



U.S. Department of Energy's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

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U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

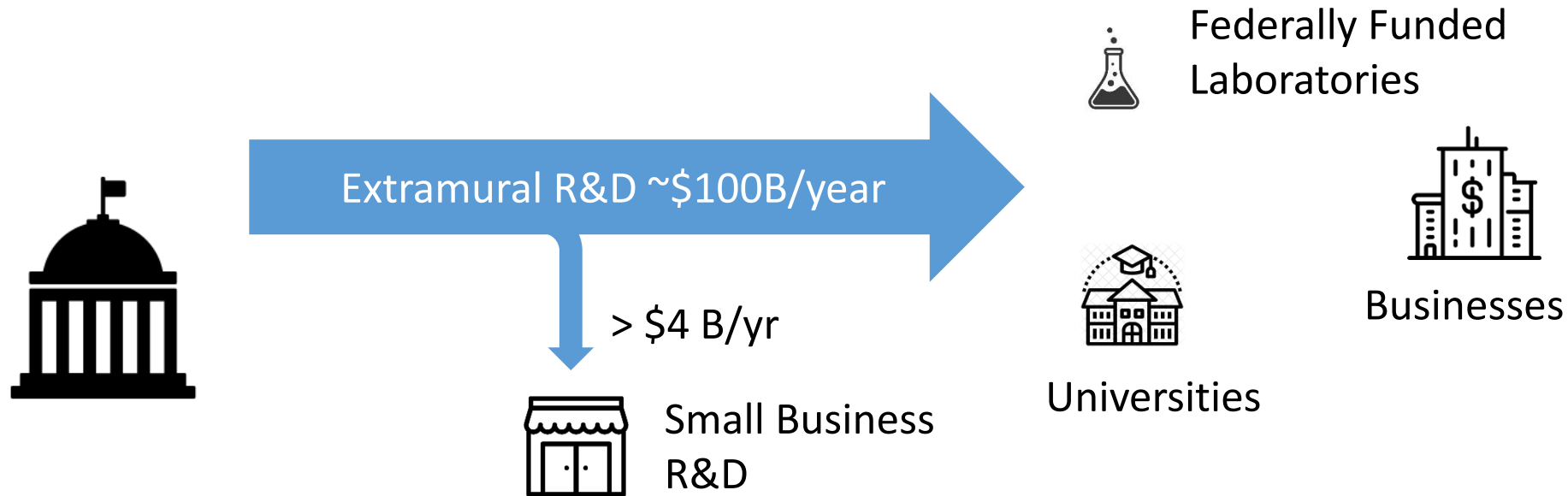
Agenda

- Federal SBIR/STTR
- About DOE SBIR/STTR Programs & Funding Opportunities
- Application Assistance
- What makes a good fit with our Programs?
- Finding a topic fit – DOE and other Agencies
- Commercialization Planning
- Commercialization Support for Awardees
- Partnering Resources
- Other Relevant Programs
- Diversity, Equity and Inclusion
- Q&A



What are the Federal SBIR & STTR Programs?

- A >\$4 Billion early stage nondilutive R&D fund for US-based small businesses
- Must be U.S. Citizen or permanent resident majority owned
- A mechanism to fund best early-stage high-risk innovation ideas
- Funds ideas that are too high risk for the private sector
- Use U.S. Small Businesses to stimulates technological innovation



