

Climate Change Research Flat in 2008 Budget

AAAS R&D Funding Update on R&D in Climate Change Science Program

(This analysis is an update of data originally presented in *AAAS Report XXXII: Research and Development FY 2008*, a comprehensive look at the President's budget for R&D in FY 2008. This analysis contains revised estimates of Climate Change Science Program (CCSP) R&D, different from figures originally presented in the President's budget. More tables and continually updated supplemental materials on R&D in the FY 2008 budget can be found on the AAAS R&D Web site at <http://www.aaas.org/spp/rd>.)

Highlights

- R&D in the interagency Climate Change Science Program (CCSP) would increase slightly in the proposed FY 2008 budget by 0.8 percent to \$1.8 billion (see Table). In real terms, however, CCSP funding would continue its steep fall of 23 percent from 2003 to 2008 and would be well below annual funding levels over the past decade.

- The related Climate Change Technology Program (CCTP), after a banner year in 2007 thanks to congressional add-ons for energy programs, would increase a further \$325 million or 9.4 percent in the FY 2008 proposed budget to \$3.8 billion (see Table).

- The Congress is trying to add even more to the CCSP and CCTP requests in the FY 2008 appropriations process, but it could be months before they are finalized.

Climate Change Science Program funding in the FY 2008 Budget

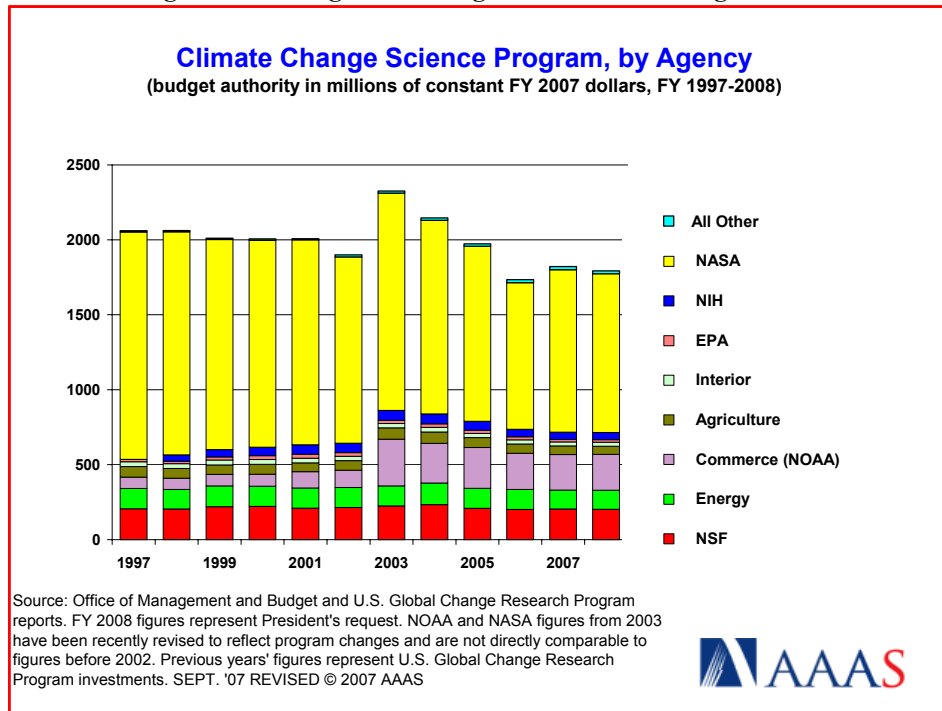


Figure 1. (click on image for full-size PDF)

Revised data indicate that federal funding for the longstanding interagency Climate Change Science Program (CCSP) would barely increase by 0.8 percent or \$14 million in the President's proposed budget to \$1.8 billion in FY 2008, well behind the projected 2.4 percent inflation rate (see Table). Although CCSP funding would be well above FY 2006 funding of \$1.7 billion during a particularly disastrous budget year for NASA, the largest sponsor of climate change science, CCSP funding in both 2007 and 2008 would be well below the average \$2 billion-a-year funding levels of the past decade. As shown in Figure 1, CCSP funding has declined steeply since 2003, the year NASA and National Oceanic and Atmospheric Administration (NOAA) restructured its programs significantly to count more programs within CCSP than in previous years. The proposed 2008 CCSP budget would be 23 percent below the 2003 funding level in inflation-adjusted terms.

