



C3 SOLUTIONS

The Conservative Coalition for Climate Solutions (C3 Solutions) welcomes the opportunity to respond to DOE’s Request for Information—Foundation for Energy Security and Innovation (FESI) 6450-01-P, published on February 8, 2023. C3 Solutions is a non-partisan 501(c)(3) think tank focused on accelerating innovation to meet America and the world’s greatest energy and environmental challenges. We believe FESI could be influential in these objectives.

Questions 1 & 2: Which aspects of the DOE mission and energy technology commercialization can you identify as potentially benefitting from FESI's involvement? Once the FESI is established, what mission areas would you recommend DOE prioritize working on with the FESI?

Response: FESI should be instrumental in enhancing energy security, driving environmental progress, and accelerating the commercialization of transformative technologies. More specifically, FESI can help leverage private capital and serve as a coordinator to better connect researchers, investors, and entrepreneurs.

Question 3: In what ways would you recommend DOE seek support of the FESI to carry out the mission areas identified?

Response: Regarding pathways to accelerate energy innovation, DOE should seek the support of FESI to help accelerate what is working (effective programs, best practices, etc.) and to fix what is broken at the agency. One can imagine a scenario where FESI becomes the work-around to many well documented frustrations of commercializing technologies from DOE spending. Those frustrations include but are not limited to stovepiped funding, inflexibility, conflict of interest laws, a culture of risk aversion (dictated by and in some cases necessary because of existing laws and regulations), budget micromanagement, weakened engagement with industry, and lack of interagency or across-agency collaboration.

Due to those existing constraints, DOE could use the flexibility of FESI to help carry out its mission. DOE should also seek FESI’s help in conducting a thorough audit of the agency’s ability to commercialize technologies, identifying legal, regulatory, policy, and cultural barriers that create inefficiencies and include a list of fixes similar to a Government Accountability Office report. Finally, DOE could seek support from FESI in attracting private capital for investments and infrastructure that is complementary to DOE and the private sector, not overlapping.

4. To assist DOE in understanding and potentially better aligning with stakeholder interest, in what ways would you recommend DOE engage with organizations to determine what they seek to accomplish?

Response: DOE should showcase its unique capabilities and talent, identify barriers where FESI could help navigate or circumvent DOE bureaucracies, and communicate what infrastructure



C3 SOLUTIONS

investment and talent is necessary to assist in DOE's mission. Another way for DOE to engage with organizations is to ensure DOE's representation inclusive of the broad range of perspectives at the agency. Lab researchers may offer different viewpoints than lab directors. An analyst working on solar at the Office of Technology Transitions and an analyst working on solar at the Solar Energy Technologies Office could add value to stakeholder engagement in different ways. Embedded entrepreneurs could also help stakeholders in unique ways. DOE should leverage the specialized expertise and institutional knowledge to help the wide range of stakeholder interests that include investors, philanthropies, companies, think tanks, universities, and large and small business.

5. How would you envision DOE engage with the FESI to:

a&d. Better support communities wishing to participate in the energy transition? Broaden participation in energy technology development among individuals from historically underrepresented groups or regions?

Response: DOE and FESI should work to lower the costs and barriers for communities wishing to participate in the energy transition. This should include simplifying grant applications while maintaining necessary transparency and oversight, reducing information asymmetries, and leveraging private sector and non-profit expertise to help with technical assistance, consultation, and partnerships with experts that the community trusts. Lowering these costs would stretch public resources (money, labor, time) further. DOE and FESI could help identify models that have worked in other communities, while still recognizing that each community's needs and capabilities are different, so that these communities can be less reliant on DOE for help and more self-sustaining.

Identifying experts that the community trusts will be especially useful for the number of demonstration programs DOE is funding across the country. There may be a distrust of industry, a distrust of government, or both. The heterogeneity of communities makes finding the most effective messengers challenging but extremely important. DOE and FESI could establish a network of networks that are best positioned to serve communities and stakeholders.

b&e. Better support industry and small businesses wishing to participate in the energy transition? Support the commercialization of energy technologies?

Response: In addition to the response in 5-a&d, FESI could build off existing, complementary models and programs to help accelerate energy innovation. That could include the expanded use of prizes and competitions and coordinating opportunities for demand-side, private sector procurement. Additionally, FESI could serve as a clearinghouse for information that could help industry and small businesses leverage public investment and de-risk technologies (expanding and/or learning from initiatives like the American-Made Network). Depending on funding and



C3 SOLUTIONS

donation levels, several models could help accelerate the commercialization of emerging technologies.

A bold ambition would be to establish a U.S. equivalent of Germany's Fraunhofer Energy Alliance to create a sustainable model where industry utilizes research expertise in a variety of ways. This could include consortium partnerships in which rising tides lift all boats for a technology or leveraging research assets for a specific company need. The U.S. Economic Development Administration's blue economy clusters could be a useful model for certain regions and communities. The Mercatus Center's Fast Grants program could be an effective model for getting smaller chunks of money out the door quickly, which could be particularly beneficial and effective for small businesses and for inexpensive but potentially transformative technologies. Again, DOE and FESI's engagement should be carried out in a way that identifies gaps that the private sector is not reaching. FESI could be a coordinating force between national lab expertise and early-stage investors and philanthropic venture capital and drive more private sector funding for emergent technologies. FESI could be a market facilitator when and where DOE is not suited to deal with philanthropies and venture capitalists.

6. What potential challenges should DOE be aware of to proactively manage given the intent to establish the FESI?

Potential challenges that DOE should be aware of include, but are not limited to: building the necessary culture so that DOE and FESI can work productively with relevant stakeholders, the lack of philanthropic interest and general funding available, existing laws, regulations and bureaucracies being an impediment to collaboration, establishing a culture of risk-taking that maintains strong oversight and governance, remaining technology neutral, pulling resources from lab foundations, politicization of FESI, and building bipartisan support.

7. What other ways could the establishment of FESI support the DOE missions? How could DOE engage effectively with the FESI on these activities?

FESI could serve as an independent monitor and evaluator for programs across the agency and relevant technology innovation programs across the federal government. Furthermore, FESI could serve as a liaison and partnership intermediary for more efficient public and private sector procurement of emerging technologies. FESI could serve as an independent, bipartisan voice that conducts a thorough audit of all the policy and regulatory barriers that impede technology transfer, commercialization, and energy innovation.

If successful in fundraising, FESI could build large-scale assets that are complementary to the national labs and provide opportunities for the private sector to pay for proprietary work. However, instead of a full cost recovery model, FESI assets could use market mechanisms to assess the value of the resources they have. For instance, if certain technologies or lab resources attract significant private sector interest, FESI could charge higher prices and establish the



C3 SOLUTIONS

market value for their use. Flexible pricing guided by market demand could help justify scaling up in-demand assets or shuttering ones that have little value. Further, additional revenues could support the ongoing operations of large-scale assets under FESI's purview. Thank you for this opportunity to provide comments. I welcome opportunities to engage in the future.

Nick Loris

Vice President, Public Policy

Conservative Coalition for Climate Solutions (C3 Solutions)

Nick.loris@c3solutions.org