Federal Climate Change Expenditures Report to Congress

April 2006

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FISCAL YEAR 2007 REPORT TO CONGRESS ON FEDERAL CLIMATE CHANGE EXPENDITURES

1. INTRODUCTION

> *"I reaffirm America's commitment to the United Nations Framework Convention and its central goal, to stabilize atmospheric greenhouse gas concentrations at a level that will prevent dangerous human interference with the climate."*
>
> President George W. Bush, February 14, 2002

The following is an accounting of Federal funding for climate change programs and activities, both domestic and international, included in the President's fiscal year 2007 Budget. This report is provided in response to Title V, Section 585(b) of Public Law 109-102, the Foreign Operations, Export Financing, and Related Programs Appropriations Act, 2006.

1.1 BACKGROUND

On February 14, 2002, President Bush announced a new national goal to reduce the greenhouse gas emission intensity of the American economy by 18 percent by the year 2012. As he said on that day: "This will set America on a path to slow the growth of our greenhouse gas emissions and, as science justifies, to stop and then reverse the growth of emissions." Achieving this goal will require enhanced and sustained near- and long-term efforts on multiple fronts that are in concert with measures to help maintain a strong national economy.

The Administration's portfolio of climate change programs and cross-cutting initiatives focuses on reducing the fundamental scientific uncertainties associated with climate change; advancing the development and introduction of energy-efficient, renewable, and other low- or non-emitting technologies; and improving standards for measuring and registering emissions reductions. Many elements of the Administration's climate change portfolio are designed to provide incentives for greenhouse gas emissions reductions throughout the United States and help developing nations to do the same.

In addition, the Administration's climate change policy directly supports the United States' responsibility as a party to the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC has as its stated objective the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system…within a time-frame sufficient to allow ecosystems to

adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."

The budget information presented in this report reflects the Administration's commitment to meeting the aims of the UNFCCC while preserving a strong American economy. The President's 2007 Budget proposes $6.5 billion for climate change activities. This amount is $714 million, or 12 percent, higher than the 2006 enacted level for climate change programs, activities, and related tax policies.

The President's Budget includes continuing support for many successful climate-related programs and initiatives as well as funding for Administration priorities that will help achieve the Administration's climate goals.

1.2 REPORT OUTLINE

The President's 2007 Budget supports a wide range of climate change-related research, development, and deployment programs, voluntary partnerships, and international aid efforts. This report presents the expenditures associated with this portfolio of activities in four main categories – science, technology, international assistance, and tax provisions – as described below:

- **Climate Change Science.** This category encompasses the U.S. Climate Change Science Program (CCSP). The CCSP has been established to integrate the work of the U.S. Global Change Research Program (USGCRP) with the activities of the Climate Change Research Initiative (CCRI).

- **Climate Change Technology.** This category comprises the U.S. Climate Change Technology Program (CCTP) and the subset of CCTP activities identified as the National Climate Change Technology Initiative (NCCTI) priorities. The CCTP is a multi-agency effort coordinated by the Department of Energy that incorporates a variety of technology research, development, and deployment activities – including voluntary partnerships and grant programs – that reduce greenhouse gas emissions.

- **International Assistance.** Programs in this category provide assistance to developing countries to support their efforts to address climate change through improved energy efficiency, renewable energy use, land use and forestry practices.

- **Energy Tax Provisions.** This category includes tax incentives for investments in certain energy technologies. These incentives promote deployment of energy efficient or alternative energy technologies, which may help reduce greenhouse gas emissions.

The following sections provide further detail in each of these four areas. Several appendices have also been included, which provide additional information. Table 1 presents an overall summary of federal climate change expenditures for 2005-2007.

1.3 REPORTING CHANGES

In August 2005, the Government Accountability Office (GAO) released a report on the Administration's climate expenditure reporting practices[1]. GAO made recommendations regarding tax provision reporting and report consistency. OMB addresses these recommendations in this report.

This report keeps the same structures, categories, definitions, and format as in past years. OMB is providing budget authority data for 2005, 2006, and 2007 for all agencies, which is consistent with past reports. Data has been more clearly labeled throughout the report and, where appropriate, reporting changes have been footnoted. In previous reports, tax proposals that helped serve to reduce or mitigate greenhouse gases were included but existing tax expenditures were not. This report now includes existing tax expenditures that could contribute to reducing greenhouse gas emissions. Proposed tax provisions would also be included; however, the 2007 Budget does not include tax expenditure proposals that impact greenhouse gases. Section 5 of this report outlines tax expenditures. Table 7 shows tax expenditures back to 2003 using consistent selection criteria.

In addition, this report reflects the clarifications provided by the 2006 Foreign Operations appropriations act (P.L. 109-102) conference report. The Foreign Operations committees requested that changes from the prior reports be explained. OMB has included in Appendix C of this report a summary table of climate funding from 2003 through 2007 to address this request. Detailed data from 2002 is not available in the report structure that has been published for the past three years due to the significant restructuring in 2004 of climate technology reporting under the Climate Change Technology Program (see FY 2005 Climate Change Expenditures Report issued in May, 2004[2]). The committees also clarified that obligation and outlay data must be provided. Specifically, P.L. 109-102 required that obligations and outlays be reported for 2006 for all agencies and that obligations and outlays for both 2005 and 2006 along with requested budget authority for 2007 be provided on a country-by-country basis for the U.S. Agency for International Development. These data are included in this report but it is not possible to crosswalk such information for prior years.

[1] U.S. Government Accountability Office. August 2005. *Federal Reports on Climate Change Funding Should be Clearer and More Complete,* (GAO-05-461).

[2] http://www.whitehouse.gov/fy05_climate_chg_rpt_to_cong.pdf, Appendix C: Climate Change Technology Program Crosswalk

Table 1

Summary of Federal Climate Change Expenditures

FY 2007 Budget

(Tax expenditures and discretionary budget authority, obligations, and outlays in millions of dollars)

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Climate Change Science Program (CCSP)	**1,864**	**1,709**	**1,975**	**1,934**	**1,715**	**6**
Climate Change Research Initiative[2]	*204*	*204*	*181*	*152*	*206*	*3*
Climate Change Technology Program (CCTP)	**2,808**	**2,773**	**2,909**	**2,843**	**2,980**	**207**
National Climate Change Technology Initiative[2]	*173*	*226*	*226*	*210*	*306*	*80*
International Assistance[3]	**234**	**241**	**242**	**191**	**220**	**-22**
Energy Tax Provisions That May Reduce Greenhouse Gases[4,5]	**369**	**1,084**	**1,084**	**1,084**	**1,607**	**523**
Total[3,6]	**5,269**	**5,794**	**6,196**	**6,048**	**6,508**	**714**

[1] All obligation and outlay data are preliminary full year estimates and are subject to change.

[2] The Climate Change Research Initiative and the National Climate Change Technology Initiative are subsets of CCSP and CCTP, respectively. These are non-add lines.

[3] The International Assistance total contains funds that are also counted in the Climate Change Science Program total. Table total line excludes this double-count.

[4] Tax incentives related to climate change included in this report are currently projected at $5.3 billion over five years (2007-2011).

[5] Tax expenditures are estimates of the revenue losses due to a tax preference. While not exactly equivalent to budget authority, obligations or outlays, tax expenditure estimates have been included in all columns for completeness.

[6] Table total may not add due to rounding. Data supersede numbers released with the President's 2007 Budget. Discrepancies resulted from rounding and improved estimates.

2. CLIMATE CHANGE SCIENCE

The cabinet-level Committee on Climate Change Science and Technology Integration is responsible for overseeing the implementation of climate science and technology initiatives and programs. The U.S. Climate Change Science Program (CCSP) was established under this committee to coordinate climate science research and to integrate the work of the U.S. Global Change Research Program (USGCRP) with the Administration's Climate Change Research Initiative (CCRI). The President's Budget reflects the coordinated planning efforts of the 13 departments and agencies that participate in the CCSP. Beginning in 2006, the CCSP began formally tracking the expected actions, deliverables, and milestones for each of its programs in order to assess overall performance. The 2007 budget request for the CCSP, which includes funding for both the USGCRP and the CCRI across 12 of the 13 agencies, is approximately $1.7 billion. The Department of Defense participates in CCSP planning but does not include funding in the CCSP total. Table 2 provides a breakdown by agency of CCSP funding.

The Department of Commerce's National Oceanic and Atmospheric Administration has responsibility for leading the implementation of the CCSP. As highlighted in the 2006 edition of *Our Changing Planet*, the CCSP has made progress on the objectives outlined in the 2003 CCSP Strategic Plan. The Administration will continue to determine where financial resources in the climate change science portfolio can be redirected from lower priority to higher priority projects, as guided by its Strategic Plan. Additional information about the CCSP can be found on the web at www.climatescience.gov.

2.1 CLIMATE CHANGE RESEARCH INITIATIVE

Within the CCSP total, the 2007 Budget requests $206 million for the CCRI, an increase of $3 million over the 2006 enacted level. The CCRI focuses on reducing significant uncertainties in climate science, improving global climate observing systems, and developing resources to support policymaking and resource management. The 2007 Budget continues to support the priorities outlined in the CCSP Strategic Plan. Table 3 provides a breakdown by agency of the CCRI funding.

2.2 U.S. GLOBAL CHANGE RESEARCH PROGRAM

Much of the U.S. investment in research on climate science and other global environmental changes is part of the USGCRP. The USGCRP forms the base of the CCSP and has existed for more than a decade. USGCRP activities involve fundamental research on natural and human-induced changes in the global environment at 11 different agencies. The central goal of the USGCRP is to obtain a more complete understanding of global climate change to better respond to the challenges it may present. The 2007 Budget proposes approximately $1.5 billion for USGCRP activities.

Table 2

Climate Change Science Program

Details by Agency/Account

(Discretionary budget authority, obligations, and outlays in millions of dollars)

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Department of Agriculture						
Agricultural Research Service	38	38	38	38	36	-2
Cooperative State Research, Education and Extension Services	5	5	5	5	6	0
Economic Research Service	0	0	0	0	0	0
Forest Service – Forest and Rangeland Research	18	18	18	18	19	1
Subtotal – USDA[2]	**62**	**62**	**62**	**62**	**60**	**-1**
Department of Commerce						
National Oceanic and Atmospheric Administration – Operations, Research, and Facilities	**120**	**151**	**151**	**151**	**173**	**22**
Department of Energy						
Science – Biological & Environmental Research	**127**	**131**	**131**	**131**	**126**	**-4**
Department of Health and Human Services						
National Institutes of Health	**57**	**57**	**57**	**55**	**57**	**0**
Department of the Interior						
U.S. Geological Survey – Surveys, Investigations, and Research	**27**	**27**	**27**	**27**	**26**	**-1**
Department of Transportation						
Federal Highway Administration – Federal-Aid Highways	1	1	1	1	1	0
Federal Aviation Administration – Research, Engineering, and Development[3]	0	0	0	0	0	0
Subtotal – DOT[2]	**1**	**1**	**1**	**1**	**1**	**0**
Environmental Protection Agency						
Science and Technology	**20**	**19**	**19**	**19**	**18**	**-1**
National Aeronautics and Space Administration[4]						
Science, Aeronautics, and Exploration	**1,241**	**1,045**	**1,312**	**1,283**	**1,029**	**-17**
National Science Foundation						
Research and Related Activities	**198**	**197**	**197**	**197**	**205**	**8**

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Smithsonian Institution						
Salaries and Expenses	**6**	**6**	**6**	**6**	**6**	**0**
U.S. Agency for International Development[5]						
Development Assistance	**6**	**13**	**13**	**3**	**14**	**1**
Total[2,6]	**1,864**	**1,709**	**1,975**	**1,934**	**1,715**	**6**

[1] All obligation and outlay data are preliminary full year estimates and are subject to change.

