

Climate Change Advisory Committee Meeting

May 20, 2010

Welcome & Introductions

Members Proxy and Sign-In



Agenda

- Action Item: Approval of March 18th Meeting Minutes
- Updates to Climate Change Initiatives
 - ARRA grant programs and other grant programs
 - State Legislation: Senate Bill 1282 and House Bill 2405
- Appointment Terms for Committee Members
- Public Comment
- Updates to Climate Change Initiatives (continued)
 - Adaptation: First Working Group Meetings
 - Implementation/Facilitation of Action Plan
 - EPA Final Tailoring Rule
- Presentations – “Coal Methane VAM project” and “The Governor’s Center for Local Government Services”
- EIA Report

Action Item – Approval of Minutes

- March 18, 2010 Meeting
 - Questions or comments prior to action?
 - Motion to approve; second; vote

Updates to Climate Change Initiatives

- American Resource Recovery Act programs
 - Green Energy Works!
 - CHP, Biogas, Solar, Wind, Green Revolving Loans, Geothermal Loans, Sustainable Business Recovery Grants
 - Conservation Works!
 - Home heating equipment rebate
 - Energy Security

American Resource Recovery Act

Program Name	Total Amount Awarded	Total Leveraged Funding	Annual Energy Savings or Generation (kWh)	Other Benefits
Sustainable Business Recovery (SBR) - Energy Harvest	\$4,386,918	\$10,138,575	6,559,670	35,600 mcf of natural gas replaced, 27,354,881 gals of #2 oil replaced, 5,048 tons of coal replaced
SBR - PEDDA	\$3,771,000	\$18,839,875	40,870,170	15,000 Tons per year CO2 reduced. 155 jobs
PEDDA - Sustainable Business Recovery	\$10,000,000	\$53,750,133	52,000,000	49,000 Tons per year CO2 reduced. Creation of 381 permanent temporary jobs and 185 permanent jobs.

American Resource Recovery Act

Program Name	Total Amount Awarded	Total Leveraged Funding	Annual Savings or Generation (kWh)	Other Benefits
Green Energy Works (GEW): CHP	\$12,173,691	\$15,723,627	54,815,000	55,000 Tons per year CO2 reduced
GEW: Biogas	\$5,031,850	\$22,080,214	23,662,140	12,000 tons per year CO2 reduced
GEW: Solar	\$10,064,000	\$48,605,483	13,185,270	8,960 tons per year CO2 reduced
GEW: Wind	\$22,800,000	\$200,000,000	291,427,000	Creates or retains 387 jobs, reduces 225,000 tons of CO2 per year.
Conservation Works!	\$22,144,465	\$16,895,657	34,175,426	25,925 tons per year of CO2 reduced
TOTALS	\$67,571,924	\$186,033,564	225,267,676	

Other Financial Programs

Program	\$ Invested	Energy Generated or Saved (kWh)	Installed Capacity (MW)	Environmental, Energy or Other Benefits
PEDA	\$65,632,838	143,552,682	63.82	Job creation: 1,371 permanent; 1,254 temp. Annual reduced: 244,911 T CO ₂ ; 1,848 T SO ₂ ; 635 T NO _x ; 7,851 T CH ₄ ;
AFIG	\$32,000,000	N/A	N/A	Production of 55 million gals. biodiesel (inclusive of \$9,145,849 in producer subsidies). Over \$6 million in HEV rebates and grants since 2003.
CFA Solar	\$40,000,000	36,560 MWh/yr	34 MW	Four solar manufacturing projects create 583 jobs. CFA investment in solar PV deployments is <\$1.00/Watt.

Other Alternative Energy Programs

Program	\$ Invested	Energy Generated or Saved (kWh)	Installed Capacity (MW)	Environmental, Energy or Other Benefits
PA Sunshine	\$67,296,651	53,270,322	6.6 MW plus 36.4 MW under construction	Creation of 550 permanent jobs.
Keystone HELP	\$15,924,011 (int. rate buy down), \$1,300,000 in rebates	1,077,055 MM BTU's saved		Predicted annual energy savings of more than \$7.28 million for the participating homeowners. Sustains and creates over 1,500 jobs.
Small Bus. Energy Efficiency	\$2,300,000			Savings in capital cost of > \$2,200,000; Savings in operating costs of > \$22 million.

