

# Federal Energy R&D in the 2009 Budget

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AAAS R&D Budget and Policy Program

<http://www.aaas.org/spp/rd>

See the “What’s New” section for the latest updates; see the “Seminars and Presentations” section for copies of this presentation.

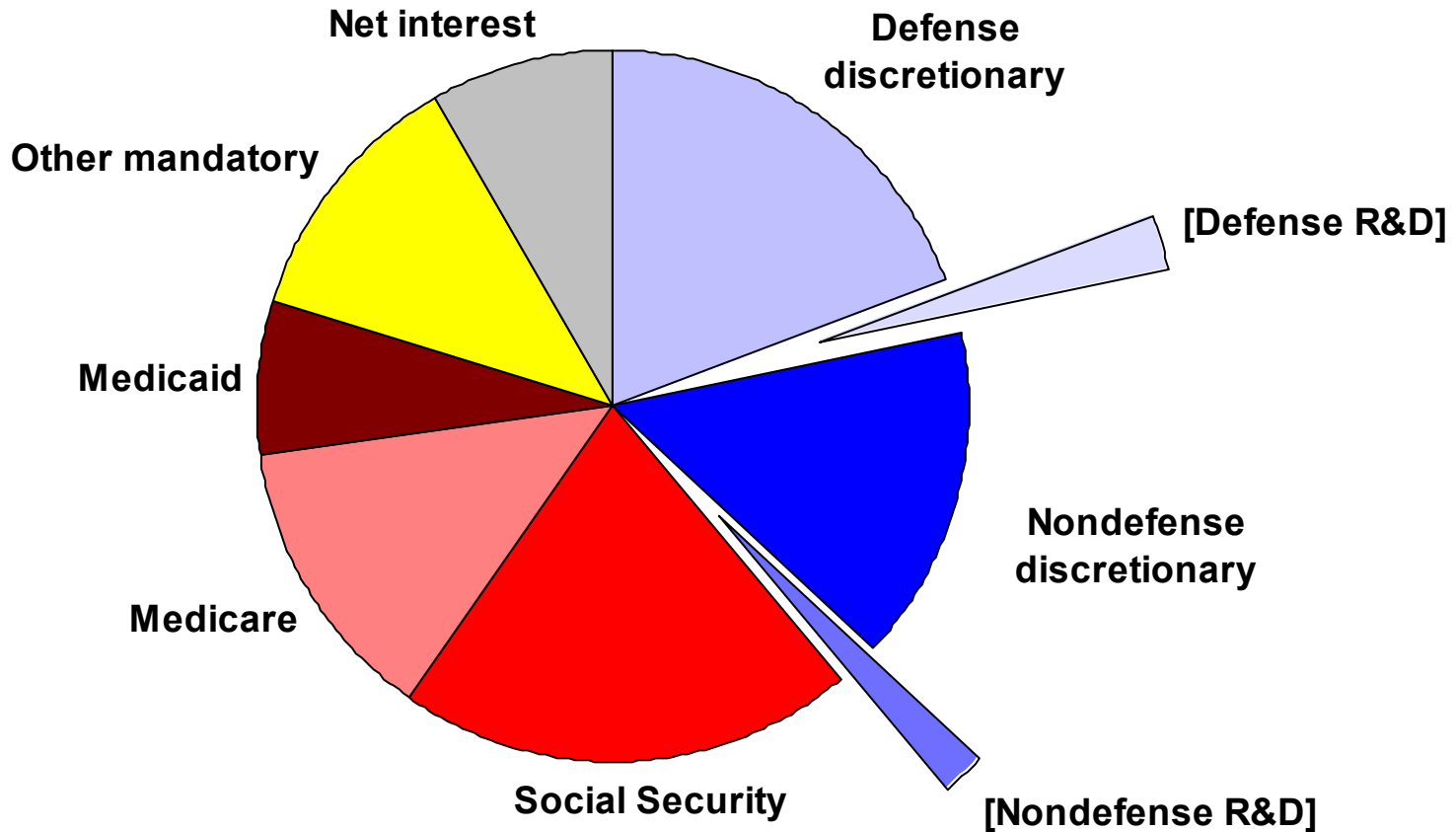


## THE 2009 BUDGET

- The President has proposed a \$3.1 trillion budget for FY 2009.
- To help control the deficit, domestic appropriations have been flat since 2004, and the President proposes to keep domestic appropriations flat in 2009.
- The President's budget proposes steep cuts in many domestic programs and several program eliminations.
- Overall, energy R&D funding has done very well in recent years under the 110<sup>th</sup> Congress.

