



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

THE DIRECTOR

May 3, 2007

The Honorable Robert C. Byrd  
Chairman  
Committee on Appropriations  
United States Senate  
Washington, D. C. 20510

Dear Mr. Chairman,

Title V, Section 585(b) of Public Law 109-102, the Foreign Operations, Export Financing, and Related Programs Appropriations Act, 2006, as carried forward under Public Law 110-5, requires the President to transmit a report to Congress on climate change expenditures within 60 days after transmittal of the President's Budget. The President has delegated the responsibility for this report to the Director of the Office of Management and Budget. I appreciate your staff working with mine to provide additional time for the transmission of this report in recognition that the FY2007 levels weren't resolved until after transmittal of the President's Budget. I am pleased to transmit it to you today.

The enclosed report provides a comprehensive accounting of Federal climate change expenditures, and it includes funding for both domestic programs and international programs and activities. As this report makes clear, the President's budget request reflects the Administration's commitment to meeting the aims of the United Nations Framework Convention on Climate Change while preserving a strong American economy.

Since 2001, the United States has invested over \$37 billion in climate change-related activities. The federal government's efforts focus on climate science, development and use of renewable and other energy technologies, global climate observing systems, and resources to support policymaking and resource management. The President's 2008 Budget provides continuing support for existing climate change-related programs, as well as funding for new initiatives to maintain our progress on climate change issues.

Sincerely,

A handwritten signature in blue ink that reads "Rob Portman". The signature is written in a cursive, flowing style.

Rob Portman

Identical Letter Sent to The Honorable David Obey, The Honorable Jerry Lewis  
and The Honorable Thad Cochran

**Federal Climate Change Expenditures**  
**Report to Congress**

**May 2007**

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# **FISCAL YEAR 2008 REPORT TO CONGRESS ON FEDERAL CLIMATE CHANGE EXPENDITURES**

## **1. INTRODUCTION**

*“America is on the verge of technological breakthroughs that will enable us to live our lives less dependent on oil. And these technologies will help us be better stewards of the environment, and they will help us to confront the serious challenge of global climate change.”*

President George W. Bush, January 23, 2007

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 2008 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 of 2006, as carried forward under Public Law 110-5.

### **1.1 BACKGROUND**

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.

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.

In addition to supporting the achievement of this national goal, the Administration’s climate change policy also 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 2008 Budget proposes \$7.4 billion for climate change activities. This amount is 3 percent higher than the 2007 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 2008 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 2006-2008 and Table 8 presents a funding history from 2003.

# Table 1

## Summary of Federal Climate Change Expenditures

FY 2008 Budget

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

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Obligations <sup>1</sup>	FY 2007 Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	\$ Change, Budget Authority 2007-08
<b>Climate Change Science Program (CCSP)</b>	<b>1,691</b>	<b>1,822</b>	<b>1,899</b>	<b>2,018</b>	<b>1,836</b>	<b>14</b>
<i>Climate Change Research Initiative<sup>2</sup></i>	<i>203</i>	<i>246</i>	<i>255</i>	<i>269</i>	<i>193</i>	<i>-53</i>
<b>Climate Change Technology Program (CCTP)</b>	<b>2,789</b>	<b>3,441</b>	<b>3,276</b>	<b>3,222</b>	<b>3,917</b>	<b>476</b>
<i>National Climate Change Technology Initiative<sup>2</sup></i>	<i>299</i>	<i>481</i>	<i>473</i>	<i>351</i>	<i>685</i>	<i>205</i>
<b>International Assistance<sup>3</sup></b>	<b>249</b>	<b>188</b>	<b>188</b>	<b>180</b>	<b>212</b>	<b>24</b>
<b>Energy Tax Provisions That May Reduce Greenhouse Gases<sup>4,5</sup></b>	<b>1,160</b>	<b>1,730</b>	<b>1,730</b>	<b>1,730</b>	<b>1,420</b>	<b>-310</b>
<b>Total<sup>3,6</sup></b>	<b>5,876</b>	<b>7,166</b>	<b>7,079</b>	<b>7,136</b>	<b>7,371</b>	<b>205</b>

<sup>1</sup> All obligation and outlay data are preliminary estimates and are subject to change.

<sup>2</sup> The Climate Change Research Initiative and the National Climate Change Technology Initiative are subsets of CCSP and CCTP, respectively. These are non-add lines.

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

<sup>4</sup> Tax incentives related to climate change included in this report are currently projected at \$5.0 billion over five years (2008-2012).

<sup>5</sup> 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.

<sup>6</sup> 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 2008 budget request for the CCSP, which includes funding for both the USGCRP and the CCRI across 11 of the 13 agencies, is approximately \$1.8 billion. The Department of Defense and the Department of State participate in CCSP planning but do 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 2007 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](http://www.climatescience.gov).

### **2.1 CLIMATE CHANGE RESEARCH INITIATIVE**

Within the CCSP total, the 2008 Budget requests \$193 million for the CCRI. 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 2008 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 2008 Budget proposes approximately \$1.6 billion for USGCRP activities.



## Table 2

### Climate Change Science Program

Details by Agency/Account

(Budget authority, obligations, and outlays in millions of dollars)

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-2008
<b>Department of Agriculture</b>						
Agricultural Research Service	38	34	35	35	32	-3
Cooperative State Research, Education and Extension Services	4	4	4	4	6	1
Economic Research Service <sup>2</sup>	0	0	0	0	0	0
Forest Service – Forest and Rangeland Research	18	19	19	19	19	0
<b>Subtotal – USDA<sup>3</sup></b>	<b>61</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>56</b>	<b>-2</b>
<b>Department of Commerce</b>						
National Oceanic and Atmospheric Administration – Operations, Research, and Facilities <sup>4</sup>	226	229	229	229	233	4
National Oceanic and Atmospheric Administration – Procurement, Acquisition, and Construction <sup>4,5</sup>	9	7	7	7	7	0
National Institute of Standards and Technology (NIST) <sup>6</sup>	---	---	---	---	5	5
<b>Subtotal – DOC<sup>3</sup></b>	<b>235</b>	<b>236</b>	<b>236</b>	<b>236</b>	<b>245</b>	<b>9</b>
<b>Department of Energy</b>						
Science – Biological & Environmental Research <sup>3</sup>	130	127	127	127	130	3
<b>Department of Health and Human Services</b>						
National Institutes of Health <sup>3</sup>	50	50	50	49	49	-1
<b>Department of the Interior</b>						
U.S. Geological Survey – Surveys, Investigations, and Research <sup>3</sup>	27	26	26	26	27	1
<b>Department of Transportation</b>						
Federal Highway Administration – Federal-Aid Highways <sup>3,7</sup>	0	0	0	0	1	0

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-2008
Federal Aviation Administration – Research, Engineering, and Development <sup>8</sup>	0	0	0	0	1	0
Federal Transit Administration - Research and University Research Centers <sup>9</sup>	0	0	0	0	0	0
<b>Subtotal – DOT<sup>3</sup></b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>
<hr/>						
<b>Environmental Protection Agency</b>						
Science and Technology <sup>3</sup>	<b>19</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>17</b>	<b>1</b>
<hr/>						
<b>National Aeronautics and Space Administration<sup>10</sup></b>						
Science, Aeronautics, and Exploration <sup>3</sup>	<b>953</b>	<b>1,083</b>	<b>1,160</b>	<b>1,280</b>	<b>1,084</b>	<b>0</b>
<hr/>						
<b>National Science Foundation</b>						
Research and Related Activities <sup>3</sup>	<b>197</b>	<b>205</b>	<b>205</b>	<b>205</b>	<b>208</b>	<b>3</b>
<hr/>						
<b>Smithsonian Institution</b>						
Salaries and Expenses <sup>3</sup>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>0</b>
<hr/>						
<b>U.S. Agency for International Development</b>						
Development Assistance <sup>3</sup>	<b>13</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>-1</b>
<hr/>						
<b>Total<sup>3</sup></b>	<b>1,691</b>	<b>1,822</b>	<b>1,899</b>	<b>2,018</b>	<b>1,836</b>	<b>14</b>

<sup>1</sup> All obligation and outlay data are preliminary estimates and are subject to change.

<sup>2</sup> Funding for the Economic Research Service is less than \$500,000 for all years shown.

<sup>3</sup> Agency subtotals and table total may not add due to rounding. All data supersede numbers released with the 2008 President's Budget. Discrepancies resulted from rounding and improved estimates.

<sup>4</sup> NOAA previously reported its climate research activities to CCSP, which were included under its Office of Oceanic and Atmospheric Research (OAR) line office and the National Marine Fisheries Service (NMFS) line office starting in FY 06. For FY 08, NOAA made a decision to report activities for the NOAA climate strategic goal, as defined in the NOAA strategic plan (2005), to ensure consistent reporting and provide the most accurate picture of its climate funding to date. The climate goal includes both research and operations funding under the following offices: OAR, NMFS, the National Weather Service, and the National Environmental Satellite, Data, and Information Service.