State Legislation

- **Senate Bill 1282** – Bioheating oil
 - Department of Agriculture is lead agency
- **House Bill 2405** – Alternative Energy Portfolio Standard (AEPS) Amendment
 - Black & Veatch Assessment
 - Energy Ventures Analysis Rebuttal

Senate Bill 1282 (P.N. 1786)

- Amends Act 78 of 2008 – “Biofuel Development and In-State Production Incentive Act”
- Introduced on March 18, 2010 by Senator Erickson and 13 co-sponsors
- Requires biodiesel blending into heating oil
- Lowers S content of heating oil to not more 15 ppm by 5/1/2011
 - Currently no regulatory standard, as high as 5,000 ppm
 - Current standard for on-road diesel is 15 ppm
- PA Dept. of Agriculture (PDA) has oversight and enforcement authority

Senate Bill 1282

- Requires biodiesel to be blended into all heating oil (“Bioheat”) and off-road diesel fuel at the following percentages:
 - 5% biodiesel by volume after 5/1/2011
 - 10% biodiesel by volume after 5/1/2013, provided:
 - NBB and NORA certify that such a blend is not harmful to heating systems or,
 - ASTM amends D396 to include blends of at least 10%
- Exceptions to fuel standards:
 - Aviation, locomotive and marine applications
 - Fuel oil grades other than #1 & #2 that comply with ASTM D396 and D975
 - Small refiners using 100% PA crude do not need to comply until after 12/31/2010

Senate Bill 1282

- PDA in conjunction with DEP can temporarily rescind oil heat requirement, based on availability of supply
- Requires registration with PDA of all importers, wholesalers and retailers of subject fuels
- Requires certification of blended fuel and bill of lading/manifest accompanied with each sale and transfer of subject fuels
- Establishes fines for violating the provisions of this bill and regulations that PDA may promulgate to implement the requirements of this bill

Senate Bill 1282

- Establishes the Biofuel Development Fund for depositing any fees, fines and interest associated with implementing these requirements. These funds may be used by PDA solely for the purposes of implementing the requirements of this legislation.
- SB 1282 now being merged into Senate Bill 901 P.N. 1400 to also prescribe annual registration fees
- SB 901 P.N. 1087 introduced by Senators Scarnatti and Mary Jo White on June 4, 2009
- SB 901 currently in House Appropriations Comm.
- Has support of PA Petroleum Marketers and Convenience Store Association

House Bill 2405

- House Bill 2405 – Alternative Energy Portfolio Standard (AEPS)
 - Black & Veatch Assessment
 - Energy Ventures Analysis Rebuttal

Appointment Terms for Committee Members

Act 70 of 2008 – Pennsylvania Climate Change Act

§ 1361.5. Climate Change Advisory Committee

- (a) **Establishment.--** There is established within the department the Climate Change Advisory Committee. The purpose of the committee shall be to advise the department regarding the implementation of the provisions of this act.
- (b) **Membership.--**
 - (1) The committee shall be composed of residents of this Commonwealth selected as set forth in this subsection. Members shall be appointed on account of their interest, knowledge or expertise regarding climate change issues. Members shall be selected to reflect a diversity of viewpoints on climate change issues from the scientific, business and industry, transportation, environmental, social, outdoor and sporting, labor and other affected communities.

Act 70 of 2008 (continued)

- (2) Eighteen members shall be appointed as follows:
- (i) Six members appointed by the Governor.
 - (ii) Six members appointed by the Senate. Of these members, the Majority Leader of the Senate shall appoint four members, and the Minority Leader of the Senate shall appoint two members.
 - (iii) Six members appointed by the House of Representatives. Of these members, the Majority Leader of the House of Representatives shall appoint four members, and the Minority Leader of the House of Representatives shall appoint two members.
- (3) The Secretary of Conservation and Natural Resources, the Secretary of Community and Economic Development and the Chair of the Pennsylvania Public Utility Commission, or their designees, shall be ex officio voting members of the committee.
- (d) Terms of service.** -- A member shall be appointed for a term of four years.

Appointment Terms for Committee Members

- 9 members were appointed to serve an initial term of two years expiring on July 9, 2010.
- 9 members were appointed to serve a term of four years expiring on July 9, 2012.
- The Chairperson was elected by members for a two-year term on October 1, 2008.
 - Nominations for Chair and Vice Chair are proposed for the next CCAC meeting on July 15.
 - Elections for Chair and Vice Chair are proposed for the following CCAC meeting on September 16.

Term expires on July 9, 2010

<u>Name</u>	<u>Appointed By</u>
Laureen Boles	Governor
Sarah Hetznecker	Governor
Vivian Loftness	Governor
Nathan Willcox	House Majority
Edward Yankovich	House Majority
Richard Allan	Senate Minority
G. Ellis or F. Harnack	House Minority
Robert Bear	Senate Majority
David Cannon	Senate Majority

Public Comment

Lunch for Committee Members

Updates to Climate Change Initiatives (continued)

- Adaptation: First working group meetings
 - Schedule is posted to CCAC Web site:
http://www.portal.state.pa.us/portal/server.pt/community/climate_change_advisory_committee/10412
- Implementation/Facilitation of Climate Change Action Plan

EPA Final Tailoring Rule

- During the January 12, 2010 CCAC meeting, Assistant Counsel Bo Reiley provided the proposed tailoring rule for GHGs under New Source Review PSD permit requirements of federal Clean Air Act.
- Final rule was announced on May 13, 2010
 - phase-in timeline for stationary sources beginning on January 2, 2011
 - focuses on large sources; exempts small facilities

Fact sheet and information are found on EPA Web site: www.epa.gov/nsr

Presentation

“Coal Ventilation Air Methane Emission Abatement Project”

- Steve Winberg, VP Research and Development, Consol Energy, Inc.