[2] Subtotals and table total may not add due to rounding. Data supersede numbers released with the President's 2007 Budget. Discrepancies resulted from rounding and improved estimates.

[3] Funding for Federal Aviation Administration is less than $500K in all years shown.

[4] NASA funding levels presented in this table do not reflect full cost accounting. NASA data in last year's report did include full cost. The decrease in NASA's CCSP budget authority between 2006 and 2007 is due to changes in the agency's budget for space observing platforms reflecting the natural development cycle of its satellites as well as revisions to mission profiles. NASA's Earth science research and analysis budget also declined. NASA's 2006 obligations and outlays are projected to be higher than 2006 enacted budget authority due to the year-to-year spend-out rates associated with the satellite missions in development.

[5] Due to recent changes in CCSP/CCRI activities and priorities, additional ongoing activities in the Democracy, Conflict, and Humanitarian Assistance program are reported under CCSP and CCRI beginning in 2006.

[6] In the 2004, 2005 and 2006 Climate Change Expenditures Reports, the CCSP and CCRI totals erroneously included $1M State Department Funding for 2004 and 2005. The State Department had zero CCSP and CCRI funding in those years. In 2003, the State Department allocated $1 million of its contribution to the Intergovernmental Panel on Climate Change (included in the International Assistance section of this report) toward an earth observation project that was also part of the CCRI initiative. This was a one time contribution and therefore the State Department line has been deleted from this table.

Table 3

Climate Change Research Initiative

Details by Agency/Account

(Discretionary budget authority, obligations, and outlays in millions of dollars)

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Department of Agriculture						
Agricultural Research Service	2	2	2	2	5	3
Forest Service – Forest and Rangeland Research	6	6	6	6	7	1
Subtotal – USDA[2]	**8**	**8**	**8**	**8**	**11**	**4**
Department of Commerce						
National Oceanic and Atmospheric Administration – Operations, Research, and Facilities	**46**	**34**	**34**	**34**	**46**	**12**
Department of Energy						
Science – Biological & Environmental Research	**25**	**25**	**25**	**25**	**24**	**-2**
Department of Transportation						
Federal Highway Administration – Federal-aid Highways	1	1	1	1	1	0
Federal Aviation Administration – Research, Engineering, and Development[3]	0	0	0	0	0	0
Subtotal – DOT[2]	**1**	**1**	**1**	**1**	**1**	**0**
National Aeronautics and Space Administration[4]						
Science, Aeronautics, and Exploration	**94**	**97**	**74**	**56**	**86**	**-12**
National Science Foundation						
Research and Related Activities	**25**	**25**	**25**	**25**	**25**	**0**
U.S. Agency for International Development[5]						
Development Assistance	**6**	**13**	**13**	**3**	**14**	**1**
Total[2,6]	**204**	**204**	**181**	**152**	**206**	**3**

[1] All obligation and outlay data are preliminary full year estimates and are subject to change.

[2] Subtotals and table total may not add due to rounding. Data supersede numbers released with the President's 2007 Budget. Discrepancies resulted from rounding and improved estimates.

[3] Funding for Federal Aviation Administration is less than $500K in all years shown.

[4] NASA funding levels presented in this table do not reflect full cost accounting. NASA data in last year's report did include full cost. The decrease in NASA's CCRI budget authority from 2006 to 2007 is due to changes in the agency's budget for space observing platforms reflecting the natural development cycle of its satellites as well as revisions to mission profiles. NASA's Earth science research and analysis budget also declined. 2006 obligations and outlays are projected to be lower than 2006 enacted budget authority based on the 2005 rate of obligation and outlays of funds for the Glory mission, which received unrequested funds midway through 2005.

[5] Due to recent changes in CCSP/CCRI activities and priorities, additional ongoing activities in the Democracy, Conflict, and Humanitarian Assistance program are reported under CCSP and CCRI beginning in 2006.

[6] In the 2004, 2005 and 2006 Climate Change Expenditures Reports, the CCSP and CCRI totals erroneously included $1 million in State Department Funding for 2004 and 2005. The State Department had zero CCSP and CCRI funding in those years. In 2003, the State Department allocated $1 million of its contribution to the Intergovernmental Panel on Climate Change (included in the International Assistance section of this report) toward an earth observation project that was also part of the CCRI initiative. This was a one time contribution and therefore the State Department line has been deleted from this table.

3. CLIMATE CHANGE TECHNOLOGY

The U.S. Climate Change Technology Program (CCTP) has been established under the Committee on Climate Change Science and Technology Integration to coordinate the federal government's climate change technology portfolio and to focus efforts on the subset of CCTP research and development activities that are part of the National Climate Change Technology Initiative (NCCTI). The CCTP is a multi-agency effort managed by the Department of Energy (DOE). Currently 12 agencies participate in CCTP planning and development, nine of which have specific activities that are part of the CCTP portfolio. The 2007 Budget proposes approximately $3.0 billion for the CCTP. Table 4 provides a breakdown by agency of CCTP funding.

The CCTP published a Vision and Framework document and draft Strategic Plan that together outline the program's goals and mission and describe federally funded technology options. The CCTP comprises research, development, and deployment efforts and a variety of voluntary partnership and grant activities. All CCTP activities help to reduce, avoid, or sequester greenhouse gas emissions. The activities have the effect of stimulating the development and use of certain energy technologies, including renewable, fossil, and nuclear technologies as well as energy efficient technologies, products, and process improvements.

Descriptions of some select programs and initiatives included in the CCTP are provided below. Except for the State Department's component of the Asia Pacific Partnership, all of the activities discussed below are included in the President's Advanced Energy Initiative (AEI). The AEI provides a 22 percent funding increase to research and promote the use of clean energy technologies that can help change the way we power our homes, businesses, and vehicles, and can help reduce our reliance on oil. Additional information about the CCTP can be found on the web at www.climatetechnology.gov.

- Asia-Pacific Partnership on Clean Development and Climate. This partnership was formally launched in January 2006 by the United States, China, India, South Korea, Australia, and Japan to promote clean development, enhance energy security, and address climate change challenges. Partners will work to develop and deploy cleaner energy technologies and practices in developing countries that are among the largest emitters of greenhouse gases. Contributions to the Partnership from the Environmental Protection Agency and the Departments of Commerce and Energy are part of the CCTP. The State Department contribution is captured in the International Assistance section of this report.

- Hydrogen Fuel Initiative. Announced by the President in his 2003 State of the Union address, this initiative involves partnering with the private sector to research and develop hydrogen infrastructure technologies that complement development of technologies to advance commercialization of hydrogen-powered fuel cell vehicles. Transitioning to hydrogen as an energy carrier produced from a variety of clean energy sources could lead to a significant reduction of air pollutants and greenhouse gas emissions in the transportation sector worldwide.

- FutureGen -- Coal-Fired, Near-Zero Emissions Electricity Generation. In February 2003, President Bush announced that the United States would sponsor, with international and private sector cost-sharing partners, a $1 billion, 10-year project to create the world's first coal-based, near-zero atmospheric emissions electricity and hydrogen power plant. This project is designed to dramatically reduce air pollution and capture and store greenhouse gas emissions.

- Global Nuclear Energy Partnership (GNEP). Under this partnership, America will work with 11 nations such as France, the United Kingdom, Japan, and Russia that have advanced civilian nuclear energy programs. Together, we will develop and deploy innovative, advanced reactors and new methods to recycle spent nuclear fuel. This will allow us to produce more energy, while dramatically reducing waste and eliminating many of the nuclear byproducts that could be used to make weapons.

- Solar America Initiative. Announced with the President's 2007 Budget, this initiative aims to reduce the cost of solar photovoltaic systems so that they can be cost competitive with conventional electricity generation technologies by 2015.

- International Thermonuclear Experimental Reactor (Fusion Energy). In January 2003, President Bush committed the United States to participate in negotiations on the largest and most technologically sophisticated energy research project in the world – the International Thermonuclear Experimental Reactor (ITER). The United States and its six international partners – the European Union, Japan, Russia, China, South Korea, and India – have chosen a site in France and are progressing rapidly toward completion of a draft agreement, with the signing of an approved final agreement scheduled for summer 2006. If successful, this cost-shared experiment will advance development of fusion energy as a commercially viable and clean source of energy near the middle of this century.

3.1 NATIONAL CLIMATE CHANGE TECHNOLOGY INITIATIVE

The CCTP continues to prioritize the portfolio of federally funded climate change technology R&D consistent with the President's National Climate Change Technology Initiative (NCCTI). NCCTI priority activities have recently been identified from within the CCTP portfolio and are listed below. They are defined as discrete activities that address technological challenges, which, if solved, could advance technologies with the potential to dramatically reduce, avoid, or sequester greenhouse gas emissions. Funding for program direction is also a component of the priorities because it is important to the success of CCTP and NCCTI. Table 5 provides a list of NCCTI funding by agency. Note that NCCTI funding is a subset of the CCTP total.