# Composition of the Proposed FY 2009 Budget

## Total Outlays = \$3.1 trillion



Note: Projected Unified deficit is \$407 billion.

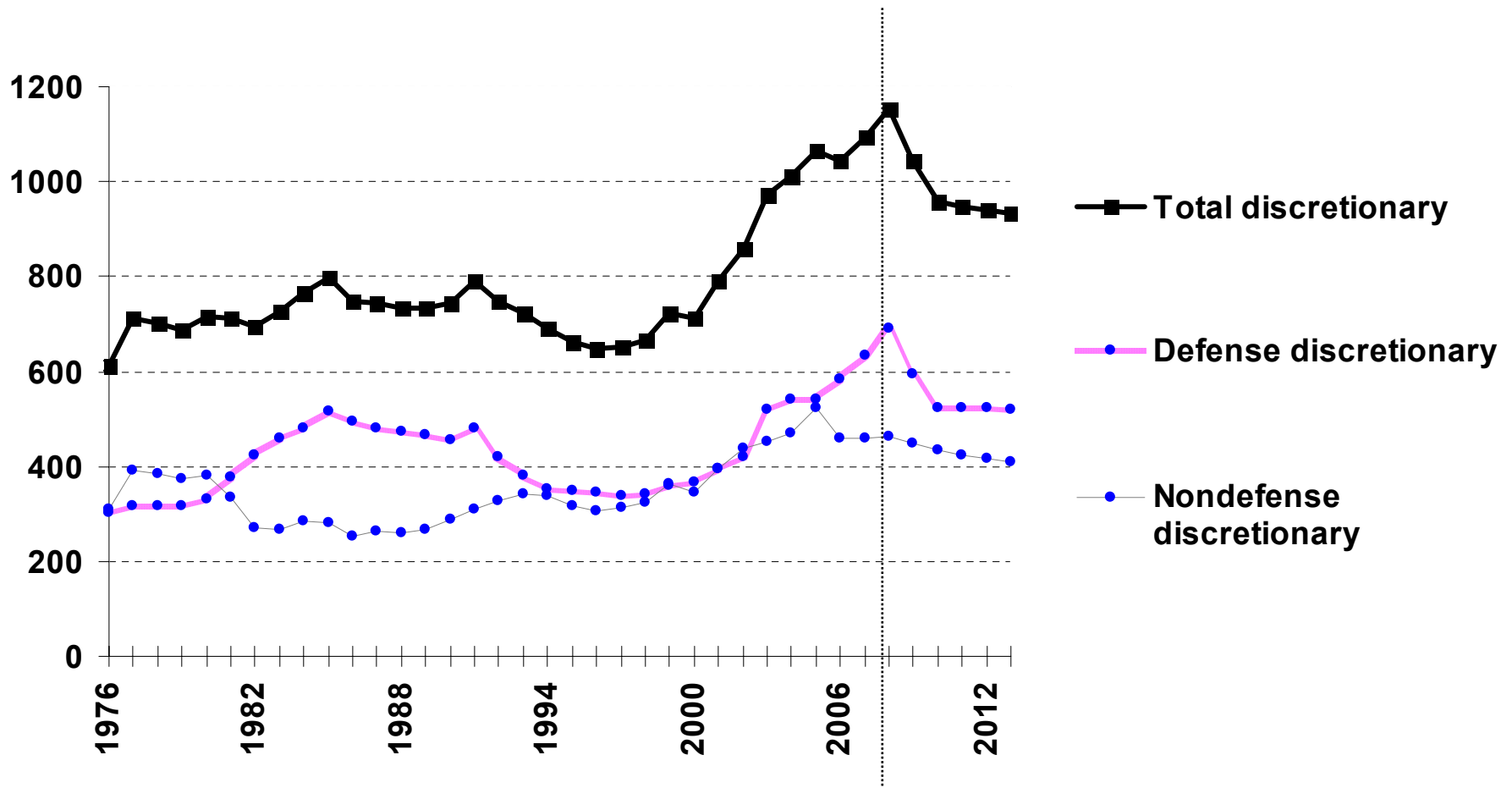
Figures exclude most Iraq and Afghanistan military costs.