Presentation

“The Governor’s Center for Local Government Services”

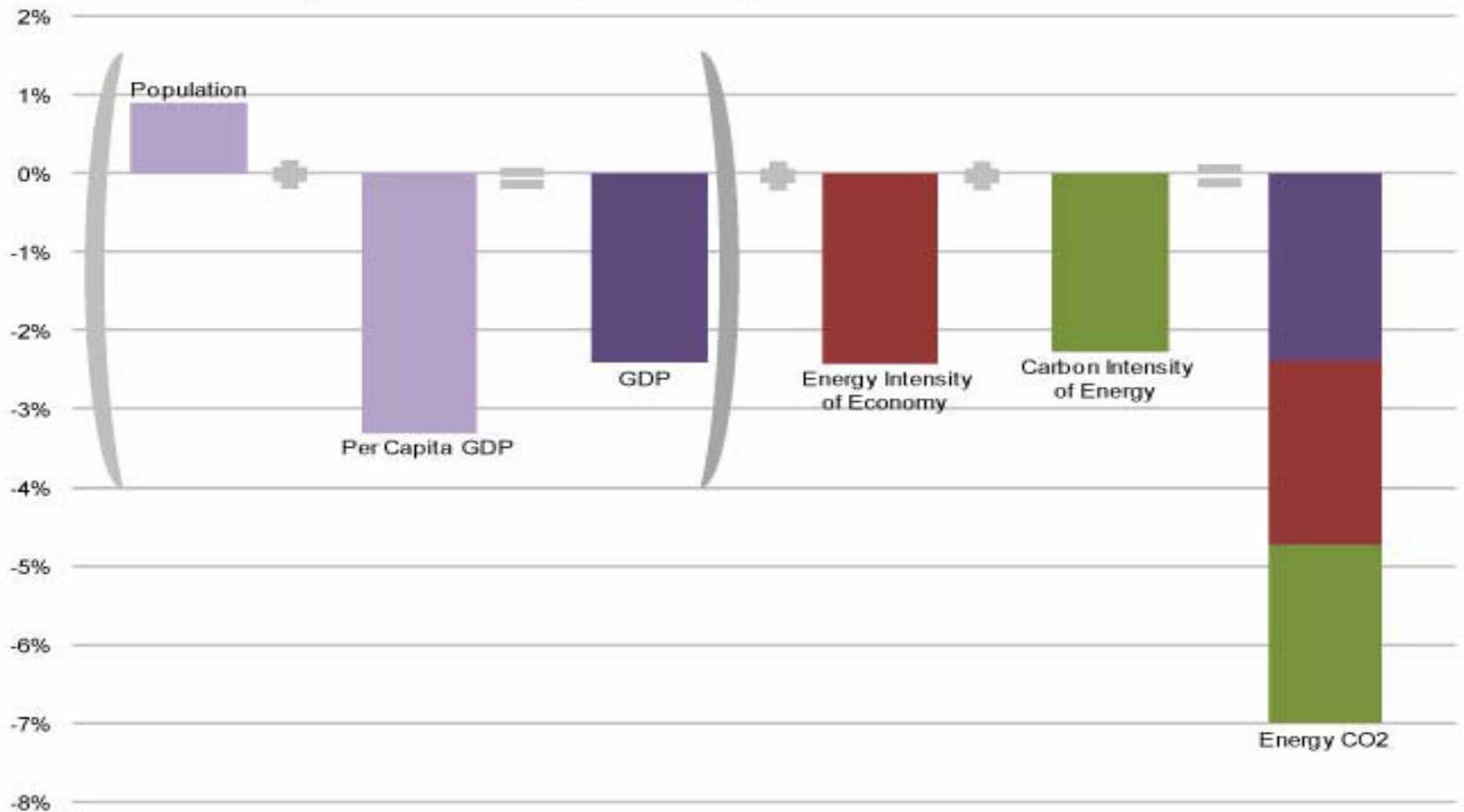
- Fred Banuelos, Deputy Director,
Dept. of Community and Economic Development

