

Amendment 1983 - To prohibit funds for the Office of Fossil Energy's Research and Development activities

[This amendment would only affect the Office of Fossil Energy's Research and Development (R&D) activities but would preserve its petroleum reserves responsibilities that maintain, for instance, the Strategic Petroleum Reserve.]

While DOE can provide helpful research and development (R&D) for the U.S. fossil fuel industries, continued federal funding for oil, natural gas, and coal R&D is not a federal priority at this time, particularly in the midst of our nation's fiscal shortcomings.

Fossil fuels are admittedly essential to keep our economy running, and further developments in technology are critical to keep exploration and production active.

Fortunately, competitive markets generally provide sufficient incentives for companies to conduct relevant research on their own. And the U.S. energy industry in particular is capable of leveraging their own resources to do it.

In 2009, the Government Accountability Office (GAO) found that from 1997 to 2006, the U.S. oil and natural gas industry spent at least \$20 billion on R&D¹—oil companies spent \$9.6 billion and service companies spent \$10.7 billion.

During this same time period, DOE funding for the same purposes totaled \$1 billion and was generally for the direct benefit of private industry.

The President's FY 2012 Budget (as well as his National Commission on Fiscal Responsibility and Reform) proposes to reduce funding for the Fossil Energy program, citing that its activities are more appropriate for the private sector to perform.

According to his budget proposal, private industry already has the necessary resources and incentives to undertake the same work without federal funding.²

¹ The data sampled did not capture R&D spending by all U.S. companies or international companies with a presence in the United States and, therefore, may underestimate the total dollar amount.

² <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/trs.pdf>

While there are some safeguards in place, GAO found that **DOE does not formally assess (or include a screening in its criteria) the likelihood that industry would have conducted the R&D without federal funding.**

According to the report, DOE officials claim the agency's R&D "only minimally duplicate[s] industry's R&D activities," but GAO found several instances of overlap between the two, concluding that DOE may embark on projects that industry would conduct without federal funding.

For example, GAO found several projects performed by the Office of Fossil Energy were similar to the ones industry was already performing, particularly in the areas of advanced drilling techniques and enhanced oil recovery (an area where industry has dedicated significant resources to on its own).

While the integrated oil and natural gas companies and service companies are typically the ones in the industry with in-house R&D operations, others still have access to it in one form or another.

For example, larger independents may purchase new technologies from those who do conduct the research and adapt it to their operations or engage in research partnerships with other interested stakeholders.

Smaller independents can obtain or become aware of new technologies from other companies, trade publications, or professional and state associations. The broad university network system for research can also provide a prominent source of information.

Some may argue smaller independents will act as free riders to the Majors' R&D efforts, but Congress' continued funding of DOE's fossil R&D causes taxpayers to otherwise be *the host* of free ridership.

Federal involvement can unfairly neutralize the competitive edge some companies have risked their scarce resources to gain.

For example, DOE performs some of its R&D in areas where it believes there is a gap in private funding or a lack of widespread knowledge on a

topic. Some dedicate entire departments and the most modern equipment to the petroleum industry.

The Fossil Energy program's original goal was to help ensure for a steady flow of oil and gas by mitigating what were thought to be finite and depleting supplies (or import restrictions) with more efficient recovery technologies.³ It has since become more closely associated with a carbon capture and sequestration program.⁴

From 1997 to 2006, DOE's R&D budget *for oil and gas* declined by over 60 percent. When adjusted for inflation, the decline is greater—from \$198 million in 1997 to approximately \$62.6 million in 2006 or 68 percent decrease.

The Fossil Energy office is now primarily geared towards carbon capture initiatives.

For example, the FutureGen 2.0 project is under its purview, otherwise known as one of the most expensive earmark in history at nearly \$2 billion.

The Bush Administration terminated this project after creating in 2003. While the project was resurrected by the current Administration, it continues to search for solid footing as its private sector partner just recently announced it will not be financially able to carry its 20 percent share of the projects costs.⁵

Federal assistance for carbon capture and sequestration is already available by other means. Two tax credits are available for certain advanced clean coal and gasification technologies. Together, they cost taxpayers more than \$1.6 billion initially and, in 2008, Congress allocated an additional \$1.5 billion for both credits. In addition, the American Reinvestment and Recovery Act provided grants for similar technologies.

GAO even found industry has conducted research on carbon capture and sequestration on their own to prepare for their clients' future needs and without federal financial incentive to do so.

³ <http://www.fe.doe.gov/aboutus/history/index.html>

⁴ <http://fuelfix.com/blog/2011/10/26/energy-department-to-stress-funding-for-carbon-capture-use-and-storage-absent-climate-legislation-official-says/>

⁵ http://www.nytimes.com/2011/11/11/business/energy-environment/coal-project-hits-snag-as-a-partner-backs-off.html?_r=1&smid=tw-nytenvironment&seid=auto