Source: AAAS, based on *Budget of the United States Government FY 2009*.

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# Trends in Discretionary Spending, FY 1976-2013

in billions of constant FY 2008 dollars



Data in fiscal years. Source: *Budget of the United States Government, FY 2009*. FY 2008 data are estimates. FY 2009-2013 data are budget projections. FY 2009-2013 figures exclude Iraq and Afghanistan military costs.

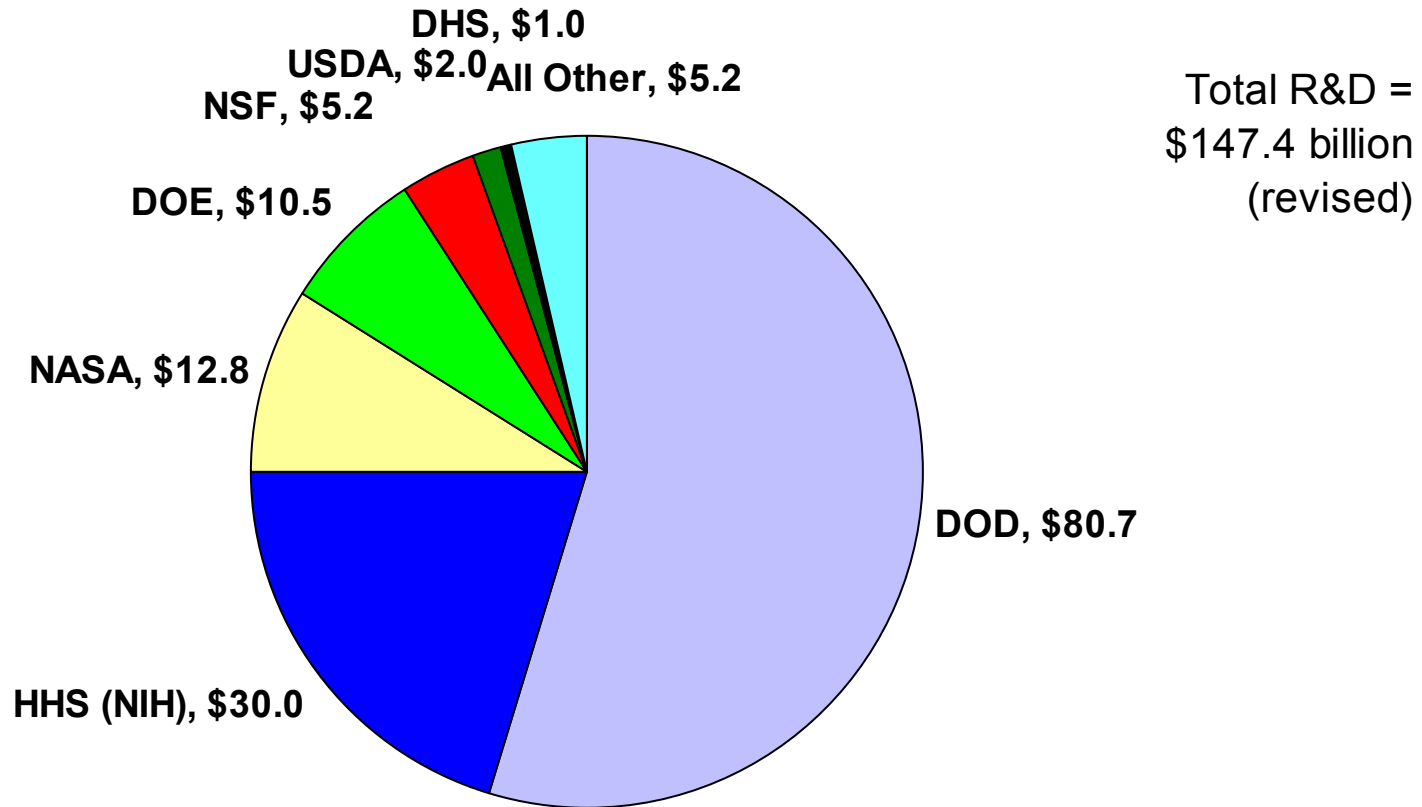
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## THE 2009 BUDGET FOR R&D

- The American Competitiveness Initiative (ACI) continues for a third year, with large increases for NSF, DOE Science, and the NIST labs to catch up to a 10-year doubling track.
- Again, there would be large increases for DOD weapons and NASA spacecraft development, but also increases for most R&D programs.
- DOE energy R&D programs would increase slightly after tremendous gains in 2007 (+56%) and 2008 (+30%).
- The NIH budget would be flat, agricultural and environmental R&D agencies would decline.

