

IMPACT for Energy Act

Background

R&D is essential for driving innovation and accounts for nearly 7% of real GDP growth.¹ However, recent declines in research funding severely jeopardizes U.S. economic competitiveness. For example, from 2008 to 2013, venture capital funding in energy startups declined by 60% and resulted in a 68% decline in startups.² Unlike other sectors, the energy sector has several unique challenges to innovation including requiring high capital needs, having long development times, overcoming incumbent technologies, and operating within a shifting regulatory environment. Addressing these challenges will require partnerships with government, industry, startups, and funding organizations. A foundation would serve as the ideal framework to organize, connect, and lead such a diverse group of partners. Foundations at the National Institutes of Health, the Centers for Disease Control and Prevention, and the U.S. Department of Agriculture have all demonstrated that they can raise tens of millions of private sector dollars towards cutting-edge research and innovation. These foundations complement and enhance the agency's mission and enable new functions and services.

The Energy Landscape

- **Rise of foreign competition.** Over the last decade, federal funding for R&D has declined as a percentage of GDP while at the same time countries like China has dramatically ramped up its own R&D funding which is set to outpace the U.S. by 2026.³
- **Strong source of jobs.** The traditional energy sector employs over 4.2 million workers and, in 2016, saw 5% job growth—compared to around 2% nationally. New markets like energy efficiency accounted for 2.2 million jobs have seen even faster job growth at 7%.⁴
- **Today's energy challenges are complex.** Viable energy solutions involve multiple partners in government, industry and academia. The pace and scale of these projects require partnerships between public and private entities to negotiate all stages of the innovation pipeline.
- **Global collaboration.** Several global initiatives are driving countries around the world to increase R&D spending in clean energy. This is complemented by private sector investments, like the Breakthrough Energy Coalition, which has announced \$1 billion in patient venture funding.

The IMPACT for Energy Act

This bill will establish a nonprofit foundation that will channel private-sector investments that support the creation, development, and commercialization of innovative technologies that address tomorrow's energy challenges. Functions of the foundation will include—

- **Supports private-sector investment.** As a 501(c)(3), the Foundation will have the flexibility to engage with private-sector investments and attract new non-traditional partners.
- **Accelerates commercialization.** The Foundation will facilitate public-private partnerships to commercialize research and technology as well as administer prize competitions that engage the private sector to invest in commercial solutions to big problems.
- **Convenes industry leaders.** The Foundation will organize events, briefings, and symposia to create a neutral space for partners to collaborate on new projects.
- **Trains tomorrow's workforce.** The Foundation will support education and training of new researchers in energy through awards, grants, and fellowships.

¹ https://www.nsf.gov/news/news_summ.jsp?cntn_id=110139

² <https://energy.mit.edu/wp-content/uploads/2016/07/MITEI-WP-2016-06.pdf>

³ <https://www.nist.gov/sites/default/files/documents/mep/data/GLObal2014funding.pdf>

⁴ https://www.energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report_0.pdf