EIA Report

- Energy Information Administration Report: U.S. Carbon Emissions in 2009

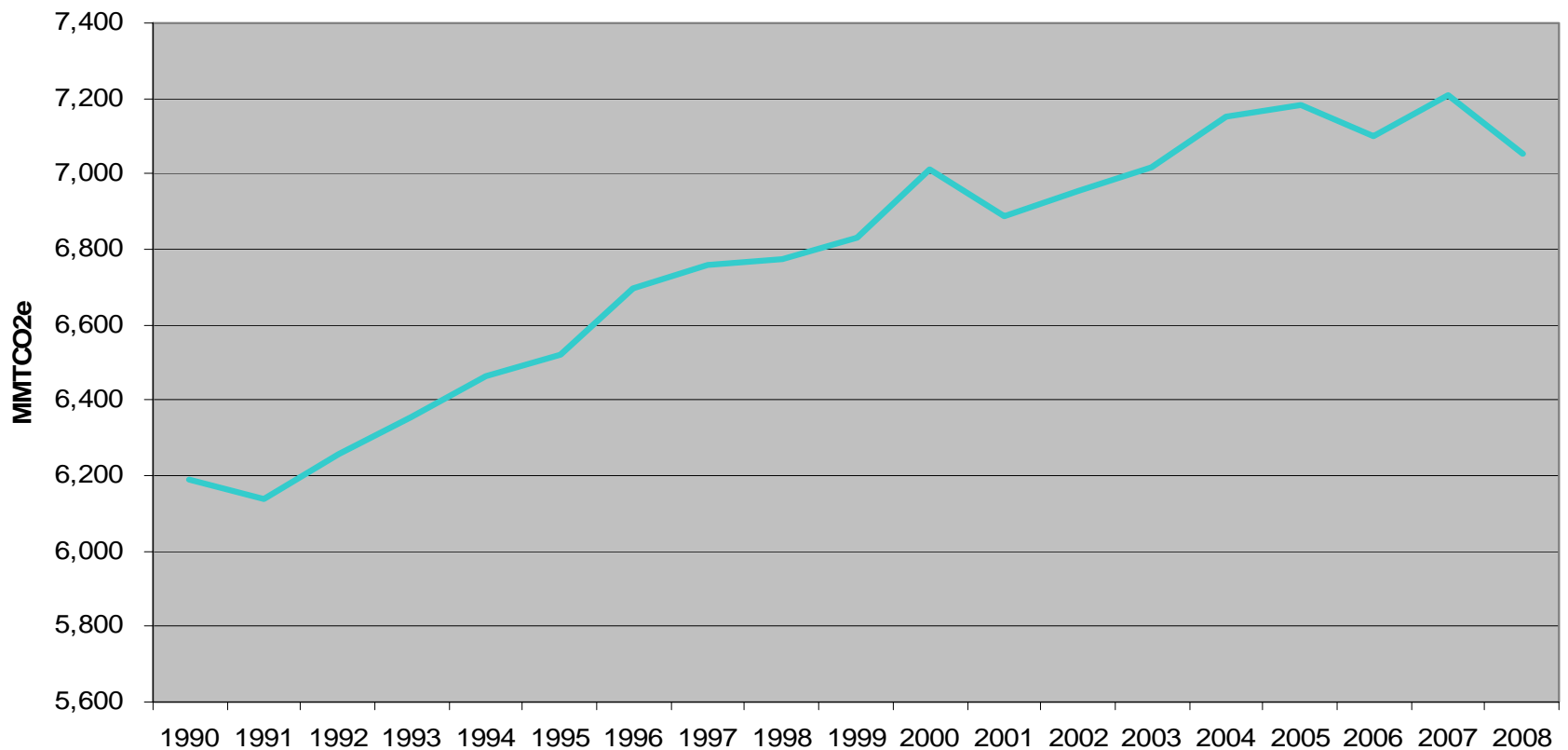
2009 Decrease in U.S. CO2 Emissions

Factors contributing to the 2009 change in energy-related carbon dioxide emissions