# Total R&D by Agency: FY 2009 Proposed

Budget Authority in billions of dollars



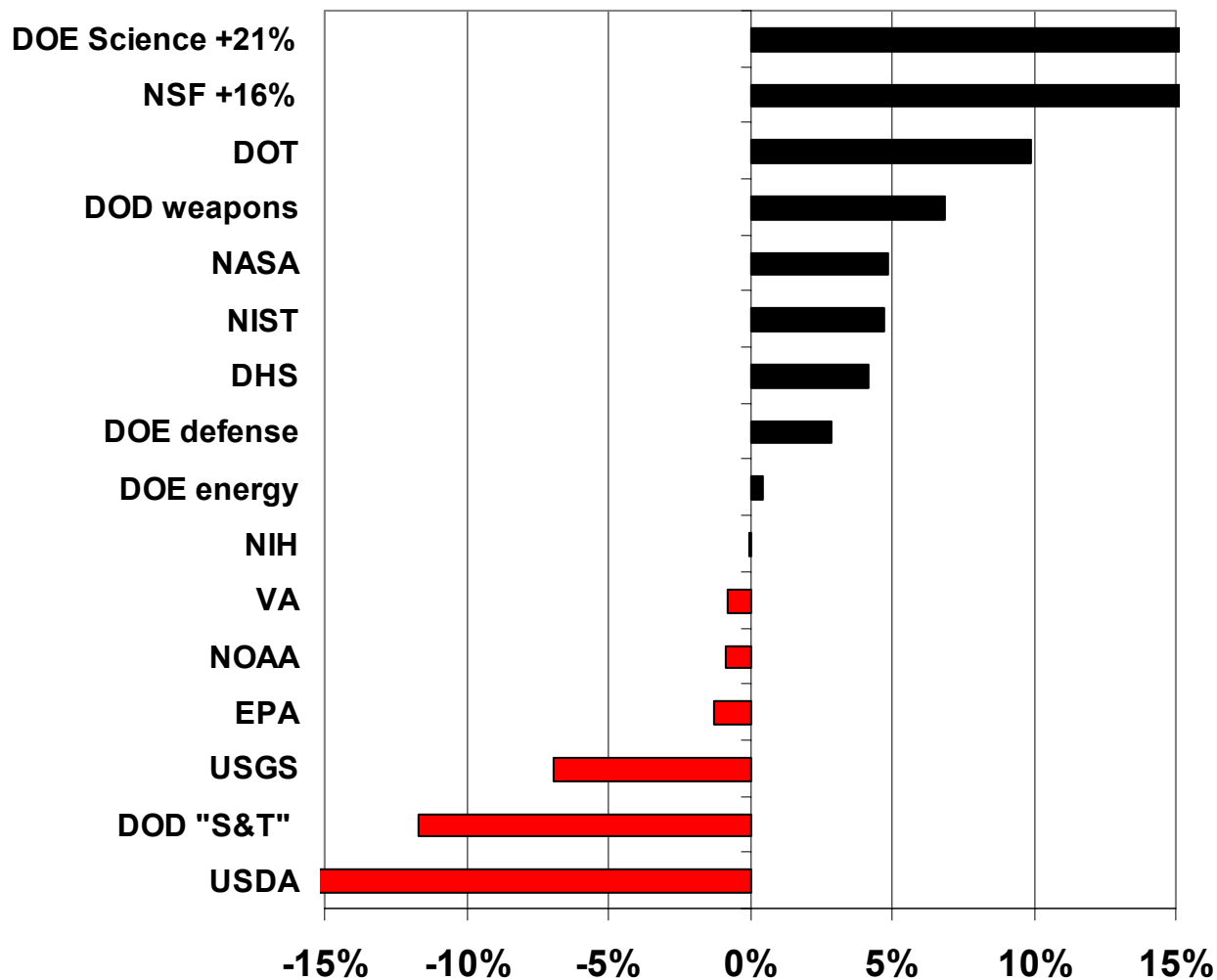
Source: AAAS, based on OMB R&D Budget Data and agency estimates for FY 2009.