<sup>5</sup> Past reports have erroneously presented all of NOAA's CCSP funding in the Operations, Research, and Facilities (ORF) account. Climate-related activities have been and continue to be funded in both the ORF account and the Procurement, Acquisition, and Construction (PAC) account.

<sup>6</sup> 2008 funding is for new measurement and standards-related activities that NIST will undertake to support CCSP.

- <sup>7</sup> The 2006 and 2007 funding for Federal Highway Administration – Federal-Aid Highways was less than \$500,000.
- <sup>8</sup> The 2006 and 2007 funding for Federal Aviation Administration – Research, Engineering, and Development was less than \$500,000.
- <sup>9</sup> Federal Transit Administration - Research and University Research Centers is FTA's support for DOT's Center for Climate Change. This program has been provided funding in the past however it was not reported because funding has been less than \$500,000.
- <sup>10</sup> NASA has revised the set of programs and projects it counts as supporting CCSP goals. Beginning in 2006, the funding levels presented do not include the Ground Network and Research Range assets or Congressional interest items but comprise activities not previously counted, including the NPOESS Preparatory Project, portions of the Landsat Data Continuity Mission (LDCM), and the Gravity Recovery and Climate Experiment (GRACE), as well as portions of the High-End Computing and Scientific Computing projects.

## Table 3

### Climate Change Research Initiative

Details by Agency/Account

(Budget authority, obligations, and outlays in millions of dollars)

	FY2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY2007 Estimated Outlays <sup>1</sup>	FY2008 Proposed Budget Authority	Chang in Budget Authority, 2007-2008
<b>Department of Agriculture</b>						
Agricultural Research Service	2	2	2	2	2	0
Forest Service – Forest and Rangeland Research	6	7	7	7	7	0
<b>Subtotal – USDA<sup>2</sup></b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>0</b>
<b>Department of Commerce</b>						
National Oceanic and Atmospheric Administration - Operations, Research, and Facilities <sup>2</sup>	34	46	46	46	46	0
<b>Department of Energy</b>						
Science – Biological & Environmental Research <sup>2</sup>	28	24	24	24	24	0
<b>Department of Transportation<sup>3</sup></b>						
Federal Highway Administration – Federal-aid Highways <sup>4</sup>	0	0	0	0	1	0
<b>Subtotal – DOT<sup>2</sup></b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>National Aeronautics and Space Administration<sup>5</sup></b>						
Science, Aeronautics, and Exploration <sup>2</sup>	95	129	138	152	76	-53
<b>National Science Foundation</b>						
Research and Related Activities <sup>2</sup>	25	25	25	25	25	0
<b>U.S. Agency for International Development</b>						
Development Assistance <sup>2</sup>	13	14	14	14	13	-1
<b>Total<sup>2</sup></b>	<b>203</b>	<b>246</b>	<b>255</b>	<b>269</b>	<b>193</b>	<b>-53</b>

- <sup>1</sup> All obligation and outlay data are preliminary estimates and are subject to change.
- <sup>2</sup> Agency subtotals and table total may not add due to rounding. All data supersede numbers released with the 2008 President's Budget. Discrepancies resulted from rounding and improved estimates.
- <sup>3</sup> In past reports, activities in the Federal Aviation Administration – Research, Engineering, and Development account have been included under CCRI. Due to changes in CCSP/CCRI activities and priorities and changes within DOT, these activities are no longer considered part of CCRI.
- <sup>4</sup> Funding for Federal Highway Administration – Federal-aid Highways is less than \$500,000 in all years shown.
- <sup>5</sup> NASA has revised the set of projects it counts as supporting CCRI goals. The funding levels presented include activities that were previously not counted, including portions of the High-End Computing and Scientific Computing projects. The funding decrease from 2007 to 2008 is primarily due to the planned ramp-down of resources for the Glory mission, a major contributor to NASA CCRI funding, which is completing development in preparation for a December 2008 launch.

### **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 2008 Budget proposes approximately \$3.9 billion for the CCTP. Table 4 provides a breakdown by agency of CCTP funding.

The CCTP published a Vision and Framework document and 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 is an initiative at the Department of Energy 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](http://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. 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

(Budget authority, obligations, and outlays in millions of dollars)

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority, 2007-2008
<b>Department of Agriculture</b>						
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	5	3
Cooperative State Research, Education and Extension Service - Biofuels/Biomass Research, Formula Funds, National Research Initiative <sup>2</sup>	3	3	4	4	32	29
Forest Service – Biofuels/Biomass, Forest and Rangeland Research	2	2	2	2	5	3
Rural Business Service – Renewable Energy Program	23	23	23	23	34	11
Rural Business Service – Value Added Producer Grants	3	3	3	3	5	2
Rural Business Service – Biomass R&D, Section 9008 Farm Bill <sup>3</sup>	14	12	12	12	0	-12
Office of the Chief Economist - Methane to Markets <sup>4</sup>	0	0	0	0	1	1
Research Education, Economics Area - Bioenergy and Biobased Products Research Initiative (mandatory funding) <sup>5, 6</sup>	---	---	---	---	50	50
Forest Service - Forest Wood to Energy (mandatory funding) <sup>5, 7</sup>	---	---	---	---	15	15
Rural Business Service – Renewable Energy Systems and Energy Efficiency Grants (mandatory funding) <sup>5, 8</sup>	---	---	---	---	50	50
Rural Business Service – Renewable Energy Systems and Energy Efficiency Loans (mandatory funding) <sup>5, 8</sup>	---	---	---	---	21	21



	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority, 2007-2008
Rural Business Service - Biomass R&D, Section 9008 (mandatory funding) <sup>5, 9</sup>	---	---	---	---	15	15
Subtotal - mandatory funding <sup>10</sup>	---	---	---	---	151	151
Subtotal - discretionary funding <sup>10</sup>	49	46	47	47	83	37
<b>Subtotal – USDA<sup>10</sup></b>	<b>49</b>	<b>46</b>	<b>47</b>	<b>47</b>	<b>234</b>	<b>188</b>
<b>Department of Commerce</b>						
National Institute of Standards and Technology (NIST) – Scientific and Technological Research and Services	8	8	8	8	8	0
NIST – Industrial Technical Services, Advanced Technology Program <sup>11</sup>	10	0	0	0	0	0
International Trade Administration – Operations and Administration <sup>12</sup>	0	0	0	0	2	2
<b>Subtotal – Commerce<sup>10</sup></b>	<b>18</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>2</b>
<b>Department of Defense</b>						
Research, Development, Test and Evaluation, Army <sup>13</sup>	49	48	21	31	17	-31
Research, Development, Test and Evaluation, Navy	17	17	17	17	16	-1
Research, Development, Test and Evaluation, Air Force	0	0	0	0	0	0
Research, Development, Test and Evaluation, Defense-wide – DARPA <sup>14</sup>	7	6	6	7	0	-6
Research, Development, Test and Evaluation, Defense-wide – Office of the Secretary of Defense	4	0	0	2	0	0
<b>Subtotal – DOD<sup>10</sup></b>	<b>77</b>	<b>72</b>	<b>45</b>	<b>57</b>	<b>33</b>	<b>-39</b>
<b>Department of Energy</b>						
Energy Supply and Conservation – Energy Efficiency and Renewable Energy <sup>15</sup>	1,166	1,411	1,411	1,316	1,236	-175
Energy Supply and Conservation – Electricity Transmission and Distribution <sup>15</sup>	77	111	95	44	106	-6
Energy Supply and Conservation – Nuclear <sup>16</sup>	343	492	493	627	791	299
Fossil Energy R&D – Efficiency and Sequestration <sup>17</sup>	397	508	392	359	539	31
Science – Fusion, Sequestration, and Hydrogen <sup>18</sup>	391	501	501	501	709	208

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority, 2007-2008
Innovative Technology Loan Guarantee Program <sup>19</sup>	0	7	7	6	0	-7
Departmental Administration – Climate Change Technology Program Direction <sup>20</sup>	0	1	1	1	1	1
<b>Subtotal – DOE<sup>10</sup></b>	<b>2,374</b>	<b>3,031</b>	<b>2,900</b>	<b>2,853</b>	<b>3,382</b>	<b>351</b>
<b>Department of Transportation<sup>21</sup></b>						
National Highway Traffic Safety Administration	1	1	1	1	1	0
Research and Innovative Technology Administration – Research and Development	1	1	1	1	1	0
Federal Transit Administration - Research and University Research Centers and Formula and Bus Grants <sup>22</sup>	14	16	15	10	15	-1
<b>Subtotal – DOT<sup>10</sup></b>	<b>16</b>	<b>17</b>	<b>16</b>	<b>11</b>	<b>16</b>	<b>-1</b>
<b>Environmental Protection Agency</b>						
Environmental Programs and Management	90	92	92	92	88	-4
Science and Technology	19	13	13	13	13	0
<b>Subtotal – EPA<sup>10</sup></b>	<b>109</b>	<b>105</b>	<b>105</b>	<b>105</b>	<b>101</b>	<b>-4</b>
<b>National Aeronautics and Space Administration<sup>23</sup></b>						
Science, Aeronautics, and Exploration	<b>129</b>	<b>140</b>	<b>134</b>	<b>119</b>	<b>119</b>	<b>-21</b>
<b>National Science Foundation</b>						
Research and Related Activities	<b>18</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>22</b>	<b>1</b>
<b>Total<sup>10, 24</sup></b>	<b>2,789</b>	<b>3,441</b>	<b>3,276</b>	<b>3,222</b>	<b>3,917</b>	<b>476</b>

<sup>1</sup> All obligation and outlay data are preliminary estimates and are subject to change.