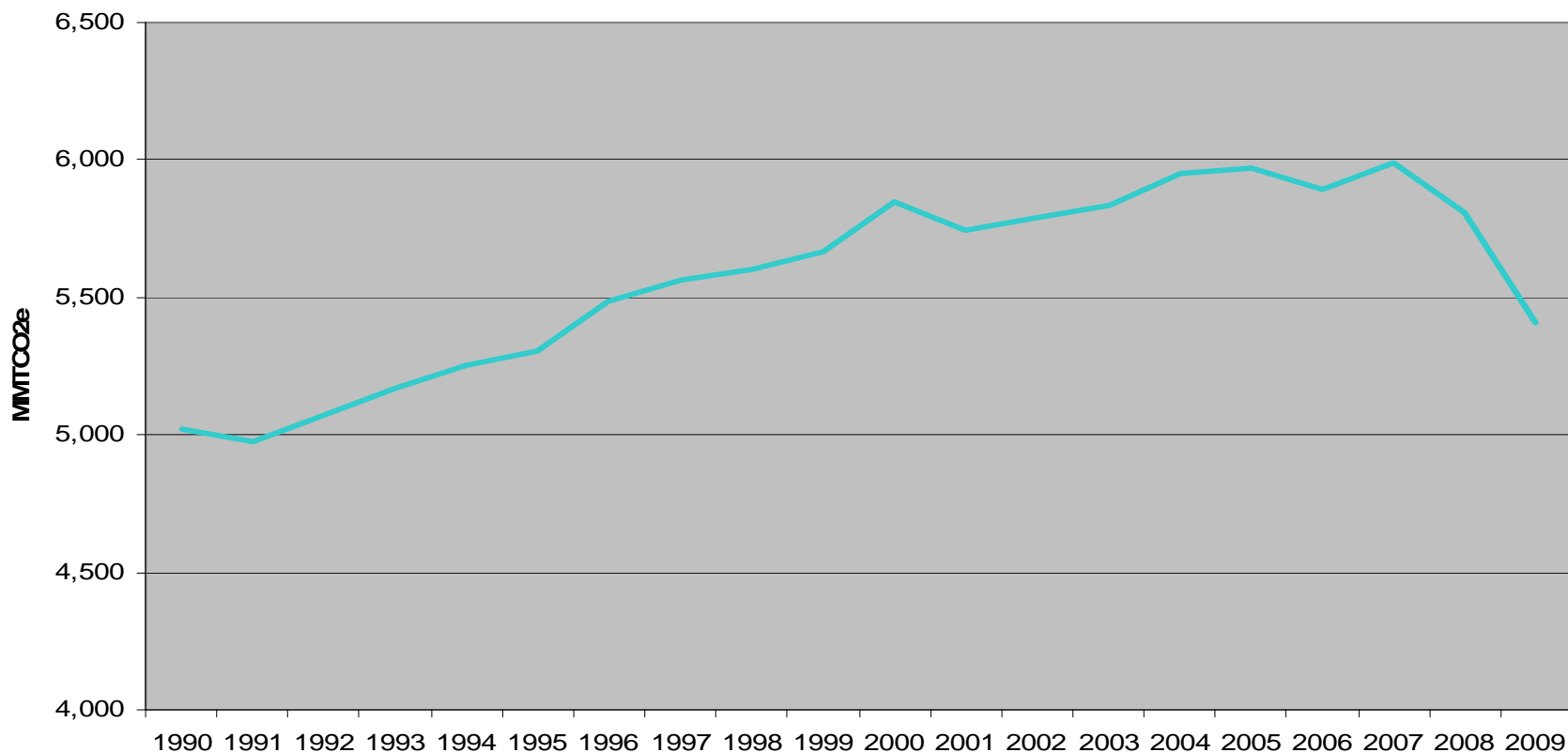
U.S. Total GHG Emissions

U.S. GHG Emissions

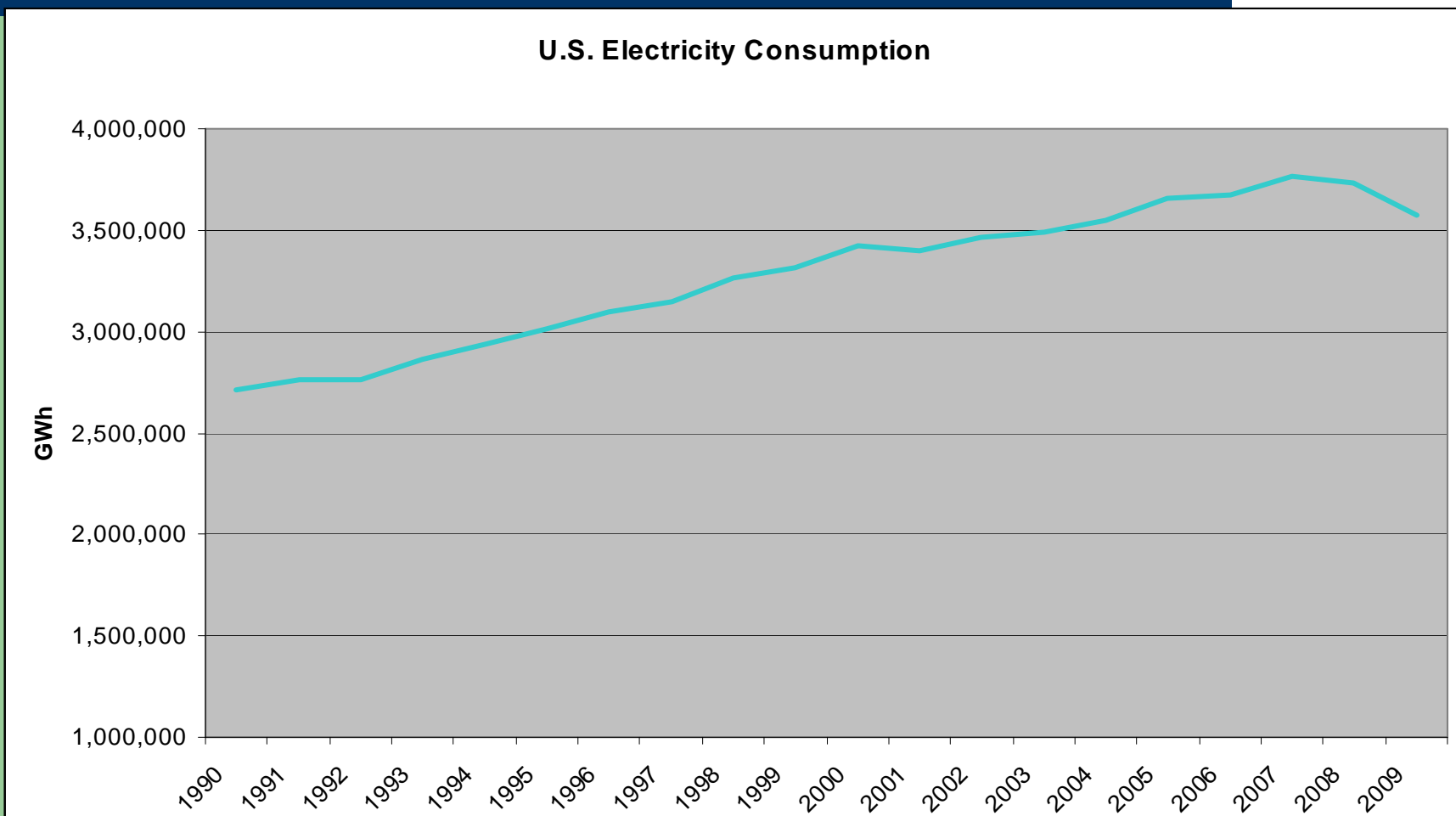