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# FY 2009 R&D Request

## Percent Change from FY 2008

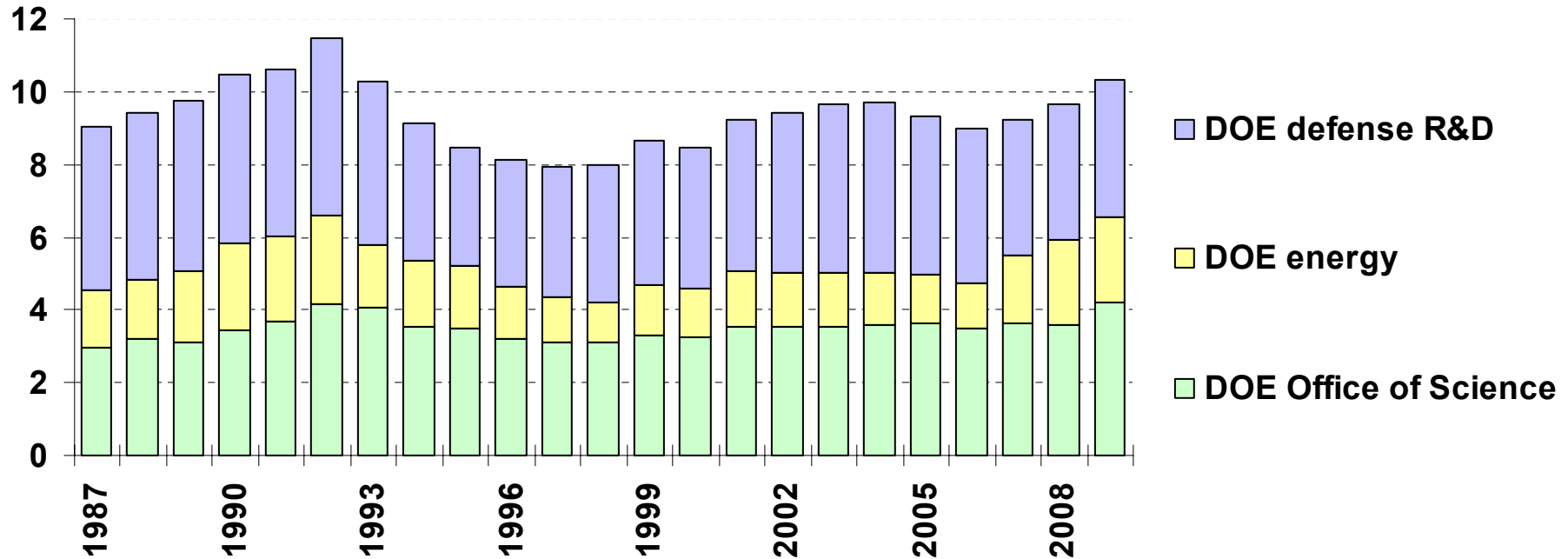


Source: AAAS, based on OMB R&D data and agency estimates for FY 2009.  
 DOD "S&T" = DOD R&D in "6.1" through "6.3" categories plus medical research.  
 DOD weapons = DOD R&D in "6.4" and higher categories.  
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# Trends in DOE R&D, FY 1987- 2009 \*

in billions of constant FY 2008 dollars



Source: AAAS analyses of R&D in AAAS Reports VIII-XXXIII. \* FY 2009 figures are latest AAAS estimates of FY 2009 request.

R&D includes conduct of R&D and R&D facilities.