<sup>2</sup> The FY 2008 level includes increased funding for research in cellulosic ethanol.

<sup>3</sup> Though initially run through the Natural Resources Conservation Service, the Biomass R&D, Section 9008 Farm Bill program was transferred at the end of FY 2006 to the Rural Business Service. The program activities, historical funding levels, and treasury account number remain the same.

<sup>4</sup> The Methane to Market partnership is a new initiative for the Office of the Chief Economist in FY 2008.

<sup>5</sup> These are mandatory programs proposed in the Administration's 2007 Farm Bill proposals.

<sup>6</sup> This new program will advance scientific knowledge for the improved production of renewable fuels and biobased products.

- <sup>7</sup> This new program will be used to accelerate development and use of new technologies to more productively utilize low-value woody biomass resources, offsetting the demand for fossil fuels and improving forest health.
- <sup>8</sup> The discretionary funding for the renewable energy program has historically been and continues to be included in this report. The program is proposed for reauthorization in the 2007 Farm Bill proposals and the associated mandatory funding has been included here.
- <sup>9</sup> The discretionary funding for the Biomass R&D program has historically been and continues to be included in this report. The program is proposed for reauthorization in the 2007 Farm Bill proposals and the associated mandatory funding has been included here.
- <sup>10</sup> Agency subtotals and table total may not add due to rounding. All data supersede numbers released with the 2008 President's Budget. Discrepancies resulted from rounding and improved estimates.
- <sup>11</sup> The 2007 Budget authority, obligations, and outlays for NIST's Advanced Technology Program are less than \$500,000. The program has been proposed for elimination in 2008.
- <sup>12</sup> The Department of Commerce will provide funding in this account for the Asia-Pacific Partnership on Clean Development and Climate in 2008.
- <sup>13</sup> The 2007 enacted budget authority funding represents Congressional action on the 2007 budget and includes earmarks that are not proposed for extension in the 2008 President's Budget request.
- <sup>14</sup> The reduction in DARPA funding from 2007 to 2008 represents the natural conclusion of an R&D program to investigate the use of waste materials to produce electricity for military installations.
- <sup>15</sup> The increase in 2007 is due to additional funding provided by the 2007 Continuing Resolution (P.L. 110-5).
- <sup>16</sup> The increases in funding for Energy Supply and Conservation – Nuclear from 2006 to 2007 and 2007 to 2008 reflect increasing support for the Global Nuclear Energy Partnership.
- <sup>17</sup> Funding increased for Fossil Energy R&D – Efficiency and Sequestration from 2006 to 2007 because the FY 2007 Continuing Resolution provided additional funds for this office.
- <sup>18</sup> The increases in funding from 2006 to 2007 and 2007 to 2008 in Science – Fusion, Sequestration, and Hydrogen reflect increased support for programs that are all included within the American Competitiveness Initiative, and are for the most part also included within the Advanced Energy Initiative, including increases to the international ITER fusion project, and three Bioenergy Research Centers becoming operational in 2008.
- <sup>19</sup> This is a new program in 2007. Administrative expenses are reported to establish a loan guarantee office. In 2008 and thereafter, administrative costs will be fee funded, so there is no net cost to the government.
- <sup>20</sup> In 2006, approximately \$400,000 from the Energy Supply and Conservation account was directed to support CCTP analysis and activities.
- <sup>21</sup> In prior reports, funding was presented under DOT's Office of the Secretary of Technology – Transportation, Policy, Research and Development account. This funding was associated with an earmarked project that was not funded after 2005. There is no other climate funding in this account and therefore it has been deleted from the report.
- <sup>22</sup> Section 3045 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU) establishes a National Fuel Cell Bus Technology Development Program (NFCBP). The NFCBP's goal is to facilitate the development of commercially viable fuel cell bus technologies and related infrastructure to reduce fossil fuel dependence and emissions from bus transportation. These grants were funded for the first time in 2006.
- <sup>23</sup> NASA's 2006 funding level increased markedly from the 2006 level reported in the last report due to Congressional direction to increase the budget for the Fundamental Aeronautics Program budget, NASA's major contributor to CCTP funding. The drop from the 2007 enacted level to the 2008 proposed level reflects differences of opinion between the Congress and Administration concerning the level at which the Fundamental Aeronautics Program should be funded.
- <sup>24</sup> Prior reports included funding for the Department of the Interior's Geological Survey – Surveys, Investigations and Research, Geology Discipline, Energy program for research to assess the sources of and potential geologic sequestration options for carbon dioxide. This research was completed in 2005 and there are no other climate technology-related activities to report. Therefore the account has been deleted.

## Table 5

# National Climate Change Technology Initiative

Details by Agency/Account

(Budget authority, obligations, and outlays in millions of dollars)

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY2007 Obligations <sup>1</sup>	FY 2007 Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority, 2007-2008
<b>Department of Energy<sup>2</sup></b>						
Energy Supply and Conservation – Energy Efficiency and Renewable Energy <sup>3</sup>	66	118	117	87	115	-2
<i>Hydrogen Storage</i>	26	35	35	30	44	9
<i>Low Wind Speed Technology</i>	6	12	12	8	6	-6
<i>Solid State Lighting</i>	19	30	30	22	19	-11
<i>Cellulosic Biomass - Biochemical Platform R&amp;D</i>	14	33	33	24	38	5
<i>Transportation Fuel Cells</i>	1	8	8	3	8	0
Energy Supply and Conservation – Nuclear <sup>4</sup>	102	187	186	136	418	231
<i>Nuclear Hydrogen Initiative</i>	24	19	19	20	23	3
<i>Advanced Fuel Cycle/Advanced Burner Reactor</i>	78	167	167	117	395	228
Fossil Energy R&D – Efficiency and Sequestration <sup>5</sup>	121	163	157	114	139	-25
<i>Sequestration</i>	65	105	103	65	86	-19
<i>Integrated Gasification Combined Cycle (IGCC)</i>	56	59	55	50	53	-6
Departmental Administration – Climate Change Technology Program Direction	0	1	1	1	1	1
<b>Subtotal – DOE<sup>6</sup></b>	<b>289</b>	<b>468</b>	<b>461</b>	<b>338</b>	<b>673</b>	<b>204</b>
<b>Environmental Protection Agency</b>						
Environmental Programs and Management - Methane Programs <sup>7</sup>	10	13	13	13	13	0
<b>Total<sup>6</sup></b>	<b>299</b>	<b>481</b>	<b>473</b>	<b>351</b>	<b>685</b>	<b>205</b>

<sup>1</sup> All obligation and outlay data are preliminary estimates and are subject to change.

<sup>2</sup> Line items in italics are non-add.

<sup>3</sup> The increase in funding from 2006 to 2007 in Energy Supply and Conservation – Energy Efficiency and Renewable Energy is largely due to an increased focus on key technologies such as cellulosic biomass, solid state lighting, and hydrogen storage. Cellulosic biomass and hydrogen storage continue to be a priority in the 2008 President's Budget.

- <sup>4</sup> The funding increase for Advanced Fuel Cycle activities ties directly to funding for the Global Nuclear Energy Partnership, part of the President's Advanced Energy Initiative.
- <sup>5</sup> The increase in Fossil Energy R&D – Efficiency and Sequestration funding in 2007 is due to additional funds for this office provided by the 2007 Continuing Resolution (P.L. 110-5) and increased focus on sequestration and gasification technologies.
- <sup>6</sup> Agency subtotals and table total may not add due to rounding. All data supersede numbers released with the 2008 President's Budget. Discrepancies resulted from rounding and improved estimates.
- <sup>7</sup> The increase from 2006 to 2007 is due to full funding of EPA's contribution to the Methane to Markets initiative which is one of several methane programs at EPA.

## **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 2008 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 2008 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 2008, the Administration has requested a total of approximately \$207.3 million for certain debt restructuring programs, including the bilateral Heavily Indebted Poor Countries (HIPC), contributions to the HIPC Trust Fund, and TFCA.

The 2008 budget requests \$106.8 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 \$133.9 million in the Asian Development Bank (ADB), from which a new environmental program may be funded that would be related to the Asia-Pacific Partnership on Clean Development and Climate may be funded.