U.S. CO2 from Energy Consumption

U.S. Energy Related CO2 Emissions

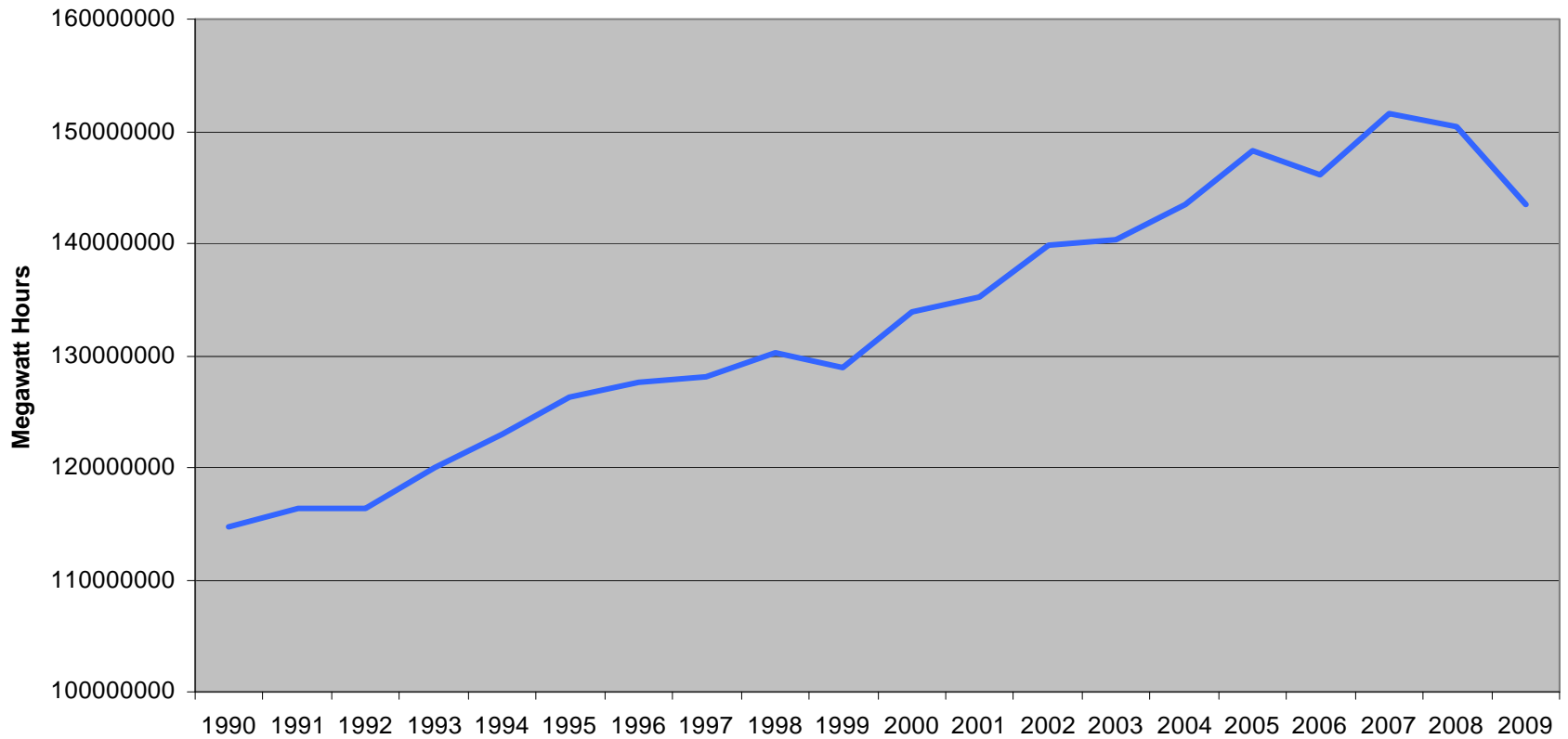


U.S. Electricity Consumption Trend