- Advanced Fuel Cycle/Advanced Burner Reactor
- Cellulosic Biomass (Biochemical Platform R&D)
- Climate Leaders
- Hydrogen Storage
- Integrated Gasification Combined Cycle (IGCC)
- Low Wind Speed Technology
- Methane Partnership Initiatives
- Nuclear Hydrogen Initiative
- Sequestration
- Transportation Fuel Cell Systems

Table 4

Climate Change Technology Program

Details by Agency/Account

(Discretionary budget authority, obligations, and outlays in millions of dollars)

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Department of Agriculture						
Natural Resources Conservation Service – Biomass R&D, Section 9008 Farm Bill	13	12	12	12	12	0
Natural Resources Conservation Service – Carbon Cycle	1	1	1	1	1	0
Forest Service R&D – Inventories of Carbon Biomass	1	1	1	1	1	0
Agricultural Research Service – Bioenergy Research	2	2	2	2	2	0
Cooperative State Research, Education and Extension Service - Biofuels/Biomass Research, Formula Funds, National Research Initiative[2]	5	5	5	3	3	-1
Forest Service – Biofuels/Biomass, Forest and Rangeland Research	2	2	2	2	3	0
Rural Business Service – Renewable Energy Program[3]	23	23	23	23	10	-13
Rural Business Service – Value Added Producer Grants[4]	2	3	3	3	3	0
Subtotal – USDA[5]	**48**	**48**	**48**	**46**	**34**	**-13**
Department of Commerce						
National Institute of Standards and Technology (NIST) – Scientific and Technological Research and Services	8	7	7	7	7	0
NIST – Industrial Technical Services, Advanced Technology Program[6]	18	10	10	10	0	-10
International Trade Administration – Operations and Administration[7]	0	0	0	0	2	2
Subtotal – Commerce[5]	**26**	**17**	**17**	**17**	**9**	**-8**
Department of Defense[8]						
Research, Development, Test and Evaluation – Army	27	37	36	33	6	-31
Research, Development, Test and Evaluation – Navy	18	23	23	21	7	-17
Research, Development, Test and Evaluation – Air Force[9]	1	0	0	0	0	0
Research, Development, Test and Evaluation – Defense-wide – DARPA	11	7	8	10	3	-4

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
DOD, continued						
Research, Development, Test and Evaluation, Defense-wide – Office of the Secretary of Defense	2	4	3	3	0	-4
Subtotal – DOD[5]	**59**	**71**	**70**	**66**	**15**	**-55**
Department of Energy[10]						
Energy Supply and Conservation – Energy Efficiency and Renewable Energy[11]	1,234	1,174	1,174	1,208	1,176	2
Energy Supply and Conservation – Electricity Transmission and Distribution	57	73	73	62	100	27
Energy Supply and Conservation – Nuclear[12]	291	333	339	442	463	131
Fossil Energy R&D – Efficiency and Sequestration[13]	374	405	537	353	419	15
Science – Fusion, Sequestration, and Hydrogen	386	423	423	420	551	129
Departmental Administration – Climate Change Technology Program Direction[14]	0	0	0	0	1	1
Subtotal – DOE[5]	**2,342**	**2,407**	**2,545**	**2,486**	**2,711**	**305**
Department of the Interior[15]						
US Geological Survey – Surveys, Investigations and Research, Geology Discipline, Energy Program	**2**	**0**	**0**	**0**	**0**	**0**
Department of Transportation						
Office of the Secretary of Technology – Transportation, Policy, Research and Development[16]	1	0	0	0	0	0
National Highway Traffic Safety Administration[17]	0	0	0	0	0	0
Research and Innovative Technology Administration – Research and Development[18]	1	0	1	1	1	0
Subtotal – DOT[5]	**2**	**0**	**1**	**1**	**1**	**0**
Environmental Protection Agency						
Environmental Programs and Management	91	90	90	90	92	2
Science and Technology	19	19	19	19	13	-6
Subtotal – EPA[5]	**110**	**109**	**109**	**109**	**105**	**-4**
National Aeronautics and Space Administration[19]						
Science, Aeronautics, and Exploration	**208**	**104**	**102**	**100**	**86**	**-19**
National Science Foundation						
Research and Related Activities	**11**	**18**	**18**	**18**	**19**	**1**
Total[5]	**2,808**	**2,773**	**2,909**	**2,843**	**2,980**	**207**

[1] All obligation and outlay data are preliminary full year estimates and are subject to change.

[2] 2005 funding for Cooperative State Research, Education and Extension Service - Biofuels/Biomass Research, Formula Funds, National Research Initiative is an estimate and subject to change based upon updated information as reported in the USDA Current Research Information System.

[3] Funding for loans and grants to small farmers and ranchers for the purchase of renewable energy systems and for making energy efficiency improvements is also provided through other state and Federal programs. The 2007 Budget request reduces funding to address this duplication.

[4] Value Added Producer Grants for renewable energy should have been reported as part of the CCTP since the formalization of the CCTP in 2003. In addition, the 2006 and 2007 grant funding levels are preliminary estimates that will be revised once the competitive grant process is complete.

[5] Subtotals and table total may not add due to rounding. Data supersede numbers released with the President's 2007 Budget. Discrepancies resulted from rounding and improved estimates.

[6] The 2007 President's Budget proposes termination of NIST's Advanced Technology Program.

[7] The Department of Commerce will provide funding in this account for the new Asia-Pacific Partnership on Clean Development and Climate beginning in 2007. No climate-related funding has been included in this account in past years.

[8] The 2005 and 2006 funding for DOD includes Congressional earmarks that are not included in the 2007 President's Budget.

[9] Obligations and outlays for 2006 are less than $500K.

[10] The 2007 Budget reflects the planned ramp-up in the International Thermonuclear Experimental Reactor project and increases for existing basic research efforts that are relevant to hydrogen, solar energy, and nuclear energy technologies. In addition, the 2007 Budget reflects an increase in funding for Advanced Fuel Cycle Initiative specifically to support the Global Nuclear Energy Partnership.

[11] In 2006, Congress merged the Energy Supply and Energy Conservation accounts to create the Energy Supply and Conservation account. The new account structure is presented in the 2007 President's Budget Appendix. The amount reported under the Energy Efficiency and Renewable Energy line within this account reflects a combined total of the Energy Conservation line item and the former Energy Supply - Renewables line item that had been presented in prior reports.

[12] The infrastructure elements of the 2005, 2006, and 2007 Nuclear funding include only infrastructure that directly supports CCTP RD&D and CCTP deployment. The reduced infrastructure reporting adheres more closely to the CCTP climate change criteria. Data presented in past reports do not reflect this corrected reporting.

[13] Obligations and outlays for Fossil Energy R&D activities assume spending a significantly higher proportion of unobligated balances in 2006 than has occurred over the last several years. DOE assumes that Fossil Energy R&D will reduce its unobligated balances by $158 million (26%) between the beginning of 2006 and the beginning of 2007.

[14] In 2005, $1.5 million was provided for CCTP program direction within DOE's Energy Efficiency and Renewable Energy program direction allocation.

[15] In 2005, USGS completed research to assess the sources of and potential geologic sequestration options for carbon dioxide. CCTP sequestration-related gas hydrate activities were also completed in 2005. Additional gas hydrate work is done at USGS, but the remaining work does not fit within the scope of CCTP.

[16] The 2005 funding within the Office of the Secretary was the result of a Congressional earmark. No CCTP funding was included for the office in the 2006 appropriations or requested in the 2007 President's Budget.

[17] Funding for the National Highway Transportation Safety Administration is less than $500K for all years shown.

[18] Funding for the Research and Innovative Technology Administration – Research and Development is less than $500K in 2006.

[19] NASA funding levels presented in this table do not reflect full cost accounting. NASA data in last year's report did include full cost. The decrease in NASA's CCTP budget authority in 2007 is due to realignment within the agency's aeronautics research program.

Table 5

National Climate Change Technology Initiative

Details by Agency/Account

(Discretionary budget authority, obligations, and outlays in millions of dollars)

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Department of Energy						
Energy Supply and Conservation – Energy Efficiency and Renewable Energy[2]	65	62	62	61	113	51
Energy Supply and Conservation – Nuclear	9	30	30	34	44	14
Fossil Energy R&D – Efficiency and Sequestration[3]	89	122	122	102	134	12
Departmental Administration – Climate Change Technology Program Direction	0	0	0	0	1	1
Subtotal – DOE[4]	**162**	**214**	**214**	**198**	**292**	**77**
Environmental Protection Agency						
Environmental Programs and Management	**11**	**12**	**12**	**12**	**15**	**3**
Total	**173**	**226**	**226**	**210**	**306**	**80**

[1] All obligation and outlay data are preliminary full year estimates and are subject to change.

[2] The increase for Energy Efficiency and Renewable Energy in the 2007 Budget reflects increased emphasis in two key technology areas: wind power for low-wind speed environments and Biochemical Platform R&D to help reduce costs of cellulosic ethanol (ethanol produced from agricultural waste, forest residues, and bioenergy crops). The increases are for ongoing activities, not new programs.

[3] The increase in funding for Fossil Energy activities from 2005 to 2006 represents a greater level of effort in ongoing Sequestration and Integrated Gasification Combined Cycle activities.

[4] Subtotals and table total may not add due to rounding. Data supersede numbers released with the President's 2007 Budget. Discrepancies resulted from rounding and improved estimates.

4. INTERNATIONAL ASSISTANCE

The United States has multiple foreign assistance programs that benefit the environment. Though these programs are not solely for climate change purposes, they can provide climate change benefits. Table 6 provides a summary of this international assistance funding.

4.1 U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)

USAID's climate change program promotes sustainable development while addressing climate change through activities that: minimize the associated growth in greenhouse gas emissions; increase carbon sequestration in forests and agricultural soils; reduce vulnerability to climate change by applying earth observations; and increase developing countries' capacity to participate in the international process. The program operates in more than 40 developing and transition countries through bilateral field missions, regional programs, and central offices to implement projects that meet development objectives while also helping lower greenhouse gas emissions. It supports technology cooperation in renewable energy and energy efficiency; improved urban transportation measures; quantification and monitoring of greenhouse gas emissions; carbon sequestration through improved land management; activities to increase adaptability to climate impacts; and capacity building to help countries meet their responsibilities under the United Nations Framework Convention on Climate Change. A detailed accounting of USAID's international assistance funding by country can be found in Appendix D (Table 10).

4.2 DEPARTMENT OF STATE

The 2007 budget for the Department of State contains $5 million for the United Nations Framework Convention on Climate Change (UNFCCC) and the Intergovernmental Panel on Climate Change (IPCC). The Secretariat of the UNFCCC carries out the decisions of the Parties to the Framework Convention in areas such as inventories of greenhouse gas emissions, national communications, scientific and technological cooperation, capacity building, and education and training. The IPCC assesses scientific, technological, and socio-economic literature and information relevant to understanding climate change, its potential impacts and options for adaptation, and mitigation. The IPCC assessments inform the development of policies within and between countries.

The 2007 budget for the Department of State also includes $30 million for the new Asia-Pacific Partnership on Clean Development and Climate, which was formally launched in January 2006. The United States, China, India, South Korea, Australia, and Japan launched the Partnership to promote clean development, enhance energy security, and address climate change. Partners will work to develop and deploy cleaner energy technologies and practices in developing countries that are among the largest global emitters of greenhouse gases. The Department of Commerce, Department of Energy, and Environmental Protection Agency will also help fund the Partnership in 2007. Funding from those agencies is reported in Section 3 of this report.

4.3 DEPARTMENT OF THE TREASURY

The Treasury Department contributes to the U.S. climate change activities through two funding mechanisms – the Tropical Forestry Conservation Act (TFCA) and the Global Environment Facility (GEF). TFCA funding reduces qualifying countries' concessional debt in exchange for payment of local currency resources into funds to support programs to conserve tropical forests. TFCA agreements have been concluded with eight countries: Bangladesh, Belize, Colombia, El Salvador, Jamaica, Peru, the Philippines, and Panama (two agreements). In total, these agreements will generate over $95 million to support forest conservation. In 2007, the Administration has requested a total of approximately $183 million for certain debt restructuring programs, including bilateral Heavily Indebted Poor Countries (HIPC) and poorest country debt reduction, contributions to the HIPC Trust Fund, and TFCA. The Budget provides the Treasury Department flexibility in determining the amount for each program though Treasury expects that at least $175 million will be needed for HIPC debt reduction. The 2007 Budget for TFCA has yet to be determined; however, it is estimated that up to $8 million may be available in 2007.