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

(Budget authority, obligations, and outlays in millions of dollars)

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority, 2007-2008
<b>Department of State</b>						
Diplomatic and Consular Affairs	---	3	3	3	4	1
Economic Support Fund <sup>2,3</sup>	6	32	32	32	32	0
International Organizations and Programs	6	6	6	6	5	-1
<b>Subtotal – State<sup>4</sup></b>	<b>12</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>0</b>
<b>Department of the Treasury<sup>5</sup></b>						
Debt Restructuring – Tropical Forestry Conservation	20	20	20	20	20	0
Global Environment Facility <sup>6</sup>	26	26	26	19	36	9
<b>Subtotal – Treasury<sup>4</sup></b>	<b>46</b>	<b>46</b>	<b>46</b>	<b>39</b>	<b>56</b>	<b>9</b>
<b>U.S. Agency for International Development<sup>2,7</sup></b>						
Andean Counterdrug Initiative <sup>8</sup>	0	0	0	0	0	0
Assistance for Eastern Europe and the Baltic States	6	3	3	3	11	8
Assistance for the Independent States of the Former Soviet Union	30	5	5	5	15	9
Development Assistance	118	89	89	89	81	-9
Economic Support Fund	33	0	0	0	7	6
International Disaster Assistance	2	2	2	2	2	0
P.L.-480 Title II Food Aid	1	0	0	0	0	0
<b>Subtotal – USAID<sup>4</sup></b>	<b>190</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>115</b>	<b>15</b>
<b>Total<sup>4</sup></b>	<b>249</b>	<b>188</b>	<b>188</b>	<b>180</b>	<b>212</b>	<b>24</b>

<sup>1</sup> All obligation and outlay data are preliminary estimates and are subject to change.

<sup>2</sup> USAID is currently restructuring its planning, budgeting and reporting methods and electronic applications. Strategic Objectives that were reported for FY 2006 may not track consistently into elements reported for FY 2007 & FY 2008. Estimates for global climate change (GCC) program funding (as a subset of total element funding) are reported here and may change as the restructuring and reform process is completed. Some GCC program activities may not appear in this table at this time and may be added in future accounting.



- <sup>3</sup> The increase in the Economic Support Fund in 2007 reflects funding for the Asia-Pacific Partnership on Clean Development and Climate.
- <sup>4</sup> Agency subtotals and table total may not add due to rounding. All data supersede numbers released with the 2008 President's Budget. Discrepancies resulted from rounding and improved estimates.
- <sup>5</sup> The 2007 President's Budget included funding for climate-related activities through the Asian Development Bank. That funding was not appropriated and nothing was requested in the 2008 President's Budget. Therefore, that account has been deleted.
- <sup>6</sup> The 2008 Budget provides \$107 million for GEF. Of this amount, a portion will be allocated to programs related to climate change.
- <sup>7</sup> Country by Country details for USAID funding can be found in Appendix D. USAID intends to fully obligate funds related to climate change before their expiration.
- <sup>8</sup> The Andean Counterdrug Initiative account was added in the fiscal year 2004 report to reflect new counter-deforestation activities in Peru. Estimates for 2007 are not yet available.

## **5. ENERGY TAX PROVISIONS THAT MAY REDUCE GREENHOUSE GASES**

This report includes existing energy tax provisions which may reduce greenhouse gases. 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 2008, 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. 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 2006 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. 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, 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*** – This provision provides for up to \$800 million in aggregate issuance of Clean Renewable Energy Bonds (CREBs) through December 31, 2008. Taxpayers holding CREBs on a credit allowance date are entitled to a tax credit in lieu of interest.

***Allowance of deduction for certain energy efficient commercial building property*** – 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*** – 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, 2009.

***Credit for energy efficiency improvements to existing homes*** – A 10 percent investment tax credit up to \$500 is available for expenditures on insulation, exterior windows and doors that improve the energy efficiency of homes and meet certain standards. 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*** – 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*** – 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, 2009.

***Credit for business installation of qualified fuel cell power plants*** – A 30 percent business energy credit for purchase of qualified fuel cell power plants for businesses is allowed.

**Table 7****Energy Tax Provisions That May Reduce Greenhouse Gases**

(Revenue effect in millions of dollars)

	2006	2007	2008	2009	2010	2011	2012	2008-2012
New technology credit (without coal) <sup>1</sup>	440	590	670	690	670	650	630	3,310
Tax credit and deduction for clean-fuel burning vehicles	110	260	150	130	-20	-50	-60	150
Exclusion of utility conservation subsidies	110	110	110	110	110	110	100	540
Credit for holding clean renewable energy bonds	20	60	80	100	100	100	100	480
Allowance of deduction for certain energy efficient commercial building property	80	190	170	90	30	-10	-10	270
Credit for construction of new energy efficient homes	10	20	30	20	10	0	0	60
Credit for energy efficiency improvements to existing homes	230	380	150	0	0	0	0	150
Credit for energy efficient appliances	120	80	0	0	0	0	0	0
Credit for residential purchases/ installations of solar and fuel cells	10	10	10	0	0	0	0	10
Credit for business installation of qualified fuel cells <sup>2</sup>	30	30	50	20	-10	-10	-10	40
<b>TOTAL</b>	<b>1,160</b>	<b>1,730</b>	<b>1,420</b>	<b>1,160</b>	<b>890</b>	<b>790</b>	<b>750</b>	<b>5,010</b>

<sup>1</sup> Estimates of revenue loss from coal provisions have been removed from the tax expenditure estimate in the budget for 2006-2012.

<sup>2</sup> 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 2007 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's Farm Bill reauthorization proposals would provide approximately \$4.4 billion in conservation activities on agricultural lands, and this level of funding represents an increase of about \$1.6 billion from 2002. Through existing 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 permits 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.

# **APPENDIX B**

## **CLIMATE CHANGE FUNDING; SUMMARY OF CHANGES, 2003-2008**

In an effort to improve the accuracy of reporting, the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) have revised their accounting of climate change expenditures. To ensure comparability, data from previous reports back to 2003 have been updated to reflect these changes and are presented in Table 8. Data reported across the five years shown in Table 8 are consistent, except where footnoted.

NASA revised its Climate Change Science Program (CCSP) and Climate Change Research Initiative (CCRI) figures to include the same programmatic content and accounting for overhead costs as reported for 2006-2008. NASA's 2003-2005 CCSP funding levels no longer include its Ground Network and Research Range assets and its 2003 CCRI funding level has been updated to include research and applications content that are now considered to support the CCRI goals.

NOAA historical data for CCSP have been updated to reflect the agency's decision to report activities consistent with the NOAA climate strategic goal, as defined in the NOAA strategic plan (2005). This ensures historic data are consistent with the 2006-2008 funding shown in this report and provides a more accurate picture of its climate funding.

## Table 8

### 2003-2008 Climate Change Funding Summary

(Tax expenditures and Budget authority in millions of dollars)

#### Summary of Discretionary Climate Expenditure Data for FY 2008 FCCER (\$ in millions)

	FY 2003 Actual Budget Authority	FY 2004 Actual Budget Authority	FY 2005 Actual Budget Authority	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-08
<b>Climate Change Science Program (CCSP)<sup>1</sup></b>	2,078	1,966	1,864	1,691	1,822	1,836	14
<i>Climate Change Research Initiative (CCRI)<sup>2, 3</sup></i>	76	161	200	203	246	193	-53
<b>Climate Change Technology Program (CCTP)<sup>4, 5, 6, 7</sup></b>	2,533	2,870	2,808	2,789	3,441	3,917	476
<i>National Climate Change Technology Initiative (NCCTI)<sup>2</sup></i>	---	---	173	299	481	685	205
<b>International Assistance</b>	270	252	234	249	188	212	24
<b>Energy Tax Provisions That May Reduce Greenhouse Gases<sup>8</sup></b>	580	500	369	1,160	1,730	1,420	-310
<b>Total<sup>9</sup></b>	<b>5,454</b>	<b>5,582</b>	<b>5,269</b>	<b>5,876</b>	<b>7,166</b>	<b>7,371</b>	<b>205</b>

<sup>1</sup> Revised 2003-2005 NASA funding levels for CCSP: \$1,297 million for 2003, \$1,185 million for 2004, and \$1,104 million for 2005. Revised 2003-2005 NOAA funding levels for CCSP: \$278 million for 2003, \$242 million for 2004, and \$257 million for 2005.

<sup>2</sup> The Climate Change Research Initiative and The National Climate Change Technology Initiative are subsets of CCSP and CCTP respectively. These are non-add lines.

<sup>3</sup> Revised 2003-2005 NASA funding levels for CCRI: \$38 million for 2003, \$53 million for 2004, and \$90 million for 2005.

<sup>4</sup> The 2003 and 2004 funding levels for CCTP have been updated to include USDA's Value Added Producer Grants for renewable energy. These grants were funded at \$4 million in 2003 and \$2 million in 2004.

<sup>5</sup> The 2003 CCTP has been updated to remove \$26 million for the Department of Transportation's Federal Transit Administration Capital Investment Grants because it has been determined that the grants did not adequately meet the CCTP criteria.

<sup>6</sup> 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.

<sup>7</sup> 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.

<sup>8</sup> 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.

<sup>9</sup> Total excludes double-counts.



