



DOE FY2013 Budget Request: Advanced Manufacturing/Industrial Technologies

March 2012

Summary

The Administration's FY2013 budget request seeks \$290 million for DOE's Advanced Manufacturing Office (AMO). This amount, while significantly higher than recent appropriations, reflects the President's commitment to a robust and competitive manufacturing sector as stated in the State of the Union. However, with the increased budget comes a significant restructuring of the program and some uncertainty of its direction. This is causing some concern with stakeholders engaged with AMO programs and other industrial energy efficiency supporters.

AMMEX Recommendation

AMMEX applauds the Administration's support for DOE and AMO and shares its goals for increased energy efficiency and enhanced competitiveness in the U.S. manufacturing sector. AMMEX provides the following suggestions for bolstering AMO activities in support of these goals. This request reflects both the focus the President has placed on manufacturing as well as recent Congressional intent on the importance of the individual programs in the Advanced Manufacturing Office:

- A strong AMO budget allocation of between **\$250 and \$300 million** for FY2013;
- At least **25%** of the overall AMO budget should be targeted to cost-share R&D with energy-intensive industrial sectors, such as those partnered with under the *Industries of the Future* (IOF) program;
- At least **15%** of the overall AMO budget should be targeted to combined heat and power (CHP) research and deployment.
- At least **25%** of the overall AMO budget should be targeted to technology deployment activities that support today's industry implementing newly commercialized energy efficiency technologies and energy management best practices, including between \$6 and \$10 million for the *Industrial Assessment Center* (IAC) program;
- Transparency of funding allocations within the AMO program's FY2013 budget.

Background

The FY2013 DOE budget request for manufacturing, like the FY2012 request, seeks a significant increase in funding for AMO (formerly the *Industrial Technologies Program*). The FY2013 request of \$290 million is more than triple the average annual appropriations for the program during the past four fiscal years.

However, with the increased budget comes a significant restructuring of the program, replacing the current R&D portfolio, including the Industries of the Future (IOF) R&D targeted at the energy-intensive manufacturing industries as well as R&D for crosscutting measures, with the Next Generation Manufacturing Processes (NGP) and Next Generation Materials (NGM) programs. While the NGP program will continue work on crosscutting R&D with some focus on energy-intensive industries, the NGM program focuses on creating new advanced materials, an area AMO has not been active in previously. The recent DOE solicitations for proposals in the NGP and NGM subject areas appear promising, but observers are awaiting the award announcements (anticipated as soon as this month) to get a

sense of the actual direction of the programs. To promote an efficient and competitive manufacturing sector, DOE needs to fund a balanced mix of new material R&D, near- and long-term focused process R&D, and technology deployment. AMMEX believes process R&D and deployment should be the top priority of the program, but we look forward to the opportunities made possible by new advanced materials. The substantial increase in funding requested by AMO should be enough to address the range manufacturing needs.

The ways DOE seeks to leverage and continue their past successes in collaboration with industry has become less clear the more industry and advocates learn about the AMO program restructuring that began during the FY2012 budget request formulation. The key to the past success of the IOF industry-specific R&D was its close working relationship with the industries involved. In addition to cutting the successful IOF program, AMO will no longer dedicate R&D funds to combined heat & power (CHP), though CHP projects will be able to compete for other research funding.

Fortunately, many of AMO’s technology deployment activities remain the same. AMO is continuing to support the *Superior Energy Performance* program built around the continuous improvement model contained in the ISO 50001 energy management standard, and has aligned the *Save Energy Now LEADER* initiative with the *Better Building/Better Plants Program and Challenge*. In addition, AMO is still supporting state and local partnerships, the *Industrial Assessment Centers (IACs)* and *Clean Energy Regional Application Centers (CEACs)* (formerly known as the *CHP Regional Application Centers* or *RACs*). These deployment activities are vital because they directly enable U.S. manufacturers to improve competitiveness, and thereby job creation and retention, through energy efficiency.

It should also be noted that the FY2013 budget request from DOE provides little indication of how the funds will actually be spent, particularly in comparison to previous years’ documentation. There are substantial descriptions of the different programs, but they are not accompanied by proposed funding allocations. This leaves AMO’s potential partners without a strong sense of the Program’s priorities and leaves any mandate for collaboration unspoken.

