



The Honorable Marco Rubio (FL)
Chairman
Senate Committee on Small Business
284 Russell Senate Office Building
Washington, DC 20510

The Honorable Ben Cardin (MD)
Ranking Member
Senate Committee on Small Business
509 Hart Senate Office Building
Washington, DC 20510

September 18, 2019

Dear Chairman Rubio and Ranking Member Cardin:

We are writing as members of the Clean Energy Business Network—the small business voice for the clean energy economy—to convey our recommendations for small business policies to support technology research, development, and commercialization.

Our companies and associations are working across the spectrum of clean energy technologies, including energy efficiency, natural gas, renewable energy, advanced transportation, and storage, among others. Our industries support over 3 million jobs across the country, many of those in manufacturing, and represent the major growth sectors of the U.S. energy economy.

Many of our businesses have benefitted from federal research and development initiatives such as the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs. We have seen how critical these programs are to promoting breakthroughs in commercialization of cutting-edge technologies. At the same time, we recommend improvements to make these programs even more impactful and available to small businesses across the nation.

Most of the recommendations below can be implemented at no additional cost to the American taxpayer and only require adjusting program direction and implementation. Where new programming or staff are called for in order to manage small business programs more effectively, these improvements can be achieved at minimal cost while increasing mission impact.

I. Legislative Priorities

A. Improvements to Existing Provisions

1. Agency Excellence

- Recommendation: *Make the Administrative Funding Pilot Program permanent.*
- Background: Since 2011, agencies have been allowed to use 3% of SBIR/STTR funds for program improvements, yielding a profusion of innovative initiatives to diversify the applicant pool, upgrade data reporting systems, and provide high-impact entrepreneurship training. Agencies need long-term certainty to make these critical improvements to their SBIR/STTR programs, without the risk of this authority lapsing as it has done in the recent past.

2. Entrepreneurial Authority

- Recommendation: *Allow Technical and Business Assistance funds to be spent in-house, rather than mandating one or more external vendors.*
- Background: Recently, SBIR/STTR awardees have been allowed to spend up to \$50,000 of their awards on non-R&D expenses such as technical and business expertise. Entrepreneurs should have the discretion to allocate these dollars in the most efficient way, so they should be allowed to choose between spending on their own employees who possess that technical and business expertise, or a contractor of their choice.

3. Award Flexibility

- Recommendation: *Extend direct-to-Phase-II authority to all agencies, and make it permanent.*
- Background: For most agencies, only prior recipients of a Phase I (Feasibility and Proof of Concept) award are eligible to apply for Phase II (Research and Development) award. Every agency should be able to make a Phase II award without a prior Phase I award if the small business is ready for it.

4. Award Size

- Recommendation: *Make the Commercialization Readiness Pilot Program for Civilian Agencies and the Commercialization Assistance Pilot Program permanent.*
- Background: Agencies have responsibly used their authority to make follow-on SBIR/STTR awards to promising companies after Phase II, when there is a clear but lengthy path to commercialization (e.g., completing the drug approval pipeline). Agencies need long-term certainty that these authorities will not lapse or expire.

B. New Ideas

5. Short-Form Applications for First Round of Consideration

- Recommendation: *Ensure that agencies create a system for reviewing and greenlighting short-form project descriptions before requiring a more time-intensive full application.*
- Background: Preparing a high-quality application is a complex and time-intensive task for any small business. Reviewing lengthy applications that are a poor fit is also a waste of federal resources and staff time. Some federal agencies provide a short-form initial application that is only a few pages long and can be completed without professional assistance. This approach should be used by all agencies to screen submissions for eligibility and fit.

6. Vouchers for Application Assistance, Particularly for Diverse Teams

- Recommendation: *Create an independent program administered by the SBA—or competitively bid to an external contractor—to review successful short-form applications on the basis of need and provide vouchers for professional assistance.*
- Background: Once selected to proceed with a full application, first-time applicants should be eligible to compete for \$3,000-5,000 vouchers from SBA that pay for high-quality technical assistance from professional consultants or state/local assistance programs of their choosing. In allocating these awards, particular preference should be given to underrepresented populations, regions, and universities. This practice will ensure that the most promising technical ideas are able to compete for awards, regardless of the team's size or prior experience working with the federal government.