The Climate Change Science Program (CCSP) dates back to the late 1980s when the U.S. Global Change Research Program (USGCRP) took shape as an interagency, coordinated federal research effort to understand climate change through federal support of research. Now an effort involving a dozen federal agencies, the program has been restructured and renamed over the years but remains an interagency effort complete with a coordinating office, structured coordinating mechanisms between the agencies, and an integrated budget. This decade, a similar effort called the Climate Change Technology Program (CCTP) has emerged as a more development oriented effort to coordinate programs that attempt to respond to or mitigate the effects of climate change. CCTP includes applied research, development, and also non-R&D deployment, demonstration, and mitigation programs. CCTP funding would increase a dramatic \$325 million or 9.4 percent to \$3.8 billion in the proposed 2008 budget (see Table), after an even larger increase in the final 2007 appropriations as approved by Congress in February 2007. Department of Energy (DOE) funding dominates CCTP, especially its programs in Energy Supply and Conservation that fund R&D on renewable energy and energy conservation as well as non-R&D deployment and demonstration projects.

Outlook for Climate Change Funding

The 2008 budget is now before the 110th Congress and is being translated into FY 2008 appropriations for the many agencies participating in the two interagency climate change programs. The 110th Congress has already indicated its intention to dramatically boost federal spending on both the CCSP and CCTP, and made a start in February 2007 by finalizing 2007 appropriations with large increases above the 2007 request for both initiatives, particularly in DOE's programs. Armed with \$21 billion more for all domestic appropriations than the President's request, congressional appropriators have boosted funding for climate change science in 2008 appropriations so far, including new dedicated climate change science programs in agencies such as USGS and EPA. Appropriators have also added hundreds of millions to the request for DOE's energy R&D programs which make up a big part of the CCTP. But 2008 appropriations are far from finished, and big battles loom between the President and the Congress over most of the 12 2008 appropriations bills. President Bush has threatened to veto any bills that exceed his budget request, and most of them could do so because of the \$21 billion in additional congressional money sprinkled among them. The final funding levels for climate change programs in 2008 thus remain uncertain.

(More materials on R&D in the FY 2008 budget, historical data and charts, and more information on *AAAS Report XXXII: Research and Development FY 2008*, can be found on the AAAS R&D Web site at <http://www.aaas.org/spp/rd>.)

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AAAS Analysis of R&D in the FY 2008 Budget

Table. Climate Change Science Program
(budget authority in millions)

	FY 2006	FY 2007	FY 2008	Change FY 07-08	
	Actual	Estimate	Budget	Amount	Percent
Climate Change Science Program (CCSP) *					
National Science Foundation	197	205	208	3	1.5%
Energy	130	127	130	3	2.4%
Commerce (NOAA)	235	236	245	9	3.8%
Agriculture	61	58	56	-2	-3.4%
Interior (USGS)	27	26	27	1	3.8%
Environ. Protection Agency	19	16	17	1	6.3%
National Institutes of Health	50	50	50	0	0.0%
NASA	953	1,083	1,084	1	0.1%
All Other (Smith., AID, DOT, State)	20	21	20	-1	-4.8%
Total CCSP	1,691	1,822	1,836	14	0.8%

Source: OMB supporting data for FY 2008 Budget, and

Office of Management and Budget, Federal Climate Change Expenditures Report to Congress, May 2007.

FY 2008 data are President's request.

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* Includes U.S. Global Change Research Program and Climate Change Research Initiative.

Table. Climate Change Technology Program
(budget authority in millions)

	FY 2006	FY 2007	FY 2008	Change FY 07-08	
	Actual	Estimate	Budget	Amount	Percent
Agriculture	49	46	83	37	80.4%
Commerce (NIST)	18	8	10	2	25.0%
Defense	77	72	33	-39	-54.2%
Energy	2,374	3,031	3,382	351	11.6%
- Energy Supply and Conservation	1,586	2,014	2,133	119	5.9%
- Fossil Energy R&D	397	508	539	31	6.1%
- Science	391	501	709	208	41.5%
- All Other DOE	0	8	1	-7	-87.5%
Transportation	16	17	16	-1	-5.9%
Environ. Protection Agency	109	105	101	-4	-3.8%
NASA	129	140	119	-21	-15.0%
National Science Foundation	18	21	22	1	4.8%
Total CCTP	2,789	3,441	3,766	325	9.4%

Source: Office of Management and Budget, *Federal Climate Change Expenditures Report to Congress*, May 2007.

Discretionary spending only; excludes USDA mandatory proposals for the 2007 farm bill.

CCTP programs do not correspond to definitions of R&D.

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