# APPENDIX C

## Table 9

### ACCOUNTING OF FEDERAL CLIMATE CHANGE EXPENDITURES BY AGENCY

Details by Agency/Account

(Tax expenditures and 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 2008 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 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated <sup>1</sup> Outlays	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-08
<b><u>Department of Agriculture</u></b>						
<b><u>Climate Change Science Program</u></b>						
Agricultural Research Service	38	34	35	35	32	-3
Cooperative State Research, Education and Extension Services	4	4	4	4	6	1
Economic Research Service	0	0	0	0	0	0
Forest Service – Forest and Rangeland Research	18	19	19	19	19	0
<b>USDA Climate Change Science Program Subtotal<sup>2</sup></b>	<b>61</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>56</b>	<b>-2</b>
 <i>Climate Change Research Initiative<sup>3</sup></i>						
<i>Agricultural Research Service</i>	2	2	2	2	2	0
<i>Forest Service - Forest and Rangeland Research</i>	6	7	7	7	7	0
<b>USDA Climate Change Research Initiative Subtotal<sup>2</sup></b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>0</b>
 <b>Climate Change Technology Program</b>						
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	5	3

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-08
Cooperative State Research, Education and Extension Service – Biofuels/Biomass Research, Formula Funds, National Research Initiative	3	3	4	4	32	29
Forest Service – Biofuels/Biomass, Forest and Rangeland Research	2	2	2	2	5	3
Rural Business Service – Renewable Energy Program	23	23	23	23	34	11
Rural Business Service – Value Added Producer Grants	3	3	3	3	5	2
Rural Business Service – Biomass R&D, Section 9008 Farm Bill	14	12	12	12	0	-12
Office of the Chief Economist - Methane to Markets	0	0	0	0	1	1
Research Education, Economics Area - Bioenergy and Biobased Products Research Initiative (mandatory funding)	---	---	---	---	50	50
Forest Service - Forest Wood to Energy (mandatory funding)	---	---	---	---	15	15
Rural Business Service – Renewable Energy Systems and Energy Efficiency Grants (mandatory funding)	---	---	---	---	50	50
Rural Business Service – Renewable Energy Systems and Energy Efficiency Loans (mandatory funding)	---	---	---	---	21	21
Rural Business Service - Biomass R&D, Section 9008 (mandatory funding)	---	---	---	---	15	15
Subtotal - mandatory funding <sup>2</sup>	---	---	---	---	151	151
Subtotal - discretionary funding <sup>2</sup>	49	46	47	47	83	37
<b>USDA Climate Change Technology Program Subtotal<sup>2</sup></b>	49	46	47	47	233.5	188
<b>Total – USDA<sup>2</sup></b>	<b>110</b>	<b>104</b>	<b>105</b>	<b>105</b>	<b>290</b>	<b>186</b>

**Department of Commerce**

**Climate Change Science Program**

National Oceanic and Atmospheric Administration – Operations, Research, and Facilities	226	229	229	229	233	4
National Oceanic and Atmospheric Administration – Procurement, Acquisition, and Construction	9	7	7	7	7	0
National Institute of Standards and Technology (NIST)	---	---	---	---	5	5
<b>DOC Climate Change Science Program Subtotal<sup>2</sup></b>	235	236	236	236	245	9

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-08
<b><i>Climate Change Research Initiative<sup>3</sup></i></b>						
<i>National Oceanic and Atmospheric Administration – Operations, Research, and Facilities</i>	34	46	46	46	46	0
<b>Climate Change Technology Program</b>						
National Institute of Standards and Technology (NIST) – Scientific and Technological Research and Services	8	8	8	8	8	0
NIST – Industrial Technical Services, Advanced Technology Program	10	0	0	0	0	0
International Trade Administration – Operations and Administration	0	0	0	0	2	2
<b>Climate Change Technology Program Subtotal<sup>2</sup></b>	18	8	8	8	10	2
<b><u>Total – Commerce<sup>2</sup></u></b>	<b>253</b>	<b>244</b>	<b>244</b>	<b>244</b>	<b>255</b>	<b>11</b>
<hr/>						
<b><u>Department of Defense</u></b>						
<b>Climate Change Technology Program</b>						
Research, Development, Test and Evaluation, Army	49	48	21	31	17	-31
Research, Development, Test and Evaluation, Navy	17	17	17	17	16	-1
Research, Development, Test and Evaluation, Air Force	0	0	0	0	0	0
Research, Development, Test and Evaluation, Defense-wide – DARPA	7	6	6	7	0	-6
Research, Development, Test and Evaluation, Defense-wide – Office of the Secretary of Defense	4	0	0	2	0	0
<b><u>Total – DOD<sup>2</sup></u></b>	<b>77</b>	<b>72</b>	<b>45</b>	<b>57</b>	<b>33</b>	<b>-39</b>
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<b><u>Department of Energy</u></b>						
<b>Climate Change Science Program</b>						
Science – Biological & Environmental Research	130	127	127	127	130	3
<b><i>Climate Change Research Initiative<sup>3</sup></i></b>						
<i>Science – Biological &amp; Environmental Research</i>	28	24	24	24	24	0
<b>Climate Change Technology Program</b>						
Energy Supply and Conservation – Energy Efficiency and Renewable Energy	1,166	1,411	1,411	1,316	1,236	-175

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-08
Energy Supply and Conservation – Electricity Transmission and Distribution	77	111	95	44	106	-6
Energy Supply and Conservation – Nuclear	343	492	493	627	791	299
Fossil Energy R&D – Efficiency and Sequestration	397	508	392	359	539	31
Science – Fusion, Sequestration, and Hydrogen	391	501	501	501	709	208
Innovative Technology Loan Guarantee Program	0	7	7	6	0	-7
Departmental Administration – Climate Change Technology Program Direction	0	1	1	1	1	1
<b>DOE Climate Change Technology Program Subtotal<sup>2</sup></b>	<b>2,374</b>	<b>3,031</b>	<b>2,900</b>	<b>2,853</b>	<b>3,382</b>	<b>351</b>
<b><i>National Climate Change Technology Initiative<sup>3</sup></i></b>						
<i>Energy Supply and Conservation – Energy Efficiency and Renewable Energy</i>	<i>66</i>	<i>118</i>	<i>117</i>	<i>87</i>	<i>115</i>	<i>-2</i>
<i>Energy Supply and Conservation – Nuclear</i>	<i>102</i>	<i>187</i>	<i>186</i>	<i>136</i>	<i>418</i>	<i>231</i>
<i>Fossil Energy R&amp;D – Efficiency and Sequestration</i>	<i>121</i>	<i>163</i>	<i>157</i>	<i>114</i>	<i>139</i>	<i>-25</i>
<i>Departmental Administration – Climate Change Technology Program Direction</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>
<b><i>DOE National Climate Change Technology Initiative Subtotal<sup>2</sup></i></b>	<b><i>289</i></b>	<b><i>468</i></b>	<b><i>461</i></b>	<b><i>338</i></b>	<b><i>673</i></b>	<b><i>204</i></b>
<b><u>Total – DOE<sup>2</sup></u></b>	<b>2,504</b>	<b>3,158</b>	<b>3,026</b>	<b>2,980</b>	<b>3,511</b>	<b>354</b>
<b><u>Department of Health and Human Services</u></b>						
<b>Climate Change Science Program</b>						
National Institutes of Health	50	50	50	49	49	-1
<b><u>Total – HHS<sup>2</sup></u></b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>49</b>	<b>49</b>	<b>-1</b>
<b><u>Department of the Interior</u></b>						
<b>Climate Change Science Program</b>						
U.S. Geological Survey – Surveys, Investigations, and Research	27	26	26	26	27	1
<b><u>Total – DOI<sup>2</sup></u></b>	<b>27</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>27</b>	<b>1</b>
<b><u>Department of State</u></b>						
<b>International Assistance</b>						
Diplomatic and Consular Affairs	---	3	3	3	4	1
Economic Support Fund	6	32	32	32	32	0
International Organizations and Programs	6	6	6	6	5	-1

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated <sup>1</sup> Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-08
<b>State International Assistance Subtotal<sup>2</sup></b>	12	41	41	41	41	0
<b><u>Total – State<sup>2</sup></u></b>	<b>12</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>0</b>

**Department of Transportation**

**Climate Change Science Program**

Federal Highway Administration – Federal-Aid Highways	0	0	0	0	1	0
Federal Aviation Administration – Research, Engineering, and Development	0	0	0	0	1	0
Federal Transit Administration - Research and University Research Centers	0	0	0	0	0	0
<b>DOT Climate Change Science Program Subtotal<sup>2</sup></b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>

*Climate Change Research Initiative<sup>3</sup>*

<i>Federal Highway Administration – Federal-aid Highways</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>
<b><i>DOT Climate Change Research Initiative Subtotal<sup>2</sup></i></b>	<b><i>0</i></b>	<b><i>0</i></b>	<b><i>0</i></b>	<b><i>0</i></b>	<b><i>1</i></b>	<b><i>0</i></b>

**Climate Change Technology Program**

National Highway Traffic Safety Administration Research and Innovative Technology Administration - Research and Development	1	1	1	1	1	0
Federal Transit Administration - Research and University Research Centers and Formula and Bus Grants	14	16	15	10	15	-1
<b>DOT Climate Change Technology Program Subtotal<sup>2</sup></b>	<b>16</b>	<b>17</b>	<b>16</b>	<b>11</b>	<b>16</b>	<b>-1</b>
<b><u>Total – DOT<sup>2</sup></u></b>	<b>17</b>	<b>18</b>	<b>17</b>	<b>12</b>	<b>17</b>	<b>0</b>

