



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Ranking Member Jamaal Bowman (D-NY)
of the Subcommittee on Energy

Energy Subcommittee Hearing:

Bridging the Valley of Death: ARPA-E's Role in Developing Breakthrough Technologies

March 12, 2024

Good morning and thank you, Chairman Williams, for convening this hearing today. And thank you to our panel of witnesses for appearing before the committee to discuss ARPA-E's exciting role in advancing potentially transformational technologies to help us reach our clean energy goals as quickly as possible.

I also want to give a special shout out to Christopher Zorn, a brilliant young constituent of mine and a high school senior from Irvington, New York, who is here with us in the audience today. Christopher is a Regeneron Science Talent Search finalist for his work on how RET and the MYC genes interact. I was proud to welcome him to the Capitol this morning and hear about his plans to change the world.

In preparing for this hearing, I looked back to what prompted the authorization of ARPA-E in 2007, and the answer was clear -- to support high-risk, high-reward clean energy R&D activities to address the technological barriers that industry cannot overcome on its own. This agency was modeled after the Department of Defense's Defense Advanced Research Program Agency (DARPA), whose work spurred revolutionary technologies like GPS and the Internet. An ARPA for energy was meant to catalyze bold innovation to address some of the most challenging energy and technology problems in the 21st century.

And since its establishment in 2009, ARPA-E has lived up to this challenge. Thanks to the \$3.76 billion in total funding that it has provided to more than 1,500 projects to date, 230 awardees have gone on to obtain \$12 billion in private-sector follow-up funding, 154 have formed new companies, and of that, 29 have a combined market valuation close to \$22 billion. These companies are using cutting-edge science, supporting jobs, and ensuring that the U.S. maintains its leadership in these critical fields. That is an incredible return on taxpayer investment.

On top of that, ARPA-E's rapid and risk-taking approach provides a pathway for turning innovative, out-of-the-box thinking into real solutions. ARPA-E's projects are exciting and address critical needs – we should celebrate this creativity and use it to inspire our nation's students. And some of these projects have real potential for communities like those within my district, such as using sensors to dramatically reduce energy use in commercial and residential buildings, or improving the energy efficiency of existing single-pane windows. These are all

ideas that if successful, would lower costs for Americans. That is not to mention the work being done towards what would be a truly revolutionary achievement of commercial fusion energy. I am looking forward to Dr. Umstattd's remarks on how ARPA-E is helping make fusion a reality.

However, despite all this, ARPA-E is now facing a budget cut in Congress's latest appropriations agreement. In keeping with our bipartisan authorizations, I think that many of my colleagues here share a similar sentiment that these cuts will harm the progress that ARPA-E has already made, and that we should be significantly increasing – not decreasing – its budget.

All that said, I am happy that we have witnesses here who have worked directly with ARPA-E. I am looking forward to hearing first-hand about the role the agency has had in developing breakthrough clean energy solutions so far, and about what future benefits these projects could have in our communities.

With that, I want to again thank our panel of witnesses assembled today, and I look forward to hearing your testimony. I yield back.