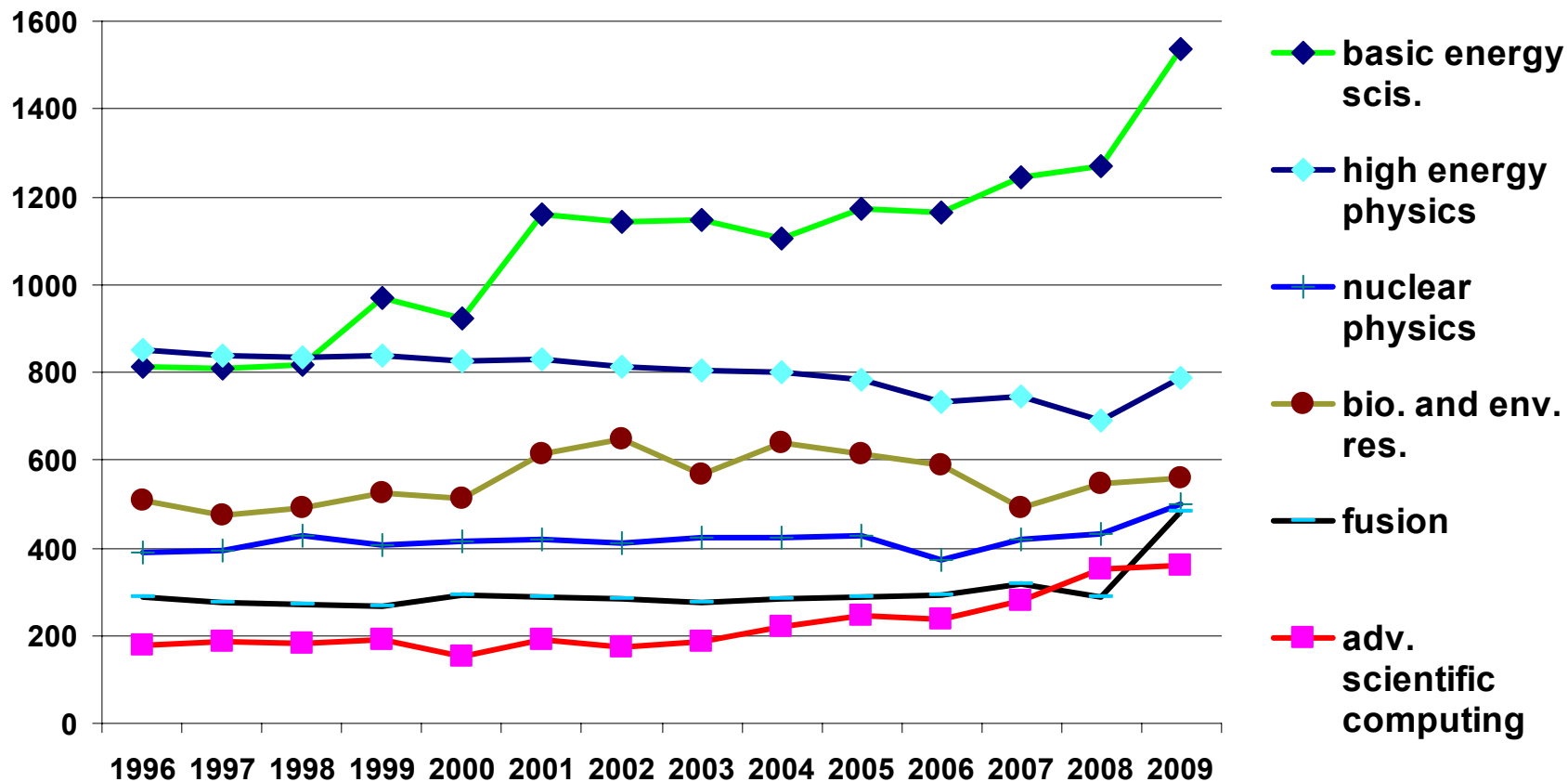
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# DOE Office of Science Programs, FY 1996-2009

(budget authority in millions of constant FY 2008 dollars)



