

U.S. Senator Chris Coons (D-DE), and Ben Ray Luján (D-NM-3), Member of the U.S. House of Representatives, hosted a discussion at <a href="OurEnergyPolicy.org">OurEnergyPolicy.org</a> (OEP) on the introduction of the IMPACT for Energy Act. Legislation which would create a non-profit foundation to drive investment in new energy technologies. Here is a snapshot of the perspectives offered by OEP's diverse community of energy professionals.

"We believe that this foundation could serve as an agent in convening industry leaders and other stakeholders to collaborate, share ideas, and solve some of your most complex and challenging problems." - Senator Chris Coons

Question 1: What are the potential consequences of continued increases in foreign investment in Energy Sector R&D, relative to the U.S.'s flat investments in recent years?

Private Investment	"If we're going to compete, we have to figure out new ways to attract private capital into a sector which has historically seen woefully inadequate investment in R&D due to the scale of capital investments, longer time frames, regulatory uncertainty and other spillover benefits that firms struggle to wholly capture. The Energy Impact Foundation would address this issue and could play a pivotal role in supporting U.S. leadership in advanced energy technology." - Brad Townsend, Associate Director, Energy Innovation, Bipartisan Policy Center, February 15, 2018
Global Competition	"We lose the economic race on innovation and commercialization. That equates to a loss of private investment and job creation, which the U.S. is sorely in need of good-paying advanced manufacturing jobs. Co-locating manufacturing and innovation near consumer markets creates competitive advantages that can make local economies globally competitive. Increased investment will pay itself back in economic growth, but the focus has to be on the entire research to commercialization pipeline and creating an environment that allows businesses to plan long term." - Hank Love, Executive Director, American Jobs Project, February 16, 2018
Financial Challenges	"The challenge in the United States is that our innovation ecosystem is not well-suited to the demands of many energy technologies. They often take a long time to mature, must be integrated into complex systems, and require patience on the part of investors. Our financial system does not generally reward patience! So the US faces a disadvantage in this field, particularly compared to Asian competitorsThat said, the U.S.'s investment in federal R&D is historically a source of strength, and we have a very dynamic private sector. The Impact for Energy Foundation has the potential to provide another valuable bridge linking these two sectors" - David Hart, Senior Fellow, Information Technology and Innovation Foundation, February 19, 2018



## Question 2: Which sectors of the energy industry would benefit from a renewed focus on joint public/private research and development and why?

Demand Side Management	"The greatest need is in understanding, coordinating, and developing standards for demand side management opportunities in the electrical grid. As more intermittent renewables are incorporated into the grid, flexibility becomes increasingly important and the demand side is an underutilized resource." - Brent Nelson, Associate Professor of Mechanical Engineering, Northern Arizona University, February 14, 2018
Green Infrastructure	"This approach could drive elegances in renewable microgrid architecture and controls, zero energy buildings, and resilient energy systems powering infrastructure. This approach lends well to more complex systems in entrenched markets – in this case – electric utilities, buildings, and infrastructure." - Scott Sklar, President, The Stella Group, LTD, February 14, 2018.
Carbon Capture and Storage	"The new 45Q carbon tax credit has created a market for CO2 sequestration and utilization. There is a massive need to accelerate, incubate, commercialize and grow companies that have CCUS technology that effectively pulls CO2 from point source emissions and direct air capture and embeds them into products." - Hank Love, Executive Director, American Jobs Project, February 16, 2018
Natural Gas Energy Efficiency	"We all know that natural gas is being used to provide building space heating and to heat domestic and process water, so we know the natural gas entering the building will be combusted. How efficiently is that being done? Why vent hot exhaust when, with the technology of Condensing Flue Gas Heat Recovery, the heat energy can be recovered from the combusted exhaust and made available to be used in an efficient manner in the building or facility or someplace close by?" - Sid Abma, CEO, Sidel Systems USA Inc. February 20, 2018

## Question 3: In what ways can additional private sector investments in the energy sector complement and sustain federal R&D support over time?

Taxes	"Better tax treatment of patient capital investments could change investor behavior to make energy technology a more lucrative investment. The UK and Australia have created tax schemes to give capital gains tax exemptions to investors that make patient capital investments. There is an entire ecosystem of impact investors that would jump at the opportunity to participate in a system like that." - Hank Love, Executive Director, American Jobs Project, February 16, 2018
National Laboratories	"The Impact for Energy Foundation provide a way for DOE's national laboratories, which have historically been somewhat isolated from their surrounding regional economies, to engage with nearby businesses and entrepreneurs and make better use of their extraordinary technical resources for the benefit of society." - David Hart, Senior Fellow, Information Technology and Innovation Foundation, February 19, 2018