



Partnerships for Energy Security and Innovation Act

A bipartisan bill establishing a foundation to drive public-private partnerships in the energy sector and commercialize 21st century energy technologies

Research and development (R&D) drives innovation and GDP growth in the United States. However, declining global shares of research expenditures severely jeopardizes U.S. economic competitiveness.¹ 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.

The Energy Landscape

- **Rising foreign competition.** Over the last decade, federal funding for R&D as a percentage of GDP has remained fairly constant while competitors like China have dramatically ramped up their own R&D funding, which just surpassed the U.S. last year.²
- **Strong source of jobs.** The traditional energy and energy efficiency sectors employed 6.8 million workers and saw 1.8 percent job growth in 2019, accounting for over 7 percent of all new jobs nationwide.³
- **Complex industry challenges.** 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 navigate all stages of the innovation pipeline.
- **Increasing 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.

"By improving relationships between the public and private sectors and aligning capital around commercialization of new technology, the [Foundation] would help accelerate innovation, strengthen the U.S. economy and bolster our global competitiveness."

-Dana Lanza
CEO of Confluence Philanthropy

The *Partnerships for Energy Security and Innovation Act* addresses these challenges by fostering partnerships between government, industry, startups, and outside funding organizations. 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 Partnerships for Energy Security and Innovation Act

This bill establishes a Foundation for Energy Security and Innovation (FESI) for the DOE to engage with the private sector to raise funds that support the creation, development, and commercialization of innovative technologies that address tomorrow's energy challenges. Functions of the foundation will include—

¹ <https://nces.nsf.gov/pubs/nsb20201/global-r-d>

² https://www.amacad.org/sites/default/files/publication/resources/Perils-of-Complacency_Full-Report_3.pdf

³ <https://static1.squarespace.com/static/5a98cf80ec4eb7c5cd928c61/t/5ee78423c6fcc20e01b83896/1592230956175/USEER+2020+0615.pdf>

- **Increasing access to private sector funding.** As a 501(c)(3), FESI will have the flexibility to engage with various private sector sources for funds and attract new non-traditional partners.
- **Accelerating commercialization.** FESI 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.
- **Convening thought-leaders.** FESI will organize events, briefings, and symposia to create a neutral space for partners to share ideas and engage the public.
- **Training tomorrow's workforce.** FESI will support education and training of new researchers in energy through awards, grants, and fellowships.

Based on a Proven Model



Foundation for the NIH: Raised \$1+ billion since its inception in 1990. Leveraged \$55 million in private funding over 5 years for Cancer Moonshot.



NREL & Wells Fargo Foundation: 5-year, \$10M grant from the Wells Fargo Foundation to help develop energy efficient technologies for commercial buildings.

Support for a DOE Foundation

Creation of a DOE foundation was the lead recommendation of two independent reports:

- **National Academy of Public Administration (NAPA).** Completed in response to the Fiscal Year 2020 funding appropriations bill, a report released by NAPA in January 2021 concludes that a DOE foundation would provide a complementary and supplementary role to the DOE, National Labs, and the lab-associated foundations.⁴
- **Information Technology & Innovation Foundation (ITIF).** A report released by ITIF in May 2020 concludes that a DOE foundation would foster public-private collaboration, connecting innovators with partners, funding, and tools to bring clean energy technologies to market.⁵

Endorsements

American Sustainable Business Council, Association of University Research Parks, BPC Action, CalCharge, Confluence Philanthropy, FedTech, Information Technology and Innovation Foundation, JLW Advising, National Association of State Energy Officials, and Social Venture Circle.

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⁴ https://s3.us-west-2.amazonaws.com/napa-2021/NAPA__DOE-Report-__-FINAL.pdf

⁵ <https://itif.org/publications/2020/05/11/mind-gap-design-new-energy-technology-commercialization-foundation>