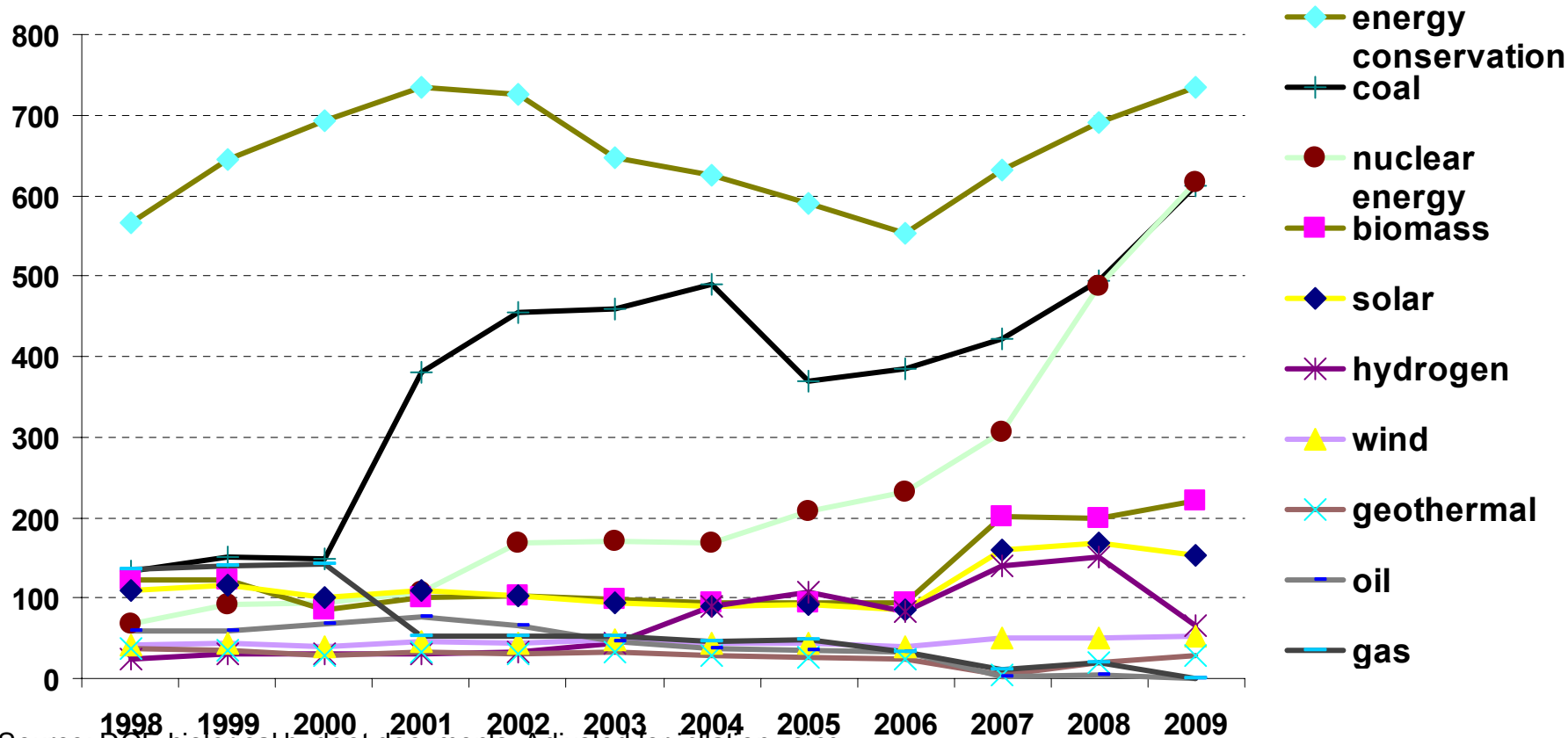
Source: AAAS Reports on R&D, various years, and DOE historical budget documents. Adjusted for inflation using OMB's GDP deflators. BES includes Spallation Neutron Source funds. BER includes earmarks for most years (not 2007 through 2009). FY 2009 figures are the budget request.

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# Trends in the DOE Budget, FY 1998-2009

(budget authority in millions of constant FY 2008 dollars)