FY 2022 SBIR/STTR Budgets by Agency

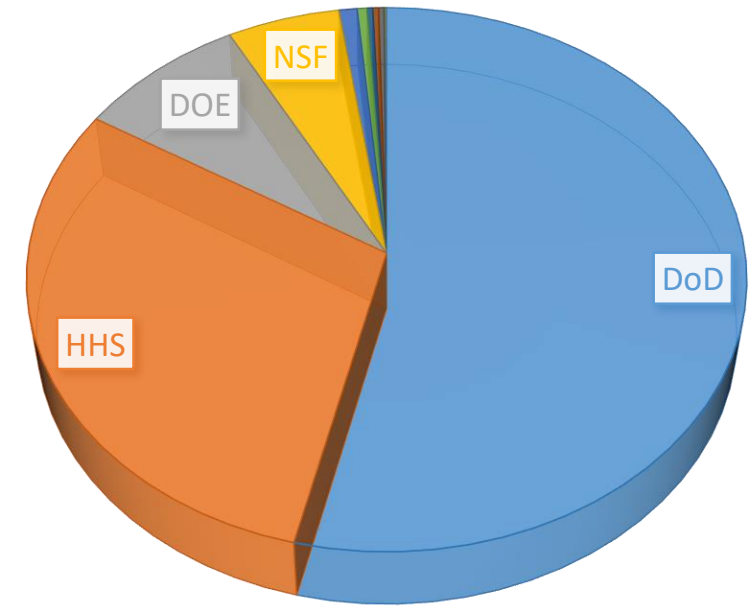


Agency	Budget (Millions)
Department of Defense (DoD)	\$ 2,240
Department of Health and Human Services (HHS), incl. National Institute of Health (NIH)	\$ 1,250
Department of Energy (DOE), incl. Advanced Research Projects Agency (ARPA -E)	\$ 348
National Science Foundation (NSF)	\$ 231
National Aeronautics and Space Administration (NASA)	\$ 215
Department of Agriculture (USDA)	\$ 38
Department of Homeland Security (DHS)	\$ 20
Department of Commerce: National Oceanic and Atmospheric Administration (NOAA), National Institute of Standards and Technology (NIST)	\$ 12
Department of Education (ED)	\$ 12
Department of Transportation (DOT)*	\$ 11
Environmental Protection Agency (EPA)	\$ 5

SBIR & STTR (> \$1B in extramural R&D)

SBIR only (> \$100M in extramural R&D)

2022 BUDGETS



SBIR: \$3.85 Billion
STTR: \$532 Million

Contracting agency
Granting agency
Both

DOE SBIR/STTR Programs – The Specifics



- Historically awards in excess of \$300 Million per year
- Grants not contracts – your idea & your execution
- Topics are aligned with DOE Mission:
 - **Leadership in Clean Energy**
 - **Leadership in Basic Energy and Engineering Sciences**
 - **Enhancement of Nuclear Security**
- Topics are more wide ranging than most expect!
- Two Phase I solicitations per year
- Letter of Intent is required
- We offer an expansive application assistance program “Phase 0”. It opens for an application cycle when the topics document are released <https://doephase0.dawnbreaker.com/>



SBIR vs STTR?



Small Business Innovation Research (SBIR) est. 1982	Small Business Technology Transfer (STTR) est. 1992
<ul style="list-style-type: none"> • Allows non-profit research institution partner • Principal Investigator (PI) employee of small business 	<ul style="list-style-type: none"> • Foster technology transfer between small business concerns and research institutions • Requires non-profit research institution (RI) partner • PI can be employee of either small business or RI

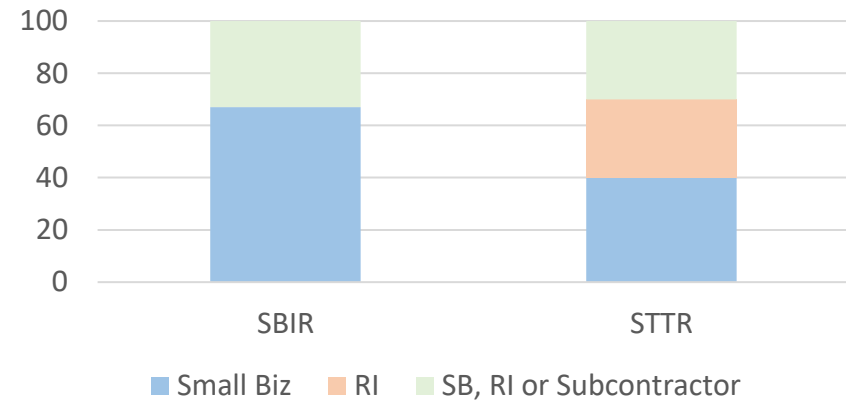
There are different level of effort requirements to meet [use our workbook to check compliance](#) !