The 2007 budget requests $56 million for the first year of the fourth GEF replenishment based on the policy commitments anticipated thus far in the negotiations. In addition, the budget requests $24 million in the Asian Development Bank (ADB) for a new environmental program which may relate to the Asia-Pacific Partnership on Clean Development and Climate, for a total of $80 million between these two programs. The relative balance of the $80 million between the two programs will depend on the final outcome of the GEF negotiations and judgment of where the funds could be most effectively used. The U.S. contribution to the GEF could be higher or lower depending on the extent of reforms in the replenishment agreement, with any balance going to the ADB. Of the total amount for both the GEF and new ADB programs, we assume that at least 30% will support climate change activities.

The GEF focuses on innovative and generally small projects that may be copied elsewhere with financing from non-GEF sources, and funds only the incremental costs of the global and environmental benefit. GEF has committed about $6 billion to date, leveraging over $20 billion from other sources including the private sector, international development banks and organizations, governments, Non-Government Organizations (NGOs), and bilateral agencies. GEF has designed and initiated nearly 1,700 investment and capacity building projects that are now being implemented by developing countries with the help of ten agencies – the World Bank, the UN Development Program, the UN Environment Program, the four regional development banks, the International Fund for Agricultural Development, the Food and Agriculture Organization, and the United Nations Industrial Development Organization. It has also provided nearly 6,000 small grants directly to NGOs and community groups in over 90 countries.

Expanding clean energy production and efficient energy use accounts for roughly one third of GEF projects to date. The GEF predates both the 1997 Kyoto Protocol (the "Protocol") and the 1992 Framework Convention on Climate Change (the "Convention"). The Protocol places no new obligations on the GEF as the Convention's financial mechanism. Two Kyoto-related funds (The Special Climate Change Fund and The Least Developed Countries Fund) are managed by the GEF. However, these two funds are kept separate from regular GEF operations. For example, they pay for their own administrative expenses.

Table 6

International Climate Change Assistance

Details by Agency/Account

(Discretionary budget authority, obligations, and outlays in millions of dollars)

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Department of State						
Diplomatic and Consular Affairs[2]	0	0	0	0	4	4
Economic Support Fund[3]	1	6	6	1	32	26
International Organizations and Programs	6	6	6	6	5	-1
Subtotal – State[4]	**7**	**12**	**12**	**7**	**41**	**29**
Department of the Treasury						
Debt Restructuring – Tropical Forestry Conservation[5]	20	20	20	20	8	-12
Global Environment Facility[6]	24	18	18	17	17	-1
Asian Development Bank[7]	0	0	0	0	7	7
Subtotal – Treasury[4]	**44**	**38**	**38**	**36**	**32**	**-6**
U.S. Agency for International Development[8]						
Andean Counterdrug Initiative[9]	2	1	1	1	0	-1
Assistance for Eastern Europe and the Baltic States	5	6	6	4	3	-4
Assistance for the Independent States of the Former Soviet Union	34	30	30	33	25	-5
Development Assistance	134	118	118	98	110	-8
Economic Support Fund	5	33	33	9	6	-27
International Disaster Assistance	2	2	2	1	2	0
P.L.-480 Title II Food Aid	1	1	1	1	1	0
Subtotal – USAID[4]	**183**	**192**	**192**	**148**	**147**	**-45**
Total[4]	**234**	**241**	**242**	**191**	**220**	**-22**

[1] All obligation and outlay data are preliminary full year estimates and are subject to change.

[2] The 2007 President's Budget request includes $4 million in Diplomatic and Consular Affairs account to support the Asia-Pacific Partnership on Clean Development and Climate. No climate funding has been included in this account in past years.

[3] The 2007 President's Budget includes $26 million in the Economic Support Fund for the new Asia-Pacific Partnership on Clean Development and Climate.

[4] Subtotals and table total may not add due to rounding. Data supersedes numbers released with the President's 2007 Budget. Discrepancies resulted from rounding and improved estimates.

[5] The enacted level for the Tropical Forestry Conservation Act (TFCA) is $20 million in 2005 and $20 million in 2006. In 2007, the Administration requested a total of $182 million for debt restructuring programs to be available for: bilateral Heavily Indebted Poor Countries (HIPC) and poorest country debt reduction, contributions to the HIPC Trust Fund, and TFCA debt reduction. The Budget provides the Treasury Department flexibility in

determining the amount for each program. The 2007 funding level for TFCA has not been determined yet, but it has been estimated that up to $8 million may be available for TFCA in 2007.

[6] The 2007 Budget provides $56 million for GEF and $24 million for the Asian Development Bank (ADB). Approximately 30% of this funding will be allocated to programs related to climate change; this represents the lower bound of 2007 funding that will support climate change programs. The allocation of the climate funding between these two accounts is contingent upon the outcome of ongoing GEF-4 replenishment negotiations.

[7] The 2007 President's Budget request includes funding for climate-related activities through the Asian Development Bank, some of which may be used to support the Asia-Pacific Partnership. No climate-related funding has been included in this account in past years.

[8] USAID funding details can be found in Appendix D.

[9] The Andean Counterdrug Initiative account was added in the fiscal year 2004 report to reflect new counter-deforestation activities in Peru.

5. ENERGY TAX PROVISIONS THAT MAY REDUCE GREENHOUSE GASES

Previous versions of this report included the Administration's proposed tax expenditures because of their potential impact on reducing greenhouse gas emissions. Those reports did not include the existing tax incentives that may also result in greenhouse gas reductions as a possible ancillary benefit. In its August 2005 report, the Government Accountability Office recommended that this report include existing tax expenditures and that they be identified using the criteria applied to the discretionary spending captured in other sections of this report. With the enactment of the Energy Policy Act of 2005 and other legislation, there are now numerous tax provisions that are clearly related to energy efficiency and alternative energy sources. To address these new tax incentives and the GAO recommendations, this report includes existing energy tax provisions which may reduce greenhouse gases using consistent selection criteria. Summary descriptions of the provisions are provided below and the associated revenue effects are shown in Table 7. Tax expenditure information can also be found in *Analytical Perspectives, Budget of the United States Government,* Fiscal Year 2007, Chapter 19.

New technology credit – A credit is provided equal to 10 percent of the basis of solar property (30 percent for purchases beginning in 2006 through 2007) and 10 percent of the basis of geothermal property placed in service during the taxable year. Equipment that uses fiber-optic distributed sunlight to illuminate the inside of a structure is solar energy property eligible for a 30 percent credit in 2006 and 2007. A credit is also available for certain electricity produced from wind energy, biomass, poultry waste, geothermal energy, solar energy, small irrigation power, municipal solid waste, or qualified hydropower and sold to an unrelated party. The credit rate in 2005 is 1.9 cents per kilowatt hour (0.9 cents per kilowatt hour for open-loop biomass, small irrigation power, municipal solid waste, and qualified hydropower) and the rate is indexed in subsequent years. To qualify for the credit the electricity must be produced at a facility placed in service after a specified date (December 31, 1992, in the case of a closed-loop biomass facility; December 31, 1993, in the case of a wind energy facility; December 31, 1999, in the case of a poultry waste facility; August 8, 2005 in the case of qualified hydropower; and October 22, 2004, in all other cases) and before January 1, 2006 for solar facilities and January 1, 2008 for all other qualifying facilities with the exception of hydropower facilities. To qualify for the credit, qualifying hydropower facilities must be placed in service before January 1, 2009. In addition, the electricity must be produced during the 10-year period after the facility is originally placed in service.

Credit and deduction for clean-fuel burning vehicles – A tax credit of 10 percent (not to exceed $4,000) is provided for purchasers of electric vehicles. The credit is reduced by 75 percent for vehicles placed in service in 2006 and is not available for vehicles placed in service after December 31, 2006. Purchasers of other clean-fuel burning vehicles and owners of clean-fuel refueling property may deduct part of their expenditures. No deduction is available to taxpayers for vehicles placed in service after December 31, 2005. The deduction for clean-fuel property is available for costs incurred before January 1, 2007. A taxpayer may claim a 30 percent credit for the cost of installing clean-fuel vehicle refueling property for property placed in service after

December 31, 2005 and before January 1, 2008. The taxpayer may not claim deductions with respect to property for which the credit is claimed. A tax credit is also available for the purchase of hybrid vehicles, fuel cell vehicles, alternative fuel vehicles and advanced lean burn vehicles. The provision applies to vehicles placed in service after December 31, 2005, and in the case of qualified fuel cell motor vehicles, before January 1, 2015; in the case of qualified hybrid motor vehicles that are automobiles and light trucks and in the case of advanced lean-burn technology vehicles, before January 1, 2011; in the case of qualified hybrid motor vehicles that are medium and heavy trucks, before January 1, 2010; and in the case of qualified alternative fuel motor vehicles, before January 1, 2011.

Exclusion of utility conservation subsidies – Non-business customers can exclude from gross income subsidies received from public utilities for expenditures on energy conservation measures.

Credit for holding clean renewable energy bonds – The Energy Tax Incentives Act of 2005 authorizes the issuance of up to $800 million of tax credit bonds ("clean renewable energy bonds" or CREBs) through December 31, 2007 to finance capital expenditures by tax-exempt electricity producers to increase their capacity to produce electricity from clean renewable sources. Qualified facilities include: wind, biomass, geothermal, solar, small irrigation, landfill gas, trash combustion, or hydropower. Facilities producing refined coal are also qualified facilities. Taxpayers holding CREBs on a credit allowance date are entitled to a tax credit.

Credit for production from advanced nuclear power facilities – This provision was introduced by the Energy Tax Incentives Act of 2005. A taxpayer producing electricity at a qualifying advanced nuclear power facility may claim a credit equal to 1.8 cents per kilowatt-hour of electricity produced for the eight-year period starting when the facility is placed in service, limited to no more than $125 million in tax credits per 1,000 megawatts of allocated capacity in any one year.

Allowance of deduction for certain energy efficient commercial building property – This provision was introduced by the Energy Tax Incentives Act of 2005. A deduction for energy efficient commercial buildings that reduce annual energy and power consumption by 50 percent compared to the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) standard is allowed. The provision is effective for property placed in service after December 31, 2005 and prior to January 1, 2008.

Credit for construction of new energy efficient homes – This provision was introduced by the Energy Tax Incentives Act of 2005. A credit is available to eligible contractors for construction of a qualified new energy-efficient home. The credit applies to homes whose construction is substantially completed after December 31, 2005 and which are purchased after December 31, 2005 and prior to January 1, 2008.

Credit for energy efficiency improvements to existing homes – This provision was introduced by the Energy Tax Incentives Act of 2005. A 10 percent investment tax credit for expenditures with respect to improvements to building envelope is available. Credits for purchases of advanced main air circulating fans, natural gas, propane, or oil furnaces or hot water boilers, and

other qualified energy efficient property are also available. Credit applies to property placed in service after December 31, 2005 and prior to January 1, 2008.