**Department of the Treasury**

**International Assistance**

Debt Restructuring – Tropical Forestry Conservation	19.8	20	20	20	20	0
Global Environment Facility	26.4	26	26	19	36	9
<b><u>Total – Treasury<sup>2</sup></u></b>	<b>46</b>	<b>46</b>	<b>46</b>	<b>39</b>	<b>56</b>	<b>9</b>

**Environmental Protection Agency**

**Climate Change Science Program**

Science and Technology	19	16	16	16	17	1
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	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-08
<b>Climate Change Technology Program</b>						
Environmental Programs and Management	90	92	92	92	88	-4
Science and Technology	19	13	13	13	13	0
<b>EPA Climate Change Technology Program Subtotal<sup>2</sup></b>	<b>109</b>	<b>105</b>	<b>105</b>	<b>105</b>	<b>101</b>	<b>-4</b>
<b>National Climate Change Technology Initiative<sup>3</sup></b>						
<i>Environmental Programs and Management - Methane Programs</i>	<i>10</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>13</i>	<i>0</i>
<b>Total – EPA<sup>2</sup></b>	<b>128</b>	<b>121</b>	<b>121</b>	<b>121</b>	<b>118</b>	<b>-4</b>
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<b><u>National Aeronautics and Space Administration</u></b>						
<b>Climate Change Science Program</b>						
Science, Aeronautics, and Exploration	953	1,083	1,160	1,280	1,084	0
<b>Climate Change Research Initiative<sup>3</sup></b>						
<i>Science, Aeronautics, and Exploration</i>	<i>95</i>	<i>129</i>	<i>138</i>	<i>152</i>	<i>76</i>	<i>-53</i>
<b>Climate Change Technology Program</b>						
Science, Aeronautics, and Exploration	129	140	134	119	119	-21
<b>Total – NASA<sup>2</sup></b>	<b>1,082</b>	<b>1,224</b>	<b>1,294</b>	<b>1,399</b>	<b>1,203</b>	<b>-21</b>
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<b><u>National Science Foundation</u></b>						
<b>Climate Change Science Program</b>						
Research and Related Activities	197	205	205	205	208	3
<b>Climate Change Research Initiative<sup>3</sup></b>						
<i>Research and Related Activities</i>	<i>25</i>	<i>25</i>	<i>25</i>	<i>25</i>	<i>25</i>	<i>0</i>
<b>Climate Change Technology Program</b>						
Research and Related Activities	18	21	21	21	22	1
<b>Total – NSF<sup>2</sup></b>	<b>215</b>	<b>226</b>	<b>226</b>	<b>226</b>	<b>231</b>	<b>5</b>
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<b><u>Smithsonian Institution</u></b>						
<b>Climate Change Science Program</b>						
Salaries and Expenses	6	6	6	6	6	0
<b>Total – Smithsonian<sup>2</sup></b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>0</b>

	FY 2006 Actual Budget Authority	FY 2007 Enacted Budget Authority	FY 2007 Estimated Obligations <sup>1</sup>	FY 2007 Estimated Outlays <sup>1</sup>	FY 2008 Proposed Budget Authority	Change in Budget Authority 2007-08
<b>U.S. Agency for International Development</b>						
<b>Climate Change Science Program</b>						
Development Assistance	13	14	14	14	13	-1
<i>Climate Change Research Initiative<sup>3</sup></i>						
<i>Development Assistance</i>	<i>13</i>	<i>14</i>	<i>14</i>	<i>14</i>	<i>13</i>	<i>-1</i>
<b>International Assistance</b>						
Andean Counterdrug Initiative	0	0	0	0	0	0
Assistance for Eastern Europe and the Baltic States	6	3	3	3	11	8
Assistance for the Independent States of the Former Soviet Union	30	5	5	5	15	9
Development Assistance	118	89	89	89	81	-9
Economic Support Fund	33	0	0	0	7	6
International Disaster Assistance	2	2	2	2	2	0
P.L.-480 Title II Food Aid	1	0	0	0	0	0
<b>USAID International Assistance Subtotal<sup>2</sup></b>	<b>190</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>115</b>	<b>15</b>
<b><u>Total – USAID<sup>2,4</sup></u></b>	<b>190</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>115</b>	<b>15</b>
<b>Total - ALL AGENCIES FUNDING<sup>2</sup></b>	<b>4,716</b>	<b>5,436</b>	<b>5,349</b>	<b>5,406</b>	<b>5,951</b>	<b>515</b>
<b>Energy Tax Provisions That May Reduce Greenhouse Gases<sup>5</sup></b>	<b>1,160</b>	<b>1,730</b>	<b>1,730</b>	<b>1,730</b>	<b>1,420</b>	<b>-310</b>
<b>Total - ALL AGENCIES FUNDING + TAX PROVISIONS<sup>2</sup></b>	<b>5,876</b>	<b>7,166</b>	<b>7,079</b>	<b>7,136</b>	<b>7,371</b>	<b>205</b>

<sup>1</sup> All obligation and outlay data are preliminary full year estimates and are subject to change.

<sup>2</sup> Subtotals and totals may not add due to rounding. Data supersede numbers released with the President's 2008 Budget. Discrepancies resulted from rounding and improved estimates.

<sup>3</sup> 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

<sup>4</sup> 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.

<sup>5</sup> 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.

# APPENDIX D

## Table 10

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

(Dollars in Thousands)

		Account <sup>2</sup>	Cat. <sup>3</sup>	FY 2006 Actual Budget Authority	Actual Obligations <sup>4</sup>	Actual Outlays <sup>4</sup>	FY 2007 <sup>1</sup> Enacted Budget Authority	Estimated Obligations <sup>4</sup>	Estimated Outlays <sup>4</sup>	FY 2008 Proposed Budget Authority
<b>AFRICA (AFR)</b>										
Africa										
Regional	4.4.1 Modern Energy Services	DA	1	0	0	0	1,050	1,050	1,050	0
Africa										
Regional	4.8.2 Clean Productive Environment	DA	1	0	0	0	500	500	500	0
Africa										
Regional	4.8.3 Program Support (Environment)	DA	5	0	0	0	23	23	23	0
Central Africa										
Regional	4.8.1 Natural Resources and Biodiversity	DA	3	15,000	15,000	15,000	13,481	13,481	13,481	9,765
Central Africa										
Regional	4.8.3 Program Support (Environment)	DA	3	0	0	0	1,520	1,520	1,520	1,535
East Africa										
Regional	4.8.1 Natural Resources and Biodiversity	DA	5	500	469	469	0	0	0	0
East Africa										
Regional	4.8.3 Program Support (Environment)	DA	3	0	31	31	0	0	0	0
West Africa										
Regional	4.4.1 Modern Energy Services	DA	5	1,000	1,000	500	0	0	0	276
West Africa										
Regional	4.8.1 Natural Resources and Biodiversity	DA	3	0	0	0	40	40	40	0
Guinea	4.8.1 Natural Resources and Biodiversity	DA	3	500	500	1,000	0	0	0	0
Kenya	4.8.1 Natural Resources and Biodiversity	DA	3	168	168	0	0	0	0	0
Liberia	4.5.2 Agriculture Sector Productivity	DA	3	0	0	0	400	400	400	0
Liberia	4.8.1 Natural Resources and Biodiversity	DA	3	0	0	0	1,940	1,940	1,940	0
Madagascar	4.5.2 Agriculture Sector Productivity	DA	3	0	0	0	1,290	1,290	1,290	0
Madagascar	4.8.1 Natural Resources and Biodiversity	DA	3	6,147	6,147	2,800	4,852	4,852	4,852	4,300
Malawi	4.8.1 Natural Resources and Biodiversity	DA	3	900	900	1,000	400	400	400	869
Mali	4.8.1 Natural Resources and Biodiversity	DA	3	0	515	500	0	0	0	346
Mali	4.8.2 Clean Productive Environment	DA	1	0	0	350	0	0	0	0
Mali	4.8.3 Program Support (Environment)	DA	5	550	35	650	0	0	0	23
Senegal	4.8.1 Natural Resources and Biodiversity	DA	3	500	500	500	1,000	1,000	1,000	500
South Africa	4.4.1 Modern Energy Services	DA	1	1,000	667	1,495	0	0	0	0
South Africa	4.8.2 Clean Productive Environment	DA	1	0	270	500	944	944	944	0
South Africa	4.8.3 Program Support (Environment)	DA	1	0	63	5	0	0	0	0
Uganda	4.8.1 Natural Resources and Biodiversity	DA	3	600	600	1,500	0	0	0	868
<b>Total AFR</b>				<b>26,865</b>	<b>26,865</b>	<b>26,300</b>	<b>27,440</b>	<b>27,440</b>	<b>27,440</b>	<b>18,482</b>

#### ASIA and NEAR EAST (ANE)

ANE										
Regional	4.5.2 Agriculture Sector Productivity	DA	3	0	0	0	400	400	400	0