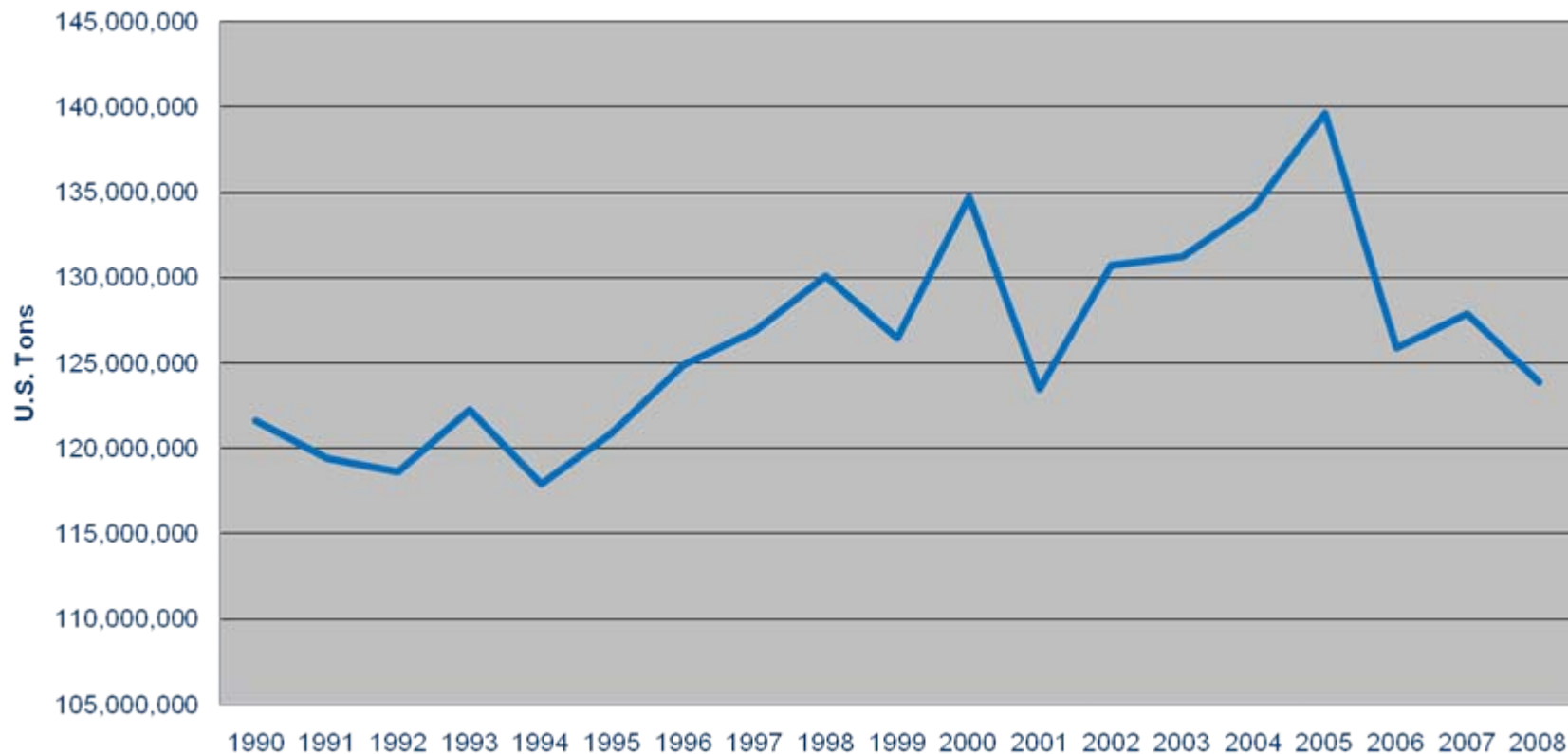
PA Electricity Consumption Trend

Pennsylvania Electricity Consumption

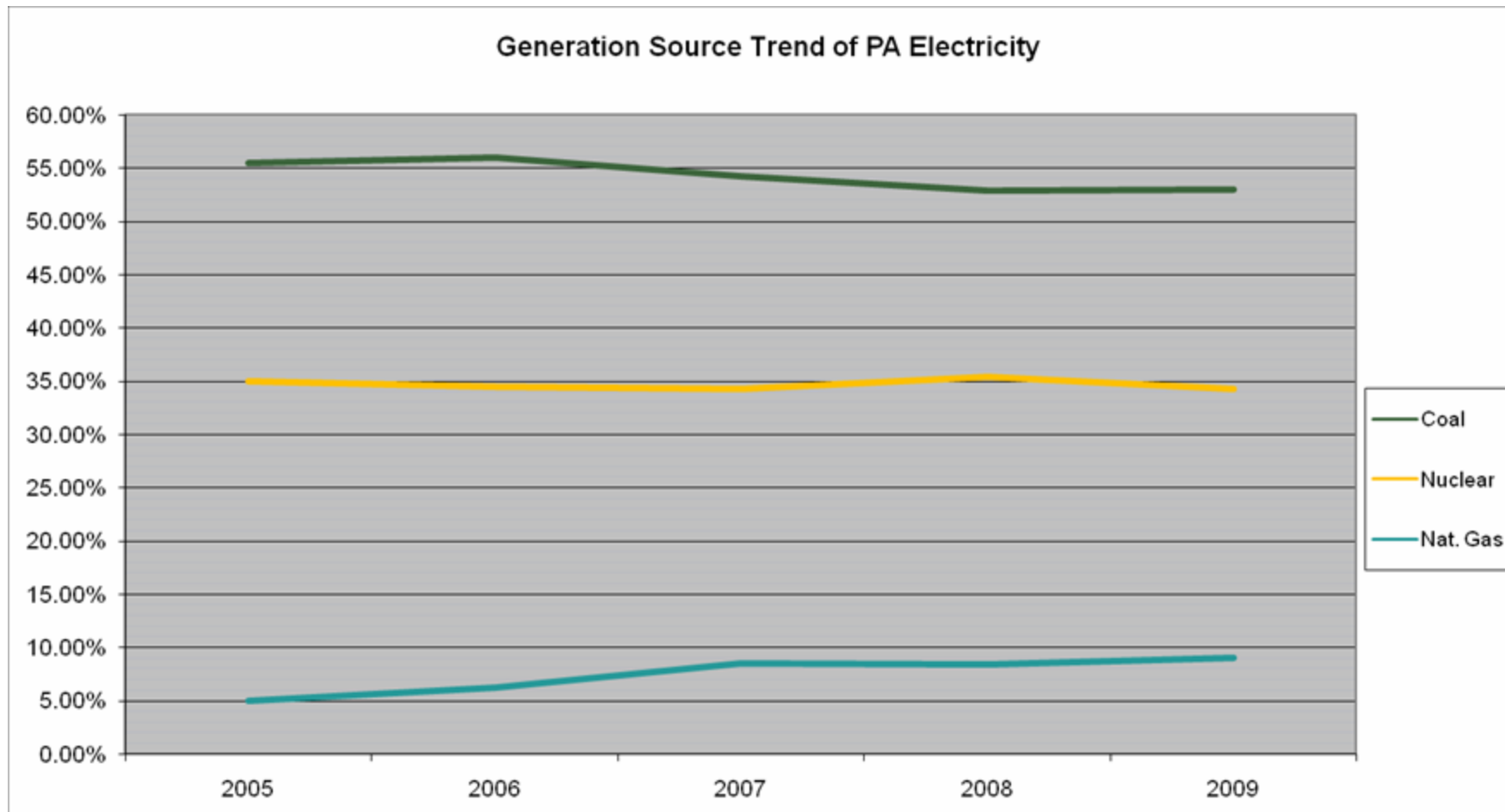


PA CO2 from Electricity Generation

PA CO2 Emissions from Electricity Generation



PA Electricity Fuel Source Trend



ADJOURN