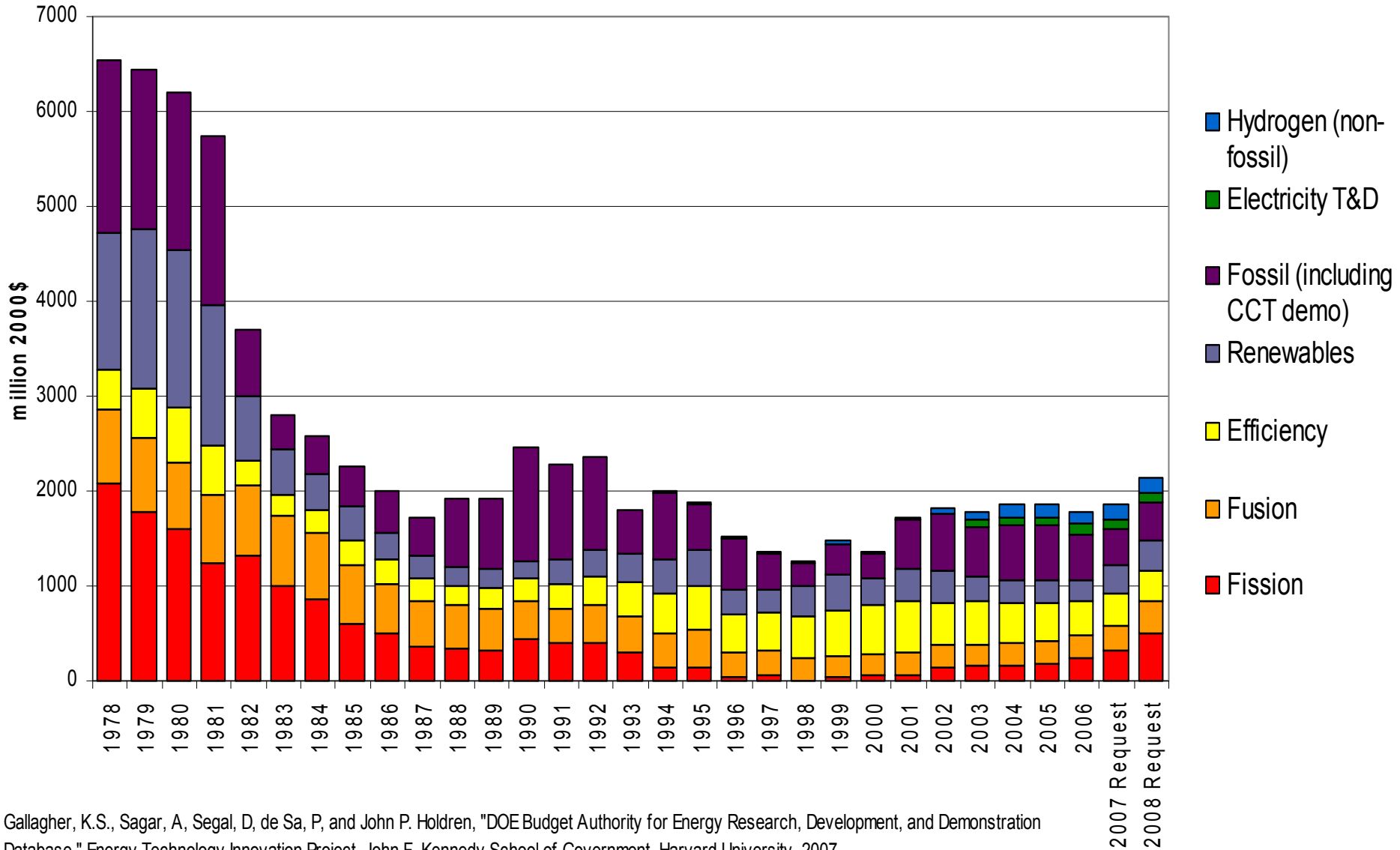


Source: DOE historical budget documents. Adjusted for inflation using OMB's GDP deflators. Line items include R&D and non-R&D components, and have been adjusted for comparability across years. Coal figures exclude previous Clean Coal Technology funds. FY 2008 figures are final appropriations; 2009 figures are latest estimates of FY 2009 request.  
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# U.S. DOE Energy RD&D

## 1978-FY2008 Administration Request



Gallagher, K.S., Sagar, A., Segal, D., de Sa, P., and John P. Holdren, "DOE Budget Authority for Energy Research, Development, and Demonstration Database," Energy Technology Innovation Project, John F. Kennedy School of Government, Harvard University, 2007.

## ENERGY R&D

- Funding for solar, biomass, and nuclear energy R&D have more than doubled in the past three years. These investments are distributed mostly through headquarters and the National Renewable Energy Laboratory (CO).
- Coal is the top priority in fossil fuels, including clean coal, carbon capture and storage, and IGCC projects. Most of the funding is distributed through the National Energy Technology Laboratory (WV, PA, AK, OK).
- Universities play a large role in Basic Energy Sciences and other Science programs.

## WHAT'S NEXT?

- Congress is considering the FY 2009 budget resolution, which could boost domestic appropriations by up to \$24 billion over the President's request. But the President has threatened to veto any appropriations that exceed his request.
- If Congress is forced to stay with the President's total, then ACI and other increases will be trimmed to shore up funding for other domestic programs, as in 2008. Energy programs would probably do well regardless.
- The Appropriations Committees will try to write and pass 12 2009 appropriations bills. But Congress is already considering delaying appropriations until the next President is in office.

## FOR MORE INFORMATION...

The AAAS R&D web site is  
[www.aaas.org/spp/rd](http://www.aaas.org/spp/rd)

The AAAS Forum on  
Science and Technology  
Policy is 8-9 May 2008  
in Washington, DC

## AAAS REPORT XXXIII

Research & Development FY 2009

Intersociety Working Group