AMMEX Recommendation Breakdown

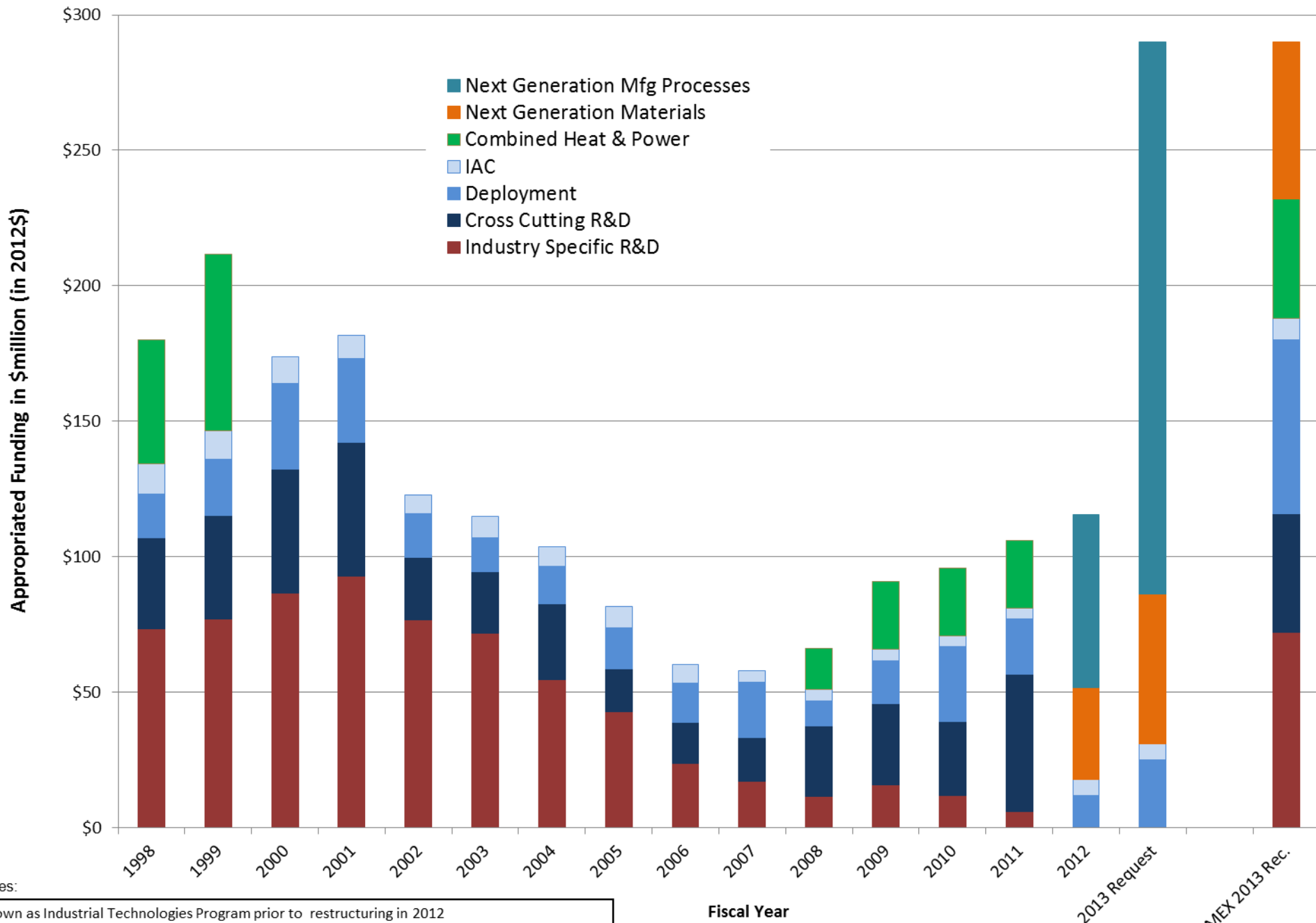
In addition to the general recommendations listed above, AMMEX supports the following budget allocations for FY2013:

AMO TOTAL	\$290
Next Gen Materials	\$58
Energy Innovation Hub	\$20
Other R&D	\$38
Next Gen Processes	\$160
Industry-Specific R&D	\$72
CHP R&D	\$44
Other cross cutting R&D	\$44
Deployment	\$72
IAC	\$8
Other Deployment	\$64

In the FY2013 AMMEX recommendation, industry-specific, cross cutting, and CHP R&D would fall under the Next Generation Manufacturing Processes program, but would be served by separate solicitations.

The Alliance for Materials Manufacturing Excellence (AMMEX) consists of companies and organizations in the materials manufacturing sector-aluminum, chemicals, forest products, glass, metal casting, and steel-along with several non-profit stakeholders.

DOE Advanced Manufacturing Office Budget Requests and Appropriations



Notes:

- Known as Industrial Technologies Program prior to restructuring in 2012
- CHP activities were active under other programs from 2000 through 2007
- 2009 Recovery Act funds not included
- IAC is a subset of deployment; 2012 and later values are estimates

Fiscal Year

2013 Request
AMMEX 2013 Rec.