If you fulfill requirements of SBIR & STTR you can submit the same application to both programs

Award always goes to the Small Business

They are two pots of funding

Phase I – R&D Requirements



SBIR and STTR were reauthorized on September 30, 2022



Participating DOE Program Offices – 2 Releases/Year

 FY24 Release 1 – July 10, 2023  FY24 Release 2 – November 6, 2023

Advanced Scientific Computing Research (ASCR)

Fusion Energy Sciences (FES)

Nuclear Nonproliferation (NNSA)

Energy Efficiency & Renewable Energy (EERE)

Basic Energy Sciences (BES)

High Energy Physics (HEP)

Nuclear Energy (NE)

Cybersecurity, Energy Security & Emergency Response (CESER)

Biological & Environmental Research (BER)

Nuclear Physics (NP)

Fossil Energy & Carbon Management (FECM)

Electricity (OE)

Environmental Management (EM)

<https://science.osti.gov/sbir/Funding-Opportunities/FY-2024>

Specific Topics Aligned with DOE Mission



Leadership in Clean Energy

- Advanced Turbine Technology
- Clean Coal, Oil and Gas Technologies
- Advanced Materials/Technologies for Nuclear Energy
- Smart Grid Technologies
- Cyber Security
- Energy Storage
- Bio-energy & Biofuels
- Hydrogen & Fuel Cells
- Solar Power
- Water Power
- Wind Energy
- Advanced Manufacturing
- Efficient Buildings & Vehicles

Leadership in Basic Energy and Engineering Sciences

- Advanced Detectors
- Accelerator technology
- RF Components and Systems
- Data Acquisition, Processing and Analysis
- Fusion Energy Systems
- High Performance Computing & Networking
- Quantum Information Sciences
- Modeling and Simulation
- Atmospheric Measurement Technology
- Genomic Science and Related Biotechnologies
- Advanced Sources: neutron, x-ray, electron

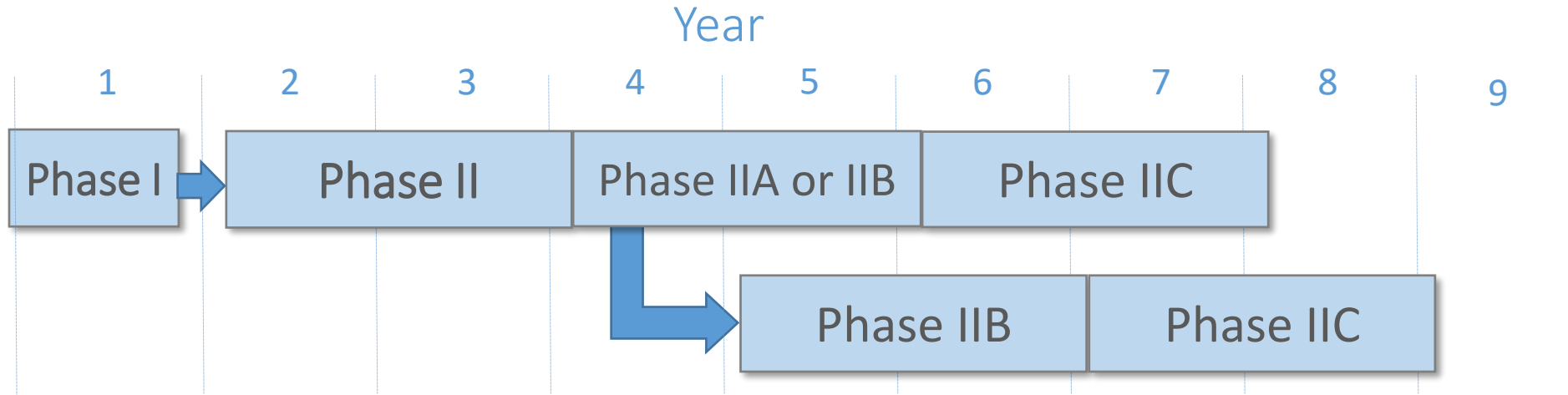
Enhancement of Nuclear Security

- Advanced Detectors
- Novel Radiation Monitoring Concepts
- In Situ Remediation
- Facility Deactivation and Decommissioning
- Remote Sensing
- Global Nuclear Safeguards R&D
- Nuclear Detonation Detection

Specific – but many more topics than you would expect



How does our funding work?



