

ISSUE BRIEF

No. 4141 | JANUARY 30, 2014

INNOVATES Act Creates a More Effective National Lab System

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Senators Chris Coons (D-DE) and Marco Rubio (R-FL) recently introduced the America Implementing New National Opportunities to Vigorously Accelerate Technology, Energy and Science (INNOVATES) Act, which would promote technology development at the Department of Energy (DOE) national laboratories.

For far too long, DOE has attempted to use taxpayer money to drive technologies all the way to the market, crippling the role of entrepreneurs and wasting billions of taxpayer dollars in the process. Instilling market reforms, as the INNOVATES Act does, would create a seamless pathway for private innovators to transition the basic research at America's national labs to commercial success stories, driving job creation and economic growth.

DOE's Failed Approach to Commercialization. Policymakers have attempted to use programs within DOE to drive their desired technologies into the marketplace. The logic for these initiatives is that a gap exists between basic research and economic viability, and more taxpayer money must be spent to attract private investment for commercialization. The result is the creation of programs that

specifically aim to drive down the cost of technologies, such as DOE's SunShot Initiative, which has the goal of reducing solar energy costs to a point where it is competitive with current electricity sources.¹

Such initiatives are exactly the wrong role for the federal government and the wrong approach to spur innovation at DOE. When the government attempts to drive technological commercialization, it circumvents the competitive process that properly assigns risk and reward in an open market. By pulling capital out of the private sector to support government-supported projects, this intervention also creates a dependency on the taxpayer that can hinder innovation over the long term.

Basic research that has promising commercial application will attract private investment. Some of those investments will succeed, and others will fail. Other research will not ultimately spin off into market successes, and using taxpayer dollars to force commercialization is wasteful and disregards how markets and private investment efficiently determine how to allocate investments.

A Better Path Forward: Establishing Efficiency and Uniformity. A more appropriate and productive role for the DOE is to conduct the basic research to meet government needs that the private sector would not undertake and allow the private sector, using private funds, to tap into that research and commercialize it when there is an attractive opportunity to do so. The system would also allow workers at the federal labs, when appropriate and without violating conflict of interest rules, to push research into the marketplace if they see an opportunity. The INNOVATES Act would help create that path of pushing and pulling innovation while not

This paper, in its entirety, can be found at <http://report.heritage.org/ib4141>

Produced by the Thomas A. Roe Institute for Economic Policy Studies

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denigrating the value of basic research and not having Washington push the technology all the way to market.

Shortly after Secretary of Energy Ernest Moniz came to office, he merged the Under Secretaries of Energy and of Science into one Under Secretary for Science and Energy. The Coons–Rubio legislation would codify this position into law. Creating an Under Secretary for Science and Energy institutes one leadership position for the lab system and would provide for more effective lab research coordination. Establishing uniformity and efficiency would remove bureaucratic obstacles for technology transfer and also create seamless collaboration for the labs to push technology into the market and create opportunities for the private sector to pull basic research out of the labs. INNOVATES would also direct the Secretary to work with the appropriate administrative authorities and entities to identify best practices with respect to engagement with the private sector, conflict-of-interest regulations, and management and operations procedures. Doing so would help recognize bureaucratic obstacles that prohibit innovation coming out of the lab system.

The act also recognizes the importance of an independent commission created in the 2014 omnibus appropriations bill that would assess coordination, management, technology transfer, and inefficiencies at the labs as well as whether the labs are properly aligned with DOE’s strategic priorities. This process could reduce redundant bureaucratic processes, eliminate duplicative programs, and improve the relationships between the labs and the contactors who manage them.

Adding Market Elements, Creating Flexibility. A current challenge to transferring research from government labs to the market is cultivating a better relationship between the labs and industry. Connecting the two so that industry can use lab resources with their own money to do research, identify new commercialization opportunities, or enhance or develop a product would drive innovation and economic growth.

DOE has created more flexible partnership programs with the Agreement for Commercializing

Technology (ACT), in which businesses partner with labs to commercialize technology and lab contractors collect an additional fee paid by the private sector to take on responsibilities DOE would not normally conduct. Former Secretary of Energy Steven Chu launched the ACT pilot program, which is set to end in 2014. While the program should be made permanent, INNOVATES would extend it by three years.

Market-Friendly Labs. Two other important elements of INNOVATES are that it would devolve authority of collaborative, non-national security research agreements less than \$1 million to the lab contractors and allow the contractors to charge higher rates for their services rather than collecting full cost recovery, which limits the labs to merely recovering the costs of private-sector use.

Granting additional managerial and financial authority to the lab contractors would empower them to effectively manage capabilities and create a quicker process for collaborative efforts with third parties. This approach would maximize the labs’ ability to meet the market demand for their capabilities and excess capacity while minimizing the unnecessary bureaucracy from the DOE.

Introducing a market-based pricing mechanism would add a competitive element to lab utilization and also help determine the actual values of lab assets.² If pieces of lab equipment attract significant market demand, labs could charge higher prices and establish the market value for their use. Flexible pricing could lead to the divestiture of resources if such a high demand demonstrates that a profit could be made, or it could lead to reducing the lab’s capabilities if there is no longer a need from the federal government or outside parties. Further, permitting the labs to charge higher rates would incentivize them to market their capabilities to the private sector, creating a better relationship with industry and the labs.³

A More Effective Lab System. The INNOVATES Act would establish a more effective management structure for America’s national laboratories to work with industry while protecting taxpayer money and protecting the labs’ ability to conduct the basic research necessary for the federal government.

1. U.S. Department of Energy, SunShot Initiative, <http://www1.eere.energy.gov/solar/sunshot/index.html> (accessed December 16, 2013).

2. Assuming there are neither additional subsidies promoting its use nor restrictions preventing its use.

3. Matthew Stepp et al., “Turning the Page: Reimagining the National Labs in the 21st Century Innovation Economy,” Information Technology and Innovation Foundation, June 2013, <http://www2.itif.org/2013-turning-page-national-lab-innovation-economy.pdf> (accessed January 21, 2014).

Rather than attempting to commercialize politically preferred technologies by dumping billions of taxpayer dollars into specific programs, INNOVATES would remove bureaucratic obstacles, devolve decision making, and introduce market elements into the lab system. This is a far more effective and appropriate strategy for driving innovation and job creation at the labs.

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