

# Reduce Basic Energy Sciences (BES) Funding

SAVINGS IN MILLIONS OF DOLLARS

2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2016-2020	2016-2025
\$301	\$302	\$302	\$306	\$313	\$320	\$327	\$336	\$342	\$349	\$1,524	\$3,198

## Heritage Recommendation:

Reduce funding for the Basic Energy Sciences (BES) program. This proposal saves \$300 million in 2016, and \$3.2 billion over 10 years.

## Rationale:

BES is a legitimate program that investigates “fundamental research to understand, predict, and ultimately control matter and energy at the electronic, atomic, and molecular levels in order to provide the foundations for new energy technologies and to support other aspects of DOE mission in energy, environment, and national security.”<sup>37</sup> However, many of the BES subprograms stray from fundamental research into commercialization. The government should eliminate such aspects of these programs, since private companies are capable of fulfilling these roles, whether through their own laboratories or by funding university research. On areas that focus on fundamental research and not commercial activities, the funding has simply become too excessive. While there is reason to phase out all Basic Energy Science funding, proposed cuts would eliminate some subprograms entirely, and return others close to FY 2008 levels.

### Programs for Elimination:

- The Experimental Program to Stimulate Competitive Research (EPSCoR)
- The Solar Photochemistry program
- The Photosynthetic Systems program
- The Geosciences program

### Programs for Reductions:

- The Experimental Condensed Matter Physics program
- The Theoretical Condensed Matter Physics program
- The Mechanical Behavior and Radiation Effects program
- The Neutron and X-ray Scattering and the Electron and Scanning Probe Microscopies program
- The Synthesis and Processing Science program
- The Materials Chemistry and Biomolecular program
- The Atomic, Molecular, and Optical program
- The Chemical Physics Research program
- The Catalysis program
- The Separations and the Heavy Element Chemistry program

## Additional Reading:

- Nicolas Loris, “Department of Energy Budget Cuts: Time to End the Hidden Green Stimulus,” Heritage Foundation *Backgrounder* No. 2668, March 23, 2012, <http://www.Heritage.org/research/reports/2012/03/departments-of-energy-budget-cuts-time-to-end-the-hidden-green-stimulus>.



## Calculations:

Savings are based on the recommended \$287.6 million in spending cuts as found in Nicolas Loris, “Department of Energy Budget Cuts: Time to End the Hidden Green Stimulus,” Heritage Foundation *Backgrounder* No. 2668, March 23, 2012, <http://www.Heritage.org/research/reports/2012/03/department-of-energy-budget-cuts-time-to-end-the-hidden-green-stimulus>. This level of cut is increased for inflation through 2014 and compared to the budget authority enacted for FY 2014 of \$1.713 billion found on page 117 of House of Representatives, 113th Congress, 2nd Session, “Energy and Water Development Appropriations Bill, 2015,” <http://appropriations.house.gov/uploadedfiles/hrpt-113-hr-fy2015-energywater.pdf>. Both the FY 2014 enacted level of spending and the alternative, lower, spending levels are increased at the same rate as discretionary spending for 2016–2025, according to the CBO’s most recent August 2014 baseline spending projections. Savings represent the difference between these two spending levels.