		Account <sup>2</sup>	Cat. <sup>3</sup>	FY 2006	Actual Obligations <sup>4</sup>	Actual Outlays <sup>4</sup>	FY 2007 <sup>1</sup>	Estimated Obligations <sup>4</sup>	Estimated Outlays <sup>4</sup>	FY 2008
				Actual Budget Authority			Enacted Budget Authority			Proposed Budget Authority
ANE										
Regional	4.8.2 Clean Productive Environment	DA	1	0	200	60	250	250	250	0
ANE										
Regional	4.8.3 Program Support (Environment)	DA	1,3	0	0	0	225	225	225	0
Regional Development Mission - Asia										
	4.4.1 Modern Energy Services	DA	1	400	0	0	0	0	0	0
Regional Development Mission - Asia										
	4.8.2 Clean Productive Environment	DA	1	0	0	0	500	500	500	0
South Asia Regional										
	4.4.1 Modern Energy Services	DA	1	4,941	1,170	7,939	4,400	4,400	4,400	2,251
South Asia Regional										
	4.4.1 Modern Energy Services	ESF	1	990	0	0	0	0	0	0
South Asia Regional										
	4.4.4 Program Support (Infrastructure)	DA	1	0	473	800	600	600	600	449
Afghanistan										
	4.4.1 Modern Energy Services	ESF	1	28,000	3,000	0	0	0	0	4,000
Afghanistan										
	4.8.1 Natural Resources and Biodiversity	DA	3	0	10,800	5,100	0	0	0	0
Bangladesh										
	4.4.1 Modern Energy Services	DA	1	0	1,150	878	375	375	375	1,800
Bangladesh										
	4.4.4 Program Support (Infrastructure)	DA	1	0	0	355	0	0	0	200
Bangladesh										
	4.8.1 Natural Resources and Biodiversity	DA	3,5	1,089	2,748	0	0	0	0	1,800
Bangladesh										
	4.8.3 Program Support (Environment)	DA	3	0	0	0	0	0	0	200
Cambodia										
	2.2.4 Anti-corruption reform	DA	3	0	0	0	1,000	1,000	1,000	0
India										
	4.4.1 Modern Energy Services	DA	1	3,698	2,915	2,512	0	0	0	230
India										
	4.4.1 Modern Energy Services	ESF	1	1,500	1,500	2,641	0	0	0	0
India										
	4.4.4 Program Support (Infrastructure)	DA	1	0	681	280	670	670	670	70
India										
	4.8.2 Clean Productive Environment	DA	1	0	100	2,861	1,748	1,748	1,748	0
India										
	4.8.3 Program Support (Environment)	DA	1	0	50	120	315	315	315	0
Indonesia										
	4.8.1 Natural Resources and Biodiversity	DA	3	4,000	6,078	4,110	1,800	1,800	1,800	4,900
Indonesia										
	4.8.2 Clean Productive Environment	DA	1	0	400	200	1,800	1,800	1,800	408
Indonesia										
	4.8.3 Program Support (Environment)	DA	3	0	444	2	0	0	0	192
Mongolia										
	4.4.1 Modern Energy Services	ESF	1	800	1,200	400	0	0	0	1,000
Mongolia										
	4.4.4 Program Support (Infrastructure)	ESF	0	0	50	17	0	0	0	0
Nepal										
	4.4.1 Modern Energy Services	DA	1	0	0	0	0	0	0	0
Nepal										
	4.8.1 Natural Resources and Biodiversity	DA	3	0	1,567	0	0	0	0	0
Philippines										
	4.4.1 Modern Energy Services	DA	1	2,010	783	2,235	1,275	1,275	1,275	3,000
Philippines										
	4.4.1 Modern Energy Services	ESF	1	594	594	594	0	0	0	1,150
Philippines										
	4.4.4 Program Support (Infrastructure)	DA	1	0	238	238	0	0	0	0
Philippines										
	4.8.1 Natural Resources and Biodiversity	DA	3	1,097	938	1,106	0	0	0	4,978
Philippines										
	4.8.2 Clean Productive Environment	DA	1	0	0	347	13	13	13	0
Philippines										
	4.8.3 Program Support (Environment)	DA	1,3	0	159	159	0	0	0	0
<b>Total ANE</b>				<b>49,119</b>	<b>37,238</b>	<b>32,954</b>	<b>15,371</b>	<b>15,371</b>	<b>15,371</b>	<b>26,628</b>

#### EUROPE and EURASIA (ENE)<sup>5</sup>

Europe Regional	4.4.1 Modern Energy Services	AEEB/SEED	1	1,500	1,229	0	2,477	2,477	2,477	2,071
Europe Regional	4.4.4 Program Support (Infrastructure)	AEEB/SEED	1	0	168	0	0	0	0	529
Europe Regional	4.8.1 Natural Resources and Biodiversity	AEEB/SEED	3	0	0	0	0	0	0	120
Europe Regional	4.8.3 Program Support (Environment)	AEEB/SEED	5	0	0	0	0	0	0	248

		Account <sup>2</sup>	Cat. <sup>3</sup>	FY 2006		Actual Outlays <sup>4</sup>	FY 2007 <sup>1</sup>		Estimated Outlays <sup>5</sup>	FY 2008
				Actual Budget Authority	Actual Obligations <sup>4</sup>		Enacted Budget Authority	Estimated Obligations <sup>4</sup>		Proposed Budget Authority
Albania	4.4.1 Modern Energy Services	AEEB/SEED	1	750	750	0	550	550	550	469
Albania	4.4.4 Program Support (Infrastructure)	AEEB/SEED	1	0	0	0	0	0	0	31
Belarus	4.8.3 Program Support (Environment)	FSA	3	0	36	36	0	0	0	0
Bosnia and Herzegovina	4.4.1 Modern Energy Services	AEEB/SEED	1	800	150	150	0	0	0	941
Bosnia and Herzegovina	4.4.4 Program Support (Infrastructure)	AEEB/SEED	1	0	50	50	0	0	0	59
Bulgaria	4.4.1 Modern Energy Services	AEEB/SEED	1	0	100	0	0	0	0	0
Croatia	4.4.1 Modern Energy Services	AEEB	1	0	0	0	0	0	0	0
Cyprus	Foster a durable settlement	ESF	1	300	300	0	0	0	0	0
Kosovo	4.4.1 Modern Energy Services	AEEB/SEED	1	2,500	3,145	1,800	0	0	0	5,000
Kosovo	4.8.2 Clean Productive Environment	AEEB/SEED	1	700	0	0	0	0	0	1,000
Macedonia	4.4.1 Modern Energy Services	AEEB/SEED	1	0	300	0	0	0	0	0
Macedonia	2.2.3 Local Government & Decentralization	AEEB/SEED	1	0	0	0	50	50	50	0
Romania	4.4.1 Modern Energy Services	AEEB/SEED	1	200	100	20	0	0	0	0
Romania	4.4.4 Program Support (Infrastructure)	AEEB/SEED	1	0	100	50	0	0	0	0
Moldova	4.8.3 Program Support (Environment)	FSA	3	0	44	44	0	0	0	0
Montenegro	4.4.1 Modern Energy Services	SEED	1	0	50	0	0	0	0	0
Montenegro	4.4.4 Program Support (Infrastructure)	SEED	1	0	8	0	0	0	0	0
Serbia	4.4.1 Modern Energy Services	SEED	1	0	0	0	0	0	0	500
<b>Subtotal Europe</b>				<b>6,750</b>	<b>6,530</b>	<b>2,150</b>	<b>3,077</b>	<b>3,077</b>	<b>3,077</b>	<b>10,968</b>
Central Asia Regional	4.4.1 Modern Energy Services	FSA	1	0	312	0	0	0	0	1,101
Central Asia Regional	4.4.4 Program Support (Infrastructure)	FSA	1	0	0	0	0	0	0	124
Eurasia Regional	4.4.1 Modern Energy Services	FSA	1	1,250	750	0	0	0	0	650
Eurasia Regional	4.4.4 Program Support (Infrastructure)	FSA	1	0	287	0	0	0	0	450
Eurasia Regional	4.8.3 Program Support (Environment)	FSA	1	0	0	0	0	0	0	375
Armenia	4.4.1 Modern Energy Services	FSA	1	5,870	870	0	550	550	550	2,947
Armenia	4.4.4 Program Support (Infrastructure)	FSA	1	0	0	0	0	0	0	269
Armenia	4.8.2 Clean Productive Environment	FSA	1	0	334	68	0	0	0	0
Azerbaijan	4.4.1 Modern Energy Services	FSA	1	0	500	55	0	0	0	0
Azerbaijan	1.6.1 Conflict Mitigation	FSA		0	0	0	350	350	350	0
Georgia	4.4.1 Modern Energy Services	FSA	1	9,120	3,141	2,865	4,400	4,400	4,400	2,723
Georgia	4.4.4 Program Support (Infrastructure)	FSA	1	0	264	35	0	0	0	277
Georgia	4.8.1 Natural Resources and Biodiversity	FSA	3,5	0	250	0	0	0	0	0
Kazakhstan	4.4.1 Modern Energy Services	FSA	1	800	538	65	0	0	0	262
Kazakhstan	4.4.4 Program Support (Infrastructure)	FSA	1	0	1	0	0	0	0	38
Kyrgyz Republic	4.4.1 Modern Energy Services	FSA	1	500	580	0	0	0	0	440
Kyrgyz Republic	4.4.4 Program Support (Infrastructure)	FSA	1	0	68	13	0	0	0	60
Russia	4.8.1 Natural Resources and Biodiversity	FSA	3	500	0	0	0	0	0	0