7. Support for Entrepreneurship Programs

- Recommendation: *Encourage agencies to allocate funding toward entrepreneurship programs within federal laboratories, universities, and incubators to work collaboratively with companies pursuing tough technical challenges.*
- Background: Over the past five years, innovative entrepreneurship training programs at universities and federal laboratories have generated above-average cohorts of promising SBIR/STTR awardees. Examples include Chain Reaction Innovations at Argonne National Lab, Cyclotron Road at Berkeley Lab, The Engine at MIT, Innovation Crossroads at Oak Ridge National Lab, and numerous incubators and accelerators across the country. Agencies should be encouraged to competitively allocate some of their funding to existing and future programs that build a pipeline of highly-educated entrepreneurs pursuing tough technical challenges.

II. Agency-Level Priorities

While the following best practices may be difficult to enact via legislation alone, agencies offering small business R&D programs should be encouraged to learn from one another and make progress on these key elements of an entrepreneur-friendly SBIR/STTR program:

8. Dedicated Program Managers

- Recommendation: *Encourage agencies to develop teams of dedicated program managers who possess relevant private-sector experience and the ability to work closely with awardees both before and after awards are made.*
- Background: Many SBIR/STTR programs are administered as a small portion of an R&D portfolio managed by agency staff with numerous competing priorities. To cater to the unique needs of small businesses with early-stage technologies, it is often ideal to deploy a team of program managers with relevant private-sector experience who focus exclusively on SBIR/STTR awards, akin to the approach used by typical ARPA-E and DARPA program managers.

9. Broad, Goal-Oriented Topics

- Recommendation: *Encourage agencies to design solicitations based on broad technologies of interest rather than narrow pre-defined research topics.*
- Background: Some agencies, such as the National Science Foundation, request more broadly-defined, goal-oriented proposals, whereas others are highly prescriptive in their solicitation topics and may miss highly-impactful, mission-relevant technology solutions proposed by entrepreneurs themselves.

10. Speed and Flexibility

- Recommendation: *Encourage the use of prizes and other flexible types of transactions to shorten award times. Having dedicated program managers would also help increase speed and flexibility.*
- Background: Fast-moving small businesses cannot wait months or a year to hear about funding sources. To the extent possible, agencies should shorten selection and award times, and offer multiple—or even continuous—funding opportunities each year.

11. Phase III Opportunities

- Recommendation: *Encourage agencies to educate and solicit successful SBIR/STTR awardees to seek and win contracts across the federal government based on agencies' missions and needs.*
- Background: While many agencies offer Phase III (non-SBIR/STTR funding) opportunities, this is typically not widely advertised or understood. Successful SBIR/STTR technologies may have broad applications across the federal government, and facilitating their procurement to serve agency missions is in the best interest of taxpayers.

In closing, small businesses across all sectors are working to develop new technologies that will transform our lives, in part with support from SBIR/STTR programs. The energy sector offers many shining examples of how the U.S. government has worked in partnership with the private sector to spur innovation. These partnerships have contributed to most transformations in the U.S. energy economy—from new oil extraction methods and hydraulic fracturing, to energy-efficient windows, to dramatic declines in the cost of wind turbines and solar panels.

Small business programs such as SBIR/STTR help small businesses rise and compete to develop promising new technological solutions and bring them to market—resulting in job creation, lower energy bills, increased domestic investment, and healthier communities. We urge you to stand beside these entrepreneurs in bringing the best and brightest ideas to market.

Thank you in advance for consideration of our views. Should you have any questions, please contact CEBN President Lynn Abramson at labramson@cebn.org or 202-785-0507 for further information.

Sincerely,

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