

New York's Carbon Emissions:

An Enviably Record

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When it comes to carbon emissions, the rest of the country could learn a great deal from the Empire State, which has among the lowest carbon dioxide emissions per capita of any state.

On a per person basis, each New Yorker emits 10.9 metric tons (a metric ton is 2,206 pounds) of carbon dioxide annually. This is just a sliver ahead of Rhode Island and California, but just over half of the national average, of 20.28 metric tons.

In 2008, the U.S. Environmental Protection Agency, using data from the U.S. Energy Information Administration issued the statewide figures for total emissions [see: http://www.epa.gov/climatechange/emissions/state_energyco2inv.html]. As a large state, New York has a large overall amount of carbon dioxide emissions – or 210.9 million metric tons in 2005.

A truer picture of a state's carbon footprint, however, is the amount generated on a per person or per capita basis. To determine this, the New York Affordable Reliable Electricity Alliance recently calculated each state's per capita emissions using 2005 state population census data. The results are on the attached page.

In fact, New York's excellent carbon standing should not come as a surprise. In the document mentioned above, the EPA notes, "Nationally, carbon dioxide (CO₂) emissions from fossil fuel combustion represented the largest (80%) of total [GigaWatt Power] GWP weighted emissions....Similarly, (CO₂) emissions from fossil fuel combustion are the largest source of greenhouse gas emissions within a state."

New York has two major advantages in this regard. First, it has a relatively clean electricity generating portfolio with nearly half of electricity coming from nuclear power (30.1 percent in 2006 according to EIA) and hydro power (18.0 percent). On a combined basis, this is nearly twice the national average as nuclear power accounts for 20 percent of the nation's electricity generation while hydro power accounts for 7 percent.

The second advantage is the widespread use of mass transit in New York City as the absence of automobiles significantly reduces carbon emissions. A typical car emits six tons per year of carbon dioxide emissions.

As New York looks for ways to reduce carbon emissions, it has a challenge of first doing no harm. Specifically, calls to close the Indian Point nuclear power plants, which on a typical day provides a third of New York City's electricity and plays a major role in powering the mass transit system are a threat to its low carbon dioxide emission standing. The National Academy of Sciences has warned that the only conceivable replacement for Indian Point would be natural gas plants, which emit sizable amounts of carbon dioxide.

New York should certainly keep and look for ways to expand its hydro and nuclear power, while also promoting other renewable sources, particularly geothermal heat pumps for buildings. Transmission grid improvements should also be made, and will be particularly important for transporting wind power. Energy efficiency programs should also be expanded.

As states and the country as a whole focus on reducing carbon emissions, there is a lot that can be learned from New York – and a lot more that New York can do.

About the Author: Dr. Patrick Moore is a co-founder and former leader of Greenpeace and an advisor to the New York Affordable Reliable Electricity Alliance (New York AREA).

About New York AREA: Founded in November 2003, the New York Affordable Reliable Electricity Alliance (New York AREA) is a diverse group of more than 125 business, labor, and community groups whose mission and purpose is to ensure that New York has an ample and reliable electricity supply, and economic prosperity for years to come. New York AREA helps to educate policy makers, businesses, and the general public regarding the necessity and importance of safe, low-cost and reliable electricity. For additional information visit: www.area-alliance.org.

State Emissions Per Capita in Metric Tons					
Rhode Island	10.57	North Carolina	17.68	Nebraska	24.57
California	10.85	Hawaii	18.18	Utah	26.37
New York	10.94	Michigan	18.75	Kansas	26.42
Vermont	10.95	Illinois	19.08	Iowa	26.95
Idaho	11.10	Minnesota	19.68	Texas	29.06
Oregon	11.75	Wisconsin	19.94	Oklahoma	30.00
Connecticut	12.41	Colorado	20.18	New Mexico	30.77
Massachusetts	13.19	Georgia	20.25	Alabama	31.08
Washington	13.65	Nevada	20.57	Kentucky	36.47
Florida	14.70	South Carolina	20.50	Indiana	37.01
Maryland	15.05	Delaware	21.11	Montana	38.75
New Jersey	15.54	Tennessee	21.24	Louisiana	42.60
New Hampshire	16.27	Arkansas	21.83	West Virginia	62.65
Arizona	16.32	Mississippi	21.91	Alaska	70.39
South Dakota	16.90	Pennsylvania	22.39	North Dakota	77.30
Virginia	17.05	Ohio	23.55	Wyoming	124.11
Maine	17.47	Missouri	24.38	National	20.28

Source: EPA, CO2 Emissions from Fossil Fuel Combustion, February 29, 2008
 Link: http://www.epa.gov/climatechange/emissions/downloads/CO2FFC_2005.pdf

Source: U.S. Census Bureau, Table 1: Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2007, December 27, 2007 Link: <http://www.census.gov/popest/states/NST-ann-est.html>