Credit for energy efficient appliances – This provision was introduced by the Energy Tax Incentives Act of 2005. Tax credits for the manufacture of efficient dishwashers, clothes washers, and refrigerators are available. Credits vary depending on the efficiency of the unit. The provision is effective for appliances manufactured in 2006 and 2007.

Credit for residential purchases/installations of solar and fuel cells – This provision was introduced by the Energy Tax Incentives Act of 2005. A credit, equal to 30 percent of qualifying expenditures, for purchase of qualified photovoltaic property and solar water heating property is available. A 30 percent credit for the purchase of qualified fuel cell power plants is also allowed and applies to property placed in service after December 31, 2005 and prior to January 1, 2008.

Credit for business installation of qualified fuel cell power plants – This provision was introduced by the Energy Tax Incentives Act of 2005. A 30 percent business energy credit for purchase of qualified fuel cell power plants for businesses is available.

Table 7

Energy Tax Provisions That May Reduce Greenhouse Gases

(Revenue effect in millions of dollars)

	2003[1]	2004[1]	2005	2006	2007	2008	2009	2010	2011	2007-11
New technology credit (without coal)[2]	380	330	219	442	586	672	690	673	654	3,275
Credit and deduction for clean-fuel burning vehicles	90	70	70	90	200	140	140	-20	-40	420
Exclusion of utility conservation subsidies	110	100	80	80	80	80	80	70	70	380
Credit for holding clean renewable energy bonds	---	---	0	0	10	30	40	50	50	180
Credit for production from advanced nuclear power facilities	---	---	0	0	0	0	0	0	0	0
Allowance of deduction for certain energy efficient commercial building property	---	---	0	80	190	140	30	-10	-10	340
Credit for construction of new energy efficient homes	---	---	0	10	20	10	10	0	0	40
Credit for energy efficiency improvements to existing homes	---	---	0	220	380	150	0	0	0	530
Credit for energy efficient appliances	---	---	0	120	80	0	0	0	0	80
Credit for residential purchases/ installations of solar and fuel cells	---	---	0	10	10	10	0	0	0	20
Credit for business installation of qualified fuel cells[3]	---	---	0	32	51	14	-9	-8	-7	41
TOTAL	**580**	**500**	**369**	**1,084**	**1,607**	**1,246**	**981**	**755**	**717**	**5,306**

[1] Estimates for 2003 and 2004 were taken from the 2005 and 2006 Analytical Perspectives volumes.
[2] Estimates of revenue loss from coal provisions have been removed from the tax expenditure estimate in the budget for 2005-2011. There were no subsidies for coal in 2003 and 2004.
[3] Estimates of revenue loss from the micro-turbine provision have been removed from the tax expenditure estimate in the budget.

APPENDIX A

IMPLEMENTATION OF THE 2002 FARM BILL

USDA provides incentives for and supports voluntary actions by private landowners to reduce greenhouse gas emissions and increase carbon sequestration. USDA's actions include financial incentives, technical assistance, demonstrations, pilot programs, education and capacity building, along with measures to assess the success of these efforts. In 2007, USDA will invest approximately $4 billion in conservation activities on agricultural lands using programs authorized by the 2002 Farm Bill, and this level of funding represents an increase of about $1.2 billion from 2002. Through the Farm Bill programs, USDA is able to partner with agricultural producers and implement a variety of land retirement, resource restoration, and best management practices:

Conservation Reserve Program (CRP): The Conservation Reserve Program encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to native grasses, wildlife plantings, trees, filterstrips, or riparian buffers. The Farm Service Agency has issued a rule that codifies existing policy, which allows the private sale of carbon credits for lands enrolled in the CRP. In addition, the rule will add trading of environmental credits as a permissive use on CRP acreage. FSA has modified the Environmental Benefits Index used to score and rank offers to enroll land in the CRP. More points for are awarded for installing vegetative covers that sequester more carbon.

Environmental Quality Incentives Program (EQIP): EQIP provides cost-sharing and incentive payments for conservation practices on working farm lands. The Natural Resources Conservation Service (NRCS) delivered guidance to its state offices to reward and recognize actions that provide greenhouse gas benefits within the EQIP ranking systems. By including this ranking criterion, NRCS can provide cost-share assistance to livestock producers who install greenhouse gas mitigating technologies, including construction of methane digesters. Producers who improve the quality of their nutrient management systems by achieving a higher level of nitrogen use efficiency can also receive cost-shared assistance.

Conservation Security Program (CSP): The Conservation Security Program is a voluntary program that provides financial and technical assistance to promote conservation on working cropland, pasture, and range land, as well as forested land that is an incidental part of an agriculture operation. NRCS is providing enhancement payments under the CSP to promote energy conservation and the production and use of renewable fuels and electricity.

USDA is also active in the promotion of biomass as a source of energy. In partnership with DOE, USDA facilitates the Biomass Research and Development Initiative (www.bioproducts-bioenergy.gov) for the promotion and development of new biomass production technologies. The Forest Service has been working to improve the commercial value of woody biomass for energy generation.

APPENDIX B

CLIMATE CHANGE FUNDING; SUMMARY OF CHANGES, 2003-2007

GAO recommended in its August 2005 report that changes to this Climate Change Expenditure Report should more clearly explained when they are introduced. In the 2006 Foreign Operations appropriations act (P.L. 109-102) conference report, the committees requested an explanation of the changes in the Climate Change Expenditures Report since 2002 and crosswalk tables that display changes from prior reports. Detailed data from 2002 is not available in the current report format due to the significant restructuring of climate technology reporting under the Climate Change Technology Program (CCTP) starting in 2003. A crosswalk detailing the CCTP changes was provided in Appendix C the fiscal year 2005 Climate Change Expenditures Report (issued in May, 2004). To comply with the committees' request and to address GAO's recommendations, reporting changes have been noted in table footnotes throughout this report and a summary table of climate funding from 2003 through 2007 has been provided (Table 8). Data reported across the five years shown in Table 8 are consistent, except where footnoted.

Table 8

2003-2007 Climate Change Funding Summary

(Tax expenditures and discretionary budget authority in millions of dollars)

	FY 2003 Actuals[1]	FY 2004 Actuals[1]	FY 2005 Actuals[1]	FY 2006 Enacted[1]	FY 2007 Proposed[1]	$ Change, 2006-07[1]
Climate Change Science Program (CCSP)[2,3]	1,766	1,976	1,864	1,709	1,715	6
Climate Change Research Initiative (CCRI)[4]	*41*	*173*	*204*	*204*	*206*	*3*
Climate Change Technology Program (CCTP)[5,6,7,8]	2,555	2,868	2,808	2,773	2,980	207
National Climate Change Technology Initiative (NCCTI)[4]	---	---	*173*	*226*	*306*	*80*
International Assistance	270	252	234	241	220	-22
Energy Tax Provisions That May Reduce Greenhouse Gases	580	500	369	1,084	1,607	523
Total[9]	**5,164**	**5,590**	**5,269**	**5,794**	**6,508**	**714**

[1] Tax provisions are shown as revenue effects. All other values are budget authority.

[2] The 2003-2005 increase in the Climate Change Science Program funding was due largely to changes in National Aeronautics and Space Administration (NASA) and National Science Foundation (NSF) funding. The 2003 to 2004 change reflects the inclusion of several additional NASA elements in CCRI, including Interdisciplinary Science Teams, High-End Computing, and Applications, and the start of Aerosol Polarimetry Sensor (APS) development. In addition, in 2004, NASA's Propulsion and Power project was completed and the Enabling Concepts and Technology program was cancelled and in 2005, NASA's Low Emissions Alternative Power project was initiated. NSF funding changes were due to overall funding reductions and changes in priorities.

[3] NASA funding for 2004 reflects full cost accounting but the funding for 2003 and 2005 through 2007 does not. Data for 2004 without full cost were not available.

[4] The Climate Change Research Initiative and The National Climate Change Technology Initiative are subsets of CCSP and CCTP respectively. These are non-add lines.

[5] The 2005-2007 totals for the CCTP include USDA's Value Added Producer Grants for renewable energy. The 2003 and 2004 CCTP totals do not include these grants, which were $4 million in 2003 and $2 million in 2004.

[6] The 2004-2007 totals for the CCTP do not include the Department of Transportation's Federal Transit Administration Capital Investment Grants because it was determined that the grants did not adequately meet the CCTP criteria. The 2003 CCTP total does include $26 million for these grants.

[7] The 2003-2004 increase in CCTP funding was largely due to changes in DOE funding. No entirely new DOE programs were counted in the CCTP portfolio. The increase was principally due to a shift in focus in the Clean Coal Power Initiative. Through 2003, the program focused on reduction of criteria and other pollutants and did not meet the criteria for inclusion in the CCTP. In 2004, the program began to focus on technologies that improve efficiency and thus reduce greenhouse gas emissions, and as a result a larger portion of the program included in the CCTP portfolio.

[8] The 2005-2007 CCTP totals reflect reduced infrastructure reporting in the Department of Energy's nuclear program, which more closely adheres to the CCTP selection criteria. The 2003 and 2004 levels in this table do not reflect this corrected reporting.

[9] Total excludes double-counts.

APPENDIX C

Table 9

ACCOUNTING OF FEDERAL CLIMATE CHANGE EXPENDITURES BY AGENCY

Details by Agency/Account

(Tax expenditures and discretionary budget authority, obligations, and outlays in millions of dollars)

The following is a listing of Federal climate change expenditures by agency and by line item in the President's 2007 Budget Appendix. Budget Appendix line items show account level data and may not reflect sub-account level climate change information. The data in this table may be subsets of an account.

