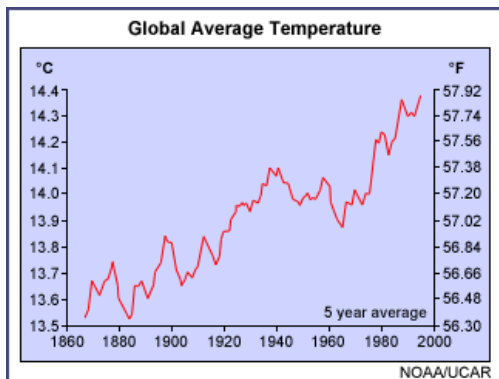


# Climate Change 101: A Primer for PA



*Produced by the Commonwealth Community Energy Project of the Pennsylvania Environmental Council, 2006*



## The Science:

**The Consensus Is In** – Leading scientific organizations, including the United Nations’ Intergovernmental Panel on Climate Change and the American Association for the Advancement of Science, overwhelmingly agree that human-induced climate change is a serious problem. Burning fossil fuels, whether directly as gasoline in your car, or indirectly as coal used to generate electricity, is the main source of carbon dioxide, the primary greenhouse gas.



## Anticipated Impacts:

**Change is Certain** – Mid-range projections are that the average surface temperature of the earth will rise 4 to 8°F by 2100. But how this will play out for specific regions is uncertain. Probable impacts include melting ice sheets leading to rising sea levels & inundated coastal regions, extreme weather, shifting rainfall patterns, and growing ranges for tropical diseases. All these changes will have profound effects on agriculture & wildlife.



## Our Role:

**The United States** – With 5% of the world’s population, the U.S. produces 25% of the world’s greenhouse gas emissions.

**Pennsylvania** – PA produces 1% of world greenhouse gas emissions. The average Pennsylvanian produces 14,500 pounds of carbon per year. Heating, cooling, and powering your home, as well as driving your vehicle, account for the majority of household emissions.

## What You Can Do:

**Be Efficient, and Green** – Investing in energy-efficient technology (heating/cooling systems, compact fluorescent lights, Energy Star appliances, and hybrid cars) cuts your energy costs and reduces greenhouse gas emissions. Purchasing local products supports the regional economy while cutting emissions.

**Influence Community & U.S. Policy** – Solutions to climate change require a strong commitment from our institutions and government. In the absence of federal leadership, colleges, cities, and states have adopted policies to make climate change a priority. Urge your leaders to take a stand, and vote accordingly.

## For More Information:

- Calculate your impact at [www.climatecrisis.net](http://www.climatecrisis.net)
- Find ways to become “greener” at [www.thegreenguide.com](http://www.thegreenguide.com)
- Learn about energy-efficient technologies at [www.aceee.org](http://www.aceee.org)
- Check out renewable energy options at [www.cleanyourair.org](http://www.cleanyourair.org)