		Account <sup>2</sup>	Cat. <sup>3</sup>	FY 2006		FY 2007 <sup>1</sup>			FY 2008	
				Actual Budget Authority	Actual Obligations <sup>4</sup>	Actual Outlays <sup>4</sup>	Enacted Budget Authority	Estimated Obligations <sup>4</sup>	Estimated Outlays <sup>5</sup>	Proposed Budget Authority
Tajikistan	4.4.1 Modern Energy Services	FSA	1	500	200	0	0	0	0	784
Tajikistan	4.4.4 Program Support (Infrastructure)	FSA	1	0	1	0	0	0	0	16
Turkmenistan	4.4.1 Modern Energy Services	FSA	1	0	0	0	0	0	0	0
Ukraine	4.4.1 Modern Energy Services	FSA	1	11,118	0	0	0	0	0	4,030
Ukraine	4.4.4 Program Support (Infrastructure)	FSA	1	0	0	0	0	0	0	70
Ukraine	4.8.1 Natural Resources and Biodiversity	FSA	3	200	200	25	0	0	0	0
Ukraine	4.8.3 Program Support (Environment)	FSA	3	0	63	63	0	0	0	0
Uzbekistan	4.4.1 Modern Energy Services	FSA	1	0	0	0	0	0	0	0
<b>Subtotal Eurasia</b>				<b>29,858</b>	<b>8,359</b>	<b>3,189</b>	<b>5,300</b>	<b>5,300</b>	<b>5,300</b>	<b>14,616</b>
<b>Total ENE</b>				<b>36,608</b>	<b>14,889</b>	<b>5,339</b>	<b>8,377</b>	<b>8,377</b>	<b>8,377</b>	<b>25,584</b>

#### LATIN AMERICA and CARIBBEAN (LAC)

LAC										
Regional	4.8.1 Natural Resources and Biodiversity	DA	3	10,800	10,800	4,050	3,255	3,255	3,255	2,767
Central America Regional	4.8.1 Natural Resources and Biodiversity	DA	1,3	2,000	2,000	1,350	0	0	0	1,400
Central America Regional	4.8.3 Program Support (Environment)	DA	5	250	250	250	0	0	0	0
Bolivia	4.8.1 Natural Resources and Biodiversity	DA	3	2,000	3,839	3,641	3,396	3,396	3,396	3,177
Bolivia	4.8.1 Natural Resources and Biodiversity	PL480	3	0	200	0	0	0	0	0
Bolivia	4.8.3 Program Support (Environment)	DA	3	0	295	295	284	284	284	295
Brazil	4.4.1 Modern Energy Services	DA	1	800	866	866	200	200	200	0
Brazil	4.4.4 Program Support (Infrastructure)	DA	1	0	134	134	0	0	0	0
Brazil	4.8.1 Natural Resources and Biodiversity	DA	3	4,200	5,572	5,572	3,739	3,739	3,739	0
Brazil	4.8.3 Program Support (Environment)	DA	3	0	556	556	0	0	0	0
Ecuador	4.8.1 Natural Resources and Biodiversity	DA	3	2,200	2,200	2,769	1,150	1,150	1,150	0
Ecuador	4.8.1 Natural Resources and Biodiversity	ESF	3	700	0	494	0	0	0	0
Guatemala	4.8.1 Natural Resources and Biodiversity	DA	3	200	400	150	582	582	582	0
Guatemala	4.8.1 Natural Resources and Biodiversity	ESF	3	0	0	0	0	0	0	350
Honduras	4.8.1 Natural Resources and Biodiversity	DA	3	1,700	1,659	1,131	700	700	700	1,419
Honduras	4.8.1 Natural Resources and Biodiversity	PL480	3	1,000	0	0	0	0	0	0
Mexico	4.4.1 Modern Energy Services	DA	1	1,100	650	1,720	0	0	0	0
Mexico	4.4.4 Program Support (Infrastructure)	DA	5	400	100	0	0	0	0	0
Mexico	4.7.5 Program Support (Economic Opportunity)	DA	1,3	0	0	0	50	50	50	0
Mexico	4.8.1 Natural Resources and Biodiversity	DA	3	3,500	995	4,411	935	935	935	0
Mexico	4.8.2 Clean Productive Environment	DA	1	0	0	0	550	550	550	500
Mexico	4.8.3 Program Support (Environment)	ESF	5	0	0	0	308	308	308	295
Mexico	5.2.1 Capacity Building, Preparedness, and Planning	DA	5	0	0	0	100	100	100	0
Nicaragua	4.8.1 Natural Resources and Biodiversity	DA	3	500	500	0	350	350	350	350
Panama	4.8.1 Natural Resources and Biodiversity	DA	3	2,500	3,482	3,000	0	0	0	0
Paraguay	4.8.1 Natural Resources and Biodiversity	DA	3	150	150	150	0	0	0	40
Paraguay	4.8.3 Program Support (Environment)	DA	3	0	5	5	0	0	0	2
Peru	Reduction of Illicit Coca Production	ACI	3	0	750	334	0	0	0	0
Peru	4.8.1 Natural Resources and Biodiversity	DA	3	2,852	1,621	902	1,765	1,765	1,765	500
<b>Total LAC</b>				<b>36,852</b>	<b>37,024</b>	<b>31,780</b>	<b>17,364</b>	<b>17,364</b>	<b>17,364</b>	<b>11,095</b>

	Account <sup>2</sup>	Cat. <sup>3</sup>	FY 2006		FY 2007 <sup>1</sup>			FY 2008		
			Actual Budget Authority	Actual Obligations <sup>4</sup>	Actual Outlays <sup>4</sup>	Enacted Budget Authority	Estimated Obligations <sup>4</sup>	Estimated Outlays <sup>4</sup>	Proposed Budget Authority	
<b>DEMOCRACY, CONFLICT, and HUMANITARIAN ASSISTANCE (DCHA)</b>										
DCHA	Climate Monitoring and Observing	IDA	5	2,300	2,300	2,543	2,300	2,300	2,300	2,300
DCHA	FEWSNET	DA	5	13,200	13,200	5,500	13,200	13,200	13,200	13,200
DCHA	2.4.1 Civic Participation	DA	1	0	0	0	4	4	4	0
DCHA	4.4.1 Modern Energy Services	DA	1	0	0	0	43	43	43	0
DCHA	4.7.2 Policy Environment for Micro and Small Enterprises	DA	1	0	0	0	16	16	16	0
<b>Total DCHA</b>				<b>15,500</b>	<b>15,500</b>	<b>8,043</b>	<b>15,563</b>	<b>15,563</b>	<b>15,563</b>	<b>15,500</b>
<b>ECONOMIC GROWTH, AGRICULTURE and TRADE (EGAT)</b>										
EGAT	4.5.2 Agriculture Sector Productivity	DA	3,5	0	0	0	2,251	2,251	2,251	0
EGAT	4.4.1 Modern Energy Services	DA	1	6,245	6,245	8,512	2,813	2,813	2,813	2,215
EGAT	4.4.4 Program Support (Infrastructure)	DA	1	0	0	0	1,438	1,438	1,438	0
EGAT	4.8.1 Natural Resources and Biodiversity	DA	3	13,697	12,791	15,785	4,639	4,639	4,639	8,079
EGAT	4.8.2 Clean Productive Environment	DA	1,3,5	5,550	3,000	3,200	1,512	1,512	1,512	1,741
EGAT	4.8.3 Program Support (Environment)	DA	3,5	0	0	0	3,689	3,689	3,689	5,651
<b>Total EGAT</b>				<b>25,492</b>	<b>22,036</b>	<b>27,497</b>	<b>16,342</b>	<b>16,342</b>	<b>16,342</b>	<b>17,686</b>
<b>USAID TOTAL</b>				<b>190,436</b>	<b>153,551</b>	<b>131,912</b>	<b>100,457</b>	<b>100,457</b>	<b>100,457</b>	<b>114,975</b>

<sup>1</sup> 2007 allocations have not been made and Operational Plans are still under review; obligations have not been made and budget amounts may change.

<sup>2</sup> **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

<sup>3</sup> **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.

<sup>4</sup> Obligation and outlay data are preliminary full year estimates and are subject to change. USAID intends to fully obligate funds related to climate change before their expiration. Outlay estimates reflect a conservative implementation schedule and are subject to change.

<sup>5</sup> In the Eurasia region as reported by the regional bureaus, FY06 budgets for many programs were authorized from AEEB funds, but the obligations occurred from SEED funds. This indicated by AEEB/SEED in the account column.