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Department of Agriculture						
Climate Change Science Program						
Agricultural Research Service	38	38	38	38	36	-2
Cooperative State Research, Education and Extension Services	5	5	5	5	6	0
Economic Research Service	0	0	0	0	0	0
Forest Service – Forest and Rangeland Research	18	18	18	18	19	1
USDA Climate Change Science Program Subtotal[2]	62	62	62	62	60	-1
Climate Change Research Initiative[3]						
Agricultural Research Service	*2*	*2*	*2*	*2*	*5*	3
Forest Service - Forest and Rangeland Research	*6*	*6*	*6*	*6*	*7*	1
USDA Climate Change Research Initiative Subtotal[2]	*8*	*8*	*8*	*8*	*11*	4
Climate Change Technology Program						
Natural Resources Conservation Service – Biomass R&D, Farm Bill Section 9008	13	12	12	12	12	0
Natural Resources Conservation Service – Carbon Cycle	1	1	1	1	1	0
Forest Service R&D – Inventories of Carbon Biomass	1	1	1	1	1	0
Agricultural Research Service – Bioenergy Research	2	2	2	2	2	0

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
USDA, continued						
Cooperative State Research, Education and Extension Service – Biofuels/Biomass Research, Formula Funds, National Research Initiative	5	5	5	3	3	-1
Forest Service – Biofuels/Biomass, Forest and Rangeland Research	2	2	2	2	3	0
Rural Business Service – Renewable Energy Program[4]	23	23	23	23	10	-13
Rural Business Service – Value Added Producer Grants[5]	2	3	3	3	3	0
USDA Climate Change Technology Program Subtotal[2]	48	48	48	46	34	-13
Total – USDA[2]	**110**	**109**	**109**	**108**	**95**	**-15**
Department of Commerce						
Climate Change Science Program						
National Oceanic and Atmospheric Administration – Operations, Research, and Facilities	120	151	151	151	173	22
Climate Change Research Initiative[3]						
National Oceanic and Atmospheric Administration – Operations, Research, and Facilities	*46*	*34*	*34*	*34*	*46*	12
Climate Change Technology Program						
National Institute of Standards and Technology (NIST) – Scientific and Technological Research and Services	8	7	7	7	7	0
NIST – Industrial Technical Services, Advanced Technology Program[6]	18	10	10	10	0	-10
International Trade Administration – Operations and Administration[7]	0	0	0	0	2	2
DOC Climate Change Technology Program Subtotal[2]	26	17	17	17	9	-8
Total – Commerce[2]	**146**	**168**	**168**	**168**	**182**	**14**
Department of Defense[8]						
Climate Change Technology Program						
Research, Development, Test and Evaluation, Army	27	37	36	33	6	-31
Research, Development, Test and Evaluation, Navy	18	23	23	21	7	-17
Research, Development, Test and Evaluation, Air Force	1	0	0	0	0	0
Research, Development, Test and Evaluation, Defense-wide – DARPA	11	7	8	10	3	-4

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
DOD, continued						
Research, Development, Test and Evaluation, Defense-wide – Office of the Secretary of Defense	2	4	3	3	0	-4
Total – DOD[2]	**59**	**71**	**70**	**66**	**15**	**-55**
Department of Energy[9]						
Climate Change Science Program						
Science – Biological & Environmental Research	127	131	131	131	126	-4
Climate Change Research Initiative[3]						
Science – Biological & Environmental Research	*25*	*25*	*25*	*25*	*24*	-2
Climate Change Technology Program						
Energy Supply and Conservation – Energy Efficiency and Renewable Energy[10,11]	1,234	1,174	1,174	1,208	1,176	2
Energy Supply and Conservation – Electricity Transmission and Distribution	57	73	73	62	100	27
Energy Supply and Conservation – Nuclear[12]	291	333	339	442	463	131
Fossil Energy R&D – Efficiency and Sequestration[13]	374	405	537	353	419	15
Science – Fusion, Sequestration, and Hydrogen	386	423	423	420	551	129
Departmental Administration – Climate Change Technology Program Direction[14]	0	0	0	0	1	1
DOE Climate Change Technology Program Subtotal[2]	2,342	2,407	2,545	2,486	2,711	305
National Climate Change Technology Initiative[3]						
Energy Supply and Conservation – Energy Efficiency and Renewable Energy	*65*	*62*	*62*	*61*	*113*	*51*
Energy Supply and Conservation – Nuclear	*9*	*30*	*30*	*34*	*44*	*14*
Fossil Energy R&D – Efficiency and Sequestration[15]	*89*	*122*	*122*	*102*	*134*	*12*
Departmental Administration – Climate Change Technology Program Direction	*0*	*0*	*0*	*0*	*1*	*1*
DOE National Climate Change Technology Initiative Subtotal[2]	*162*	*214*	*214*	*198*	*292*	*77*
Total – DOE[2]	**2,469**	**2,537**	**2,676**	**2,616**	**2,838**	**301**
Department of Health and Human Services						
Climate Change Science Program						
National Institutes of Health	57	57	57	55	57	0
Total – HHS[2]	**57**	**57**	**57**	**55**	**57**	**0**

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Department of the Interior						
Climate Change Science Program						
U.S. Geological Survey – Surveys, Investigations, and Research	27	27	27	27	26	-1
Climate Change Technology Program						
US Geological Survey – Surveys, Investigations and Research, Geology Discipline, Energy Program[16]	2	0	0	0	0	0
Total – DOI[2]	**29**	**27**	**27**	**27**	**26**	**-1**
Department of State						
International Assistance						
Diplomatic and Consular Affairs[17]	0	0	0	0	4	4
Economic Support Fund[18]	1	6	6	1	32	26
International Organizations and Programs	6	6	6	6	5	-1
State International Assistance Subtotal[2]	7	12	12	7	41	29
Total – State[2]	**7**	**12**	**12**	**7**	**41**	**29**
Department of Transportation						
Climate Change Science Program						
Federal Highway Administration – Federal-Aid Highways	1	1	1	1	1	0
Federal Aviation Administration – Research, Engineering, and Development[19]	0	0	0	0	0	0
DOT Climate Change Science Program Subtotal[2]	1	1	1	1	1	0
Climate Change Research Initiative[3]						
Federal Highway Administration – Federal-aid Highways	*1*	*1*	*1*	*1*	*1*	0
Federal Aviation Administration – Research, Engineering, and Development[19]	*0*	*0*	*0*	*0*	*0*	0
DOT Climate Change Research Initiative Subtotal[2]	*1*	*1*	*1*	*1*	*1*	0
Climate Change Technology Program						
Office of the Secretary of Technology - Transportation, Policy, Research and Development[20]	1	0	0	0	0	0
National Highway Traffic Safety Administration[21]	0	0	0	0	0	0
Research and Innovative Technology Administration - Research and Development[22]	1	0	1	1	1	0
DOT Climate Change Technology Program Subtotal[2]	2	0	1	1	1	0
Total – DOT[2]	**3**	**1**	**2**	**2**	**2**	**1**

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
Department of the Treasury						
International Assistance						
Debt Restructuring – Tropical Forestry Conservation[23]	20	20	20	20	8	-12
Global Environment Facility[24]	24	18	18	17	17	-1
Asian Development Bank[25]	0	0	0	0	7	7
Total – Treasury[2]	**44**	**38**	**38**	**36**	**32**	**-6**
Environmental Protection Agency						
Climate Change Science Program						
Science and Technology	20	19	19	19	18	-1
Climate Change Technology Program						
Environmental Programs and Management	91	90	90	90	92	2
Science and Technology	19	19	19	19	13	-6
EPA Climate Change Technology Program Subtotal[2]	110	109	109	109	105	-4
National Climate Change Technology Initiative[3]						
Environmental Programs and Management	*11*	*12*	*12*	*12*	*15*	*3*
Total – EPA[2]	**130**	**128**	**128**	**128**	**123**	**-5**
National Aeronautics and Space Administration[26]						
Climate Change Science Program[27,28]						
Science, Aeronautics, and Exploration	1,241	1,045	1,312	1,283	1,029	-17
Climate Change Research Initiative[3,27]						
Science, Aeronautics, and Exploration	*94*	*97*	*74*	*56*	*86*	-12
Climate Change Technology Program[29]						
Science, Aeronautics, and Exploration	208	104	102	100	86	-19
Total – NASA[2]	**1,449**	**1,150**	**1,414**	**1,384**	**1,114**	**-35**
National Science Foundation						
Climate Change Science Program						
Research and Related Activities	198	197	197	197	205	8
Climate Change Research Initiative[3]						
Research and Related Activities	25	*25*	*25*	*25*	*25*	0
Climate Change Technology Program						
Research and Related Activities	11	18	18	18	19	1
Total – NSF[2]	**209**	**215**	**215**	**215**	**224**	**9**
Smithsonian Institution						
Climate Change Science Program						
Salaries and Expenses	6	6	6	6	6	0
Total – Smithsonian[2]	**6**	**6**	**6**	**6**	**6**	**0**

	FY 2005 Actual Budget Authority	FY 2006 Enacted Budget Authority	FY 2006 Obligations[1]	FY 2006 Outlays[1]	FY 2007 Proposed Budget Authority	$ Change, Budget Authority 2006-07
U.S. Agency for International Development						
Climate Change Science Program[30]						
Development Assistance	6	13	13	3	14	1
Climate Change Research Initiative[3,30]						
Development Assistance	*6*	*13*	*13*	*3*	*14*	*1*
International Assistance						
Andean Counterdrug Initiative[31]	2	1	1	1	0	-1
Assistance for Eastern Europe and the Baltic States	5	6	6	4	3	-4
Assistance for the Independent States of the Former Soviet Union	34	30	30	33	25	-5
Development Assistance	134	118	118	98	110	-8
Economic Support Fund	5	33	33	9	6	-27
International Disaster Assistance	2	2	2	1	2	0
P.L.-480 Title II Food Aid	1	1	1	1	1	0
USAID International Assistance Subtotal[2]	183	192	192	148	147	-45
Total – USAID[2,32]	**183**	**192**	**192**	**148**	**147**	**-45**
TOTAL - ALL AGENCIES, DISCRETIONARY FUNDING[2]	**4,900**	**4,710**	**5,112**	**4,964**	**4,901**	**191**
Energy Tax Provisions That May Reduce Greenhouse Gases	**369**	**1,084**	**1,084**	**1,084**	**1,607**	**523**
TOTAL - ALL AGENCIES, DISCRETIONARY FUNDING + TAX PROVISIONS[2]	**5,269**	**5,794**	**6,196**	**6,048**	**6,508**	**714**

[1] All obligation and outlay data are preliminary full year estimates and are subject to change.

[2] Subtotals and totals may not add due to rounding. Data supersede numbers released with the President's 2007 Budget. Discrepancies resulted from rounding and improved estimates.

[3] The Climate Change Research Initiative (CCRI) and the National Climate Change Technology Initiative (NCCTI) are subsets of the overall Climate Change Science Program and Climate Change Technology Programs respectively; all CCRI and NCCTI lines are non-add lines.

[4] Funding for loans and grants to small farmer and ranchers for the purchase of renewable energy systems and for making energy efficiency improvements is also provided through other state and Federal programs. The 2007 Budget request reduces funding to address this duplication.

[5] Value Added Producer Grants for renewable energy should have been reported as part of the CCTP since the formalization of the CCTP in 2003. In addition, the 2006 and 2007 funding levels are preliminary estimates that will be revised once the competitive grant process is complete.

[6] The 2007 President's Budget proposes termination of NIST's Advanced Technology Program.

[7] The Department of Commerce will provide funding in this account for the new Asia-Pacific Partnership on Clean Development and Climate beginning in 2007. No climate-related funding has been included in this account in past years.

[8] The reduction in 2007 budget authority is due to the exclusion of Congressional earmarks in the President's Budget that are included in the 2005 and 2006 funding levels shown.

[9] The 2007 Budget for DOE's CCTP contribution reflects the planned ramp-up in the International Thermonuclear Experimental Reactor project and increases for existing basic research efforts that are relevant to hydrogen, solar

energy, and nuclear energy technologies. In addition, the 2007 Budget reflects an increase in funding for Advanced Fuel Cycle Initiative specifically to support the Global Nuclear Energy Partnership.

