbon cap, as of 2030 state and local revenues will be \$114 billion, an increase of 82 percent. Per person, the average Virginia resident received \$8,151 from state and local services in 2007 and will receive \$11,599 in 2030, a 42 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 Virginia will create major new opportunities for the state's educational system. For example, Virginia could choose to reduce the average classroom size in its K-12 public school system by 20 percent, from 20.9 in 2007 to 16.7 in 2030, and still increase support for all other state and local services by 74 percent. This is after assuming salary increases for teachers and all other employees throughout Virginia's public sector proportional to the state's overall economic growth (Figure 4).

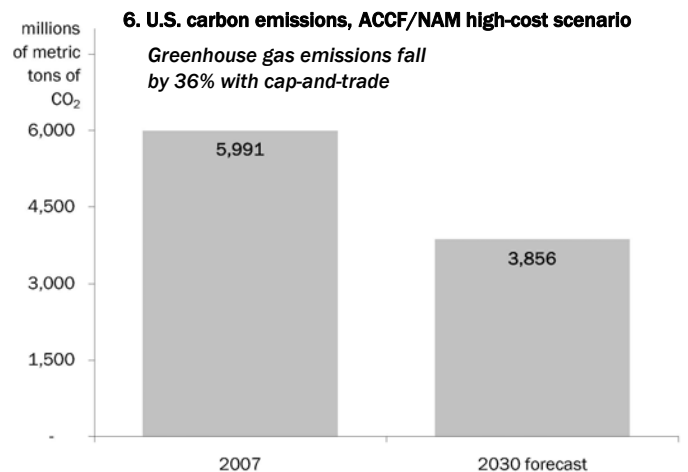
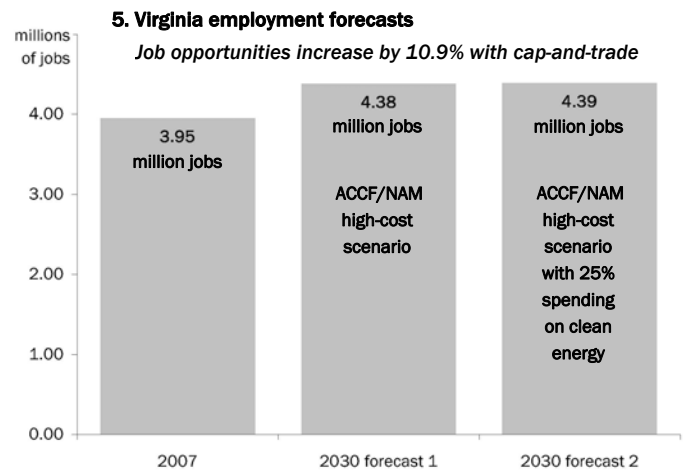
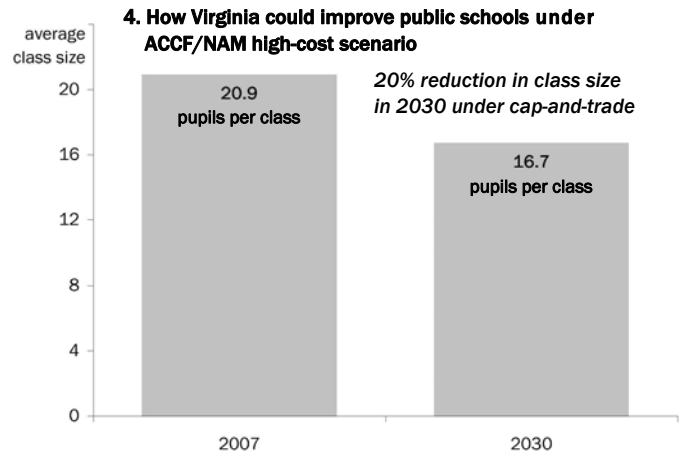
**EMPLOYMENT OPPORTUNITIES**

In 2007, about 3.95 million people were employed in Virginia. Under the ACCF/NAM high-cost case forecast, 4.38 million people will have jobs in 2030, a 10.9 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 Virginia's energy spending shifts from fossil fuels to clean energy as of 2030, this would likely increase Virginia's employment by about 17,000 relative to the ACCF/NAM high-cost case forecast, for a total of 4.39 million jobs (Figure 5).

**FIGHTING GLOBAL WARMING**

Under the ACCF/NAM high-cost case forecast under a carbon cap program, in 2030 average Virginians will be about 42 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](http://www.peri.umass.edu/emissions).**



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