[10] In 2006, Congress merged the Energy Supply and Energy Conservation accounts to create the Energy Supply and Conservation account. The new account structure is presented in the FY 2007 President's Budget Appendix. The amount reported under the Energy Efficiency and Renewable Energy line within this account reflects a combined total of the Energy Conservation line item and the former Energy Supply - Renewables line item that had been presented in prior reports.

[11] The increase for Energy Efficiency and Renewable Energy in the 2007 Budget reflects increased emphasis in two key technology areas: wind power for low-wind speed environments and Biochemical Platform R&D to help reduce costs of cellulosic ethanol (ethanol produced from agricultural waste, forest residues, and bioenergy crops). The increases are for ongoing activities, not new programs.

[12] The infrastructure elements of the 2005, 2006, and 2007 Nuclear funding include only infrastructure that directly supports CCTP RD&D and CCTP deployment. The reduced infrastructure reporting adheres more closely to the CCTP climate change criteria. Data presented in past reports do not reflect this corrected reporting.

[13] Obligations and outlays for Fossil Energy R&D activities assume spending a significantly higher proportion of unobligated balances in 2006 than has occurred over the last several years. DOE assumes that Fossil Energy R&D will reduce its unobligated balances by $158 million (26%) between the beginning of 2006 and the beginning of 2007.

[14] In 2005, $1.5 million was provided for CCTP program direction within DOE's Energy Efficiency and Renewable Energy program direction allocation.

[15] The increase in funding for Fossil Energy activities within NCCTI from 2005 to 2006 represents a greater level of effort in ongoing Sequestration and Integrated Gasification Combined Cycle activities.

[16] In 2005, USGS completed research to assess the sources of and potential geologic sequestration options for carbon dioxide. CCTP sequestration-related gas hydrate activities were also completed in 2005. Additional gas hydrate work is done at USGS, but the remaining work does not fit within the scope of CCTP.

[17] The 2007 President's Budget request includes $4 million in Diplomatic and Consular Affairs account to support the new Asia-Pacific Partnership on Clean Development and Climate. No climate funding has been included in this account in past years.

[18] The 2007 President's Budget includes $26 million in the Economic Support Fund for the new Asia-Pacific Partnership on Clean Development and Climate.

[19] Funding for Federal Aviation Administration is less than $500K in all years shown.

[20] The 2005 funding within the Office of the Secretary was the result of a Congressional earmark. No CCTP funding was included for the office in the 2006 appropriations or requested in the 2007 President's Budget.

[21] Funding for the National Highway Transportation Safety Administration's is less than $500K for all years shown.

[22] Funding for the Research and Innovative Technology Administration – Research and Development is less than $500K in 2006.

[23] The enacted level for the Tropical Forestry Conservation Act (TFCA) is $20 million in 2005 and $20 million in 2006. 2007, the Administration requested a total of $182 million for debt restructuring programs to be available for: bilateral Heavily Indebted Poor Countries (HIPC) and poorest country debt reduction, contributions to the HIPC Trust Fund, and TFCA debt reduction. The Budget provides the Treasury Department flexibility in determining the amount for each program. The 2007 funding level for TFCA has not been determined yet, but it has been estimated that up to $8 million may be available for TFCA in 2007.

[24] The 2007 Budget provides $56 million for GEF and $24 million for the Asian Development Bank (ADB). Approximately 30% of this funding will be allocated to programs related to climate change; this represents the lower bound of 2007 funding that will support climate change programs. The allocation of the climate funding between these two accounts is contingent upon the outcome of ongoing GEF-4 replenishment negotiations.

[25] The 2007 President's Budget request includes funding for climate-related activities through the Asian Development Bank, some of which may be used to support the Asia-Pacific Partnership. No climate-related funding has been included in this account in past years.

[26] NASA funding levels presented in this table do not reflect full cost accounting from 2006 onward.

[27] The decreases in NASA's CCSP and CCRI budget authority from 2006 to 2007 are due to changes in the agency's budget for space observing platforms reflecting the natural development cycle of its satellites as well as revisions to mission profiles.

[28] NASA's 2006 obligations and outlays for CCSP are projected to be higher than 2006 enacted budget authority due to the year-to-year spend-out rates associated with the satellite missions in development.

[29] The decrease in NASA's CCTP number in 2007 is due to realignment within its Aeronautics Research areas.

[30] Due to recent changes in CCSP/CCRI activities and priorities, additional ongoing activities in the Democracy, Conflict, and Humanitarian Assistance program are reported under CCSP and CCRI beginning in 2006.
[31] The Andean Counterdrug Initiative account was added in the FY 2004 report to reflect new counter-deforestation activities in Peru.
[32] The International Assistance subtotal for USAID contains funds that are also counted in USAID's Climate Change Science Program subtotal. Agency total line excludes this double-count.

APPENDIX D

Table 10

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT GLOBAL CLIMATE CHANGE FUNDING BY BUREAU/COUNTRY

(Dollars in Thousands)

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
AFRICA (AFR)										
Africa Regional	Broad-based support for Africa	DA	5	7,000	0	0	0	0	0	0
Central Africa Regional	Reduce the Rate of Forest Degradation and Loss of Biodiversity through Increased Natural Resource Management Capacity	DA	3	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Guinea	Increased use of sustainable natural resource management practices	DA	3	1,000	1,000	1,000	0	0	0	0
Guinea	Inclusive Governance Reform Advanced	DA	3	0	0	0	500	500	500	0
Madagascar	Biologically Diverse Forest Ecosystems Conserved	DA	3	2,800	6,147	6,147	6,147	6,147	6,147	5,472
Malawi	Sustainable Increases in Rural Incomes	DA	3	1,000	1,273	1,273	0	0	0	0
Malawi	Enhanced Wealth/Asset Creation and Retention Capacity for the Rural Poor	DA	3	0	0	0	900	900	900	973
Mali	Accelerated Economic Growth	DA	3	450	500	500	0	0	0	0
Mali	Accelerated Economic Growth	DA	5	50	650	650	550	550	550	450
Mali	Accelerated Economic Growth	DA	1	1,000	350	350	0	0	0	0

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
Senegal	Improved Local Delivery of Services and Sustainable Use of Resources in Targeted Areas	DA	3	500	500	276	0	0	0	0
Senegal	Increased Ecomomic Growth through Trade and Natural Resource Management	DA	3	0	0	0	500	500	500	1,000
South Africa	Increased Access to Shelter and Environmentally Sound Municipal Services	DA	1	940	1,395	1,269	1,000	1,000	1,000	0
South Africa	Increased Market-Driven Employment Opportunities	DA	3	500	500	500	0	0	0	0
South Africa	Democratic Consolidation Advanced	DA	1	100	100	84	0	0	0	0
South Africa	Improved Capacity to Formulate, Evaluate and Implement Economic Policies	DA	3	75	5	5	0	0	0	0
South Africa	Improved Capacity to Formulate, Evaluate and Implement Economic Policies	DA	1	385	0	0	0	0	0	0
South Africa	Strenghtened Capacity to Deliver Sustainable and Accessible Integrated Municipal and Justice Services	DA	3	0	0	0	0	0	0	1,000
Uganda	Expanded Sustainable Economic Opportunities for Rural Sector Growth	DA	3	1,500	600	600	600	600	600	700
REDSO/ESA	Regional Food Security	DA	4	500	0	0	0	0	0	0
REDSO/ESA	Enhanced African Capacity to Achieve Regional Food Security	DA	5	0	50	50	50	50	50	50
WARP	Management and Agricultural Growth in West Africa	DA	5	300	500	500	0	0	0	0

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
WARP	Agricultrual Productivity and Food Security Enhanced	DA	5	0	0	0	1,000	1,000	515	0
Total AFR				**33,100**	**28,570**	**28,204**	**26,247**	**26,247**	**25,762**	**24,645**
ASIA and the NEAR EAST (ANE)										
ANE Regional	Encourage Economic Growth	DA	1	4,000	0	0	0	0	0	0
ANE Regional	Program Development and Learning	DA	1	0	0	0	0	0	0	1,000
Afghanistan	Infrastructure, Economic Governance & Democracy	DA	1	7,426	0	0	0	0	0	0
Afghanistan	Infrastructure, Economic Governance & Democracy	ESF	1	0	2,000	300	0	0	600	0
Afghanistan	A Thriving Economy led by the Private Sector	ESF	1	0	0	0	28,000	28,000	4,200	2,000
Afghanistan	A Thriving Economy led by the Private Sector	DA	1	0	0	0	0	0	0	1,800
Bangladesh	Improved Performance of the Energy Sector	DA	1	3,000	0	0	0	0	0	0
Bangladesh	Improved Performance of the Energy Sector	ESF	1	1,000	0	0	0	0	0	0
Bangladesh	Expanded Economic Opportunities Created	DA	1	0	2,000	300	1,089	1,089	763	450
India[7]	Improved Access to Clean Energy and Water in Selected States	ESF	1	2,500	3,500	525	1,500	1,500	1,275	1,500
India	Improved Access to Clean Energy and Water in Selected States	DA	1	6,000	10,300	1,545	3,698	3,698	3,645	4,220
Indonesia	Energy Sector Governance Strengthened	ESF	1	500	0	0	0	0	0	0
Indonesia	Strengthened and Decentralized Natural Resources Management	DA	3	3,000	2,000	300	4,000	4,000	1,200	3,000
Mongolia	Private Sector-Led Economic Growth	ESF	1	0	0	0	800	800	120	800

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
Nepal	Increased Private Sector Participation in Environmentally and Socially Sustainable Hydropower Development	DA	1	2,000	1,600	240	0	0	480	0
Philippines	Management of Productive, Life-Sustaining Natural Resources Strengthened	DA	1	0	2,774	416	2,010	2,010	1,134	1,795
Philippines	Environment and Energy	DA	3	5,000	1,369	205	1,097	1,097	575	997
Philippines	Environment and Energy	ESF	1	0	6,074	911	594	594	1,911	1,000
Philippines	Environment and Energy	ESF	1	0	690	104	0	0	207	0
Regional Development Mission-Asia (RDM-Asia)	Cleaner Cities and Industries in Asia	DA	1	500	0	0	0	0	0	0
Regional Development Mission-Asia (RDM-Asia)	Improved Environmental Conditions in Asia	DA	1	0	0	0	400	400	60	500
South Asia Regional	Promote Energy Security in South Asia	DA	1	0	2,252	338	4,941	4,941	1,417	5,000
South Asia Regional	Promote Energy Security in South Asia	ESF	1	0	0	0	990	990	149	0
Total ANE				**34,926**	**34,559**	**5,184**	**49,119**	**49,119**	**17,736**	**24,062**
EUROPE AND EURASIA (ENE)										
Albania	Special Initiatives	AEEB	1	800	850	800	750	750	375	500
Bosnia and Herzegovinia	Accelerated Development of Private Sector	AEEB	1	1,000	1,000	800	800	800	800	1,000
Bulgaria	Economic Growth and Increased Prosperity	AEEB	1	300	300	300	0	0	0	0
Croatia	Growth of a Dynamic and Competitive Private Sector	AEEB	1	535	522	500	0	0	0	0
Cyprus	Conditions to foster a durable settlement are stregthened	ESF	1	0	1,500	750	300	300	150	0
Europe Regional	A More Economically Sustainable and Environmentally Sustainable Energy Sector	AEEB	1	1,500	1,493	747	1,500	1,500	1,500	1,157

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
Kosovo	Social Stabilization through Special Initiatives	AEEB	1	0	0	0	700	700	350	0
Kosovo	Social Stabilization through Special Initiatives	AEEB	1	0	733	366	2,500	2,500	1,250	0
Macedonia	Accelerated Development and Growth of the Private Sector	AEEB	1	200	200	100	0	0	0	0
Romania	Accelerated Private Sector Growth by Supporting a Market-Driven Environment	AEEB	1	650	650	325	200	200	200	0
Subtotal Europe				**4,985**	**7,248**	**4,688**	**6,750**	**6,750**	**4,625**	**2,657**
Armenia	Secure and Sustained Access to Energy and Water Resources	FSA	1	6,250	2,348	4,500	2,200	2,200	3,500	1,900
Armenia	Secure and Sustained Access to Energy and Water Resources	FSA	1	0	231	231	290	290	240	260
Armenia	Secure and Sustained Access to Energy and Water Resources	FSA	1	0	146	146	160	160	140	120
Armenia	Secure and Sustained Access to Energy and Water Resources	FSA	1	0	293	293	320	320	300	290
Armenia	Transfer to Dept. of Energy (DOE)	FSA	1	4,000	4,000	3,500	2,400	2,400	2,500	1,750
Armenia	Transfer to Nuclear Regulatory Commission (NRC)	FSA	1	500	500	500	500	500	500	364
Azerbaijan	Accelerated Development & Growth of a Small and Medium Enterprises in Targeted Areas	FSA	1	1,600	1,882	1,700	0	0	1,000	0
Central Asian Republics Regional	Improved Management of Critical Natural Resources, Including Energy	FSA	1	500	500	600	0	0	300	0

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
Eurasia Regional	A More Economically Sound and Environmentally Sustainable Energy System	FSA	1	1,060	1,045	1,000	1,250	1,250	1,000	1,200
Georgia	A Foundation for a More Sustainable Energy System	FSA	1	8,000	13,400	8,000	9,000	9,000	9,000	6,800
Georgia	Transfer to Nuclear Regulatory Commission (NRC)	FSA	1	0	0	0	120	120	50	108
Kazakhstan	Improved Management of Critical Natural Resources, Including Energy	FSA	1	500	1,500	1,000	800	800	1,000	610
Kyrgyzstan	Improved Management of Critical Natural Resources, Including Energy	FSA	1	1,076	300	500	500	500	700	0
Russia[7]	Environmental Resources Managed More Effectively to Support Economic Growth	FSA	3	0	1,000	1,000	500	500	500	371
Tajikistan	Improved Management of Critical Natural Resources, Including Energy	FSA	1	0	100	200	500	500	300	0
Turkmenistan	Improved Management of Critical Natural Resources, Including Energy	FSA	1	0	200	100	0	0	100	0
Ukraine	Growth of SMEs and Agriculture	FSA	3	937	150	100	0	0	100	0
Ukraine	Increased Environmental Protection	FSA	3	0	900	800	200	200	200	0
Ukraine	Transfer to Dept of Energy (DOE)	FSA	1	9,500	9,500	11,000	9,138	9,138	10,000	9,340
Ukraine	Transfer to Nuclear Regulatory Commission (NRC)	FSA	1	500	500	450	495	495	500	506
Ukraine[7]	Transfer to Dept of Labor (DOL)	FSA	1	0	1,500	1,300	1,485	1,485	1,500	1,518
Uzbekistan	Improved Management of Critical Natural Resources, Including Energy	FSA	1	0	100	50	0	0	50	0

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
Subtotal Eurasia				**34,423**	**40,095**	**36,970**	**29,858**	**29,858**	**33,480**	**25,137**
Total ENE				**39,408**	**47,343**	**41,658**	**36,608**	**36,608**	**38,105**	**27,794**
LATIN AMERICA and the CARRIBEAN (LAC)										
LAC Regional[8]	Amazon Basin Conservation Initiative	DA	3	12,800	12,800	0	8,000	8,000	8,000	8,000
LAC Regional	Improved Conservation of the Region's Biological Resources	DA	3	2,800	2,800	2,800	2,800	2,800	2,738	2,800
Bolivia	Forest, Water and Biodiversity Resources Managed for Sustained Economic Growth	DA	3	1,400	1,400	1,400	2,000	2,000	2,000	2,000
Brazil	Natural Ecosystems Sustained	DA	3	4,870	4,870	4,870	4,200	4,200	4,200	5,330
Brazil[7]	Global Climate Change Mitigated through Market-based Renewable Energy and Energy Conservation	DA	1	990	990	990	800	800	800	900
Central America Regional Program	Economic Freedom: Open, Diversified, Expanding Economies	DA	1,3	250	250	1	250	250	125	100
Central America Regional Program	Economic Freedom: Open, Diversified, Expanding Economies	DA	5	3,000	3,000	17	2,000	2,000	1,000	1,000
Ecuador	Biodiversity Conserved in Selected Protected Areas, Their Buffer Zones and Indigenous Territories	DA	3	2,200	2,200	2,200	2,200	2,200	2,200	1,825
Ecuador	Improved Social and Economic Conditions of Inhabitants along the Peru-Ecuador Border, Promoting Border Integration	ESF	3	548	548	548	700	700	700	400
Guatemala	Economic Freedom: Open, Diversified, Expanding Economies	DA	3	200	200	127	200	200	168	300

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
Honduras	Economic Freedom: Open, Diversified, Expanding Economies	DA	3	1,700	1,700	1,337	1,700	1,700	1,700	750
Honduras	Investing in People: Healthier, Better Educated	PL-480	3	900	1,000	1,000	1,000	1,000	1,000	1,000
Mexico[f]	Economic Freedom: Open, Diversified, Expanding Economies	DA	1	1,078	1,078	1,064	1,100	1,100	1,100	650
Mexico	Economic Freedom: Open, Diversified, Expanding Economies	DA	3	3,522	3,522	3,522	3,500	3,500	3,500	3,593
Mexico	Economic Freedom: Open, Diversified, Expanding Economies	DA	5	400	400	395	400	400	400	100
Nicaragua	Economic Freedom: Open, Diversified, Expanding Economies	DA	3	500	500	418	500	500	500	500
Panama	Economic Freedom: Open, Diversified, Expanding Economies	DA	3	2,500	2,500	1,533	2,500	2,500	1,813	2,500
Paraguay	Management of Globally Important Ecoregions Improved	DA	3	150	150	150	150	150	150	40
Peru	Strengthened Environmental Management to Address Priority Problems	DA	3	3,525	3,525	3,525	3,770	3,770	3,770	1,200
Peru	Sustained Reduction of Illicit Coca Production in Targeted Areas of Peru	ACI	3	1,800	1,800	1,800	1,000	1,000	1,000	0
Total LAC				**45,133**	**45,233**	**27,697**	**38,770**	**38,770**	**36,864**	**32,988**
DEMOCRACY, CONFLICT, and HUMANITARIAN ASSISTANCE (DCHA)										
DCHA	Worldwide Climate Monitoring and Observing	IDA	5	2,300	2,543	2,543	2,300	2,300	575	2,300
DCHA	Famine Early Warning System (FEWSNET)	DA	5	2,000	12,987	12,987	13,200	13,200	3,300	13,900
Total DCHA				**4,300**	**15,530**	**15,530**	**15,500**	**15,500**	**3,875**	**16,200**

				FY 2005			FY 2006			FY 2007
		Account[1]	Category[2]	Actual Budget Authority[3]	Actual Obligations[4,5]	Estimated Outlays[4,6]	Enacted Budget Authority	Estimated Obligations[4,5]	Estimated Outlays[4,6]	Proposed Budget Authority
ECONOMIC GROWTH, AGRICULTURE AND TRADE (EGAT)										
EGAT	Global Environmental and Science Policies Mobilized to Address Development Challenges	DA	1,3,5	3,200	3,200	3,200	5,550	5,550	5,550	5,550
EGAT	Management for Conservation and Sustainable Use of Natural Resources Improved	DA	3	9,530	9,935	6,719	8,197	8,197	8,197	7,087
EGAT	Economic Growth, Improved Health and Sound Natural Resources Management Expanded	DA	3	4,900	5,850	5,850	5,500	5,500	5,500	3,000
EGAT	Access to Critical Infrastructure Improved	DA	1	8,512	8,512	8,512	6,245	6,245	6,245	5,265
Total EGAT[7]				**26,142**	**27,497**	**24,281**	**25,492**	**25,492**	**25,492**	**20,902**
USAID TOTAL				**183,009**	**198,732**	**142,554**	**191,736**	**191,736**	**147,834**	**146,591**

[1] **USAID Accounts:**

ACI – Andean Counterdrug Initiative
AEEB – Assistance for Eastern Europe and the Baltic States
DA – Development Assistance
ESF – Economic Support Fund
FSA – Assistance for the Independent States of the Former Soviet Union
IDA – International Disaster Assistance
PL480 – P.L.-480 Title II Food Aid

[2] **2007 USAID Legislative Reporting Categories**:

1. Activities that promote the transfer and deployment of United States clean energy technologies. Under USAID's Climate Change Program, technology transfer is promoted to assist developing countries to achieve sustainable economic growth and development but is not tracked as an individual goal within the program. USAID's energy-related climate change programs demonstrate U.S. technologies and/or work to address the policy, legal, and regulatory barriers that limit clean technology deployment.
2. Activities to assist in the measurement, monitoring, reporting, verification, and reduction of greenhouse gas emissions. USAID does not currently separate measuring, monitoring, reporting, and verification of GHG emissions from the energy and land use sector activities in which these occur. All of the activities that assist with technology transfer and carbon capture promote the reduction of greenhouse gas emissions.
3. Activities/programs to promote carbon capture and sequestration measures.
4. Activities/programs to help meet such countries' responsibilities under the Framework Convention on Climate Change. The spending for this category has not been formally tracked under USAID's Climate Change Program. It has been tracked as a performance indicator of program results and information concerning results through FY 2000 can be provided by USAID upon request.
5. Activities to develop assessments of the vulnerability to impacts of climate change and response strategies.

[3] In 2005, USAID realigned several of its existing programs to new strategic objectives. As a result, some programs showing 2005 budget authority are now reporting 2005 obligations and outlays, 2006 enacted budget authority, obligations, and outlays, and 2007 proposed funding the programs' new strategic objective.
[4] Obligation and outlay data are preliminary full year estimates and are subject to change.
[5] USAID intends to fully obligate funds related to climate change before their expiration.
[6] Outlay estimates reflect a conservative implementation schedule and are subject to change.
[7] This program supports the Methane to Markets Initiative.
[8] The $12.8 million attributable to climate change activities from the amount allocated for the Amazon Basin Conservation Initiative in 2005 will be obligated prior to September 30, 2006, as a result of an extensive participatory design process.