Phase I	Phase II	Phase IIA/IIB	Phase IIC
<ul style="list-style-type: none"> • Two annual Funding Opportunity Announcements • Focused, mission-aligned topics • Feedback provided on letters of intent • Max \$200,000/\$250,000 • 6 - 12 months duration • ~ 350-400 awards per year 	<ul style="list-style-type: none"> • Phase I awardees apply for Phase II the following year • Max \$1,100,000/\$1,600,000 • 2 years duration • ~ 160 awards per year 	<ul style="list-style-type: none"> • For projects that require additional R&D funding to transition to commercialization • \$1,100,000 • 2 years duration • ~30 awards per year 	<ul style="list-style-type: none"> • Pilot program to leverage 1:1 matching funds for commercialization • \$1,100,000 • 2 years duration



Funding Opportunities

<https://science.osti.gov/sbir/Funding-Opportunities>



- Topics Documents
- Register for Topics Webinar
- FOA Release
- Register for FOA Webinar
- LOIs are required
- Application Due Date

	Phase I	Release 1	Release 2
Topics Issued	Monday, July 11, 2022	Monday, November 7, 2022	
Document	Phase I Release 1 Topics 📄	Phase I Release 2 Topics 📄	
Phase 0 Application Assistance (free for first time applicants) starts	Monday, July 11, 2022	Monday, November 7, 2022	
Topic Webinar, week of	Webinar 1: Topics 1-15 🔗 Slides 📄 Webinar 2: Topics 16-24 🔗 Slides 📄	November 15, 2022: Topics 1- 9 & 22-28 🔗 Slides 📄 November 16, 2022: Topics 10 - 21 🔗 Slides 📄 November 17, 2021: Topics 29 - 41 🔗 Slides 📄	
FOA Issued	Monday, August 8, 2022	Monday, December 12, 2022	
Document	DE-FOA-0002783 📄	DE-FOA-0002903 📄	
FOA Webinar	Friday, August 12, 2022 🔗 Slides 📄	Friday, December 16, 2022 🔗 Slides 📄	
Letters of Intent (LOI) Due	Monday, August 29, 2022 5:00pm ET	Tuesday, January 3, 2023 5:00pm ET	
Non-responsive LOI Feedback Provided	Monday, September 19, 2022	Tuesday, January 24, 2023	
Full Applications Due	Monday, October 17, 2022 11:59pm ET	Thursday, February 23, 2023 11:59pm ET	
Award Notification	Tuesday, January 10, 2023**	Monday, May 15, 2023** Tuesday, May 30, 2023	
Projected Grant Start Date	Tuesday, February 21, 2023	Monday, June 26, 2023 Monday, July 10, 2023	
Awardee Webinar, week of	March 10, 2023 🔗 Slides 📄	July 24, 2023	
Phase Shift I Kick-off (formerly I-Corps)	April 27-28, 2023 (on site)	September 2023	
Principal Investigator Meeting	June 21-22, 2023 (on site)	October 2023	

Example only - FY 2023 is closed

*Registration link will be posted here, one week prior to the webinars. To receive this link automatically via email, please join our Mail List.



Funding Opportunities

<https://science.osti.gov/sbir/Funding-Opportunities>



Mark your calendars for FY 2024!

2024

Phase I	Release 1	Release 2
Topics Issued	Monday, July 10, 2023	Monday, November 6, 2023
Document		
Phase 0 Application Assistance (free for first time applicants) starts	Monday, July 10, 2023	Monday, November 6, 2023
Topic Webinar, week of	Monday, July 17, 2023*	Monday, November 13, 2023*
FOA Issued	Monday, August 7, 2023	Monday, December 11, 2023



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Application Assistance

[Phase 0 application assistance](#) for first-time DOE applicants

Free to you!

Email us!

General questions: sbir-sttr@science.doe.gov

Get Connected!

Subscribe to our mailing list: <https://science.osti.gov/sbir>

Stay Connected!



Recorded Topic, FOA and AMA Webinars



36 short tutorials on the Application Process

<https://doetutorials.dawnbreaker.com/>



Being on our mailing list is the most important way to stay up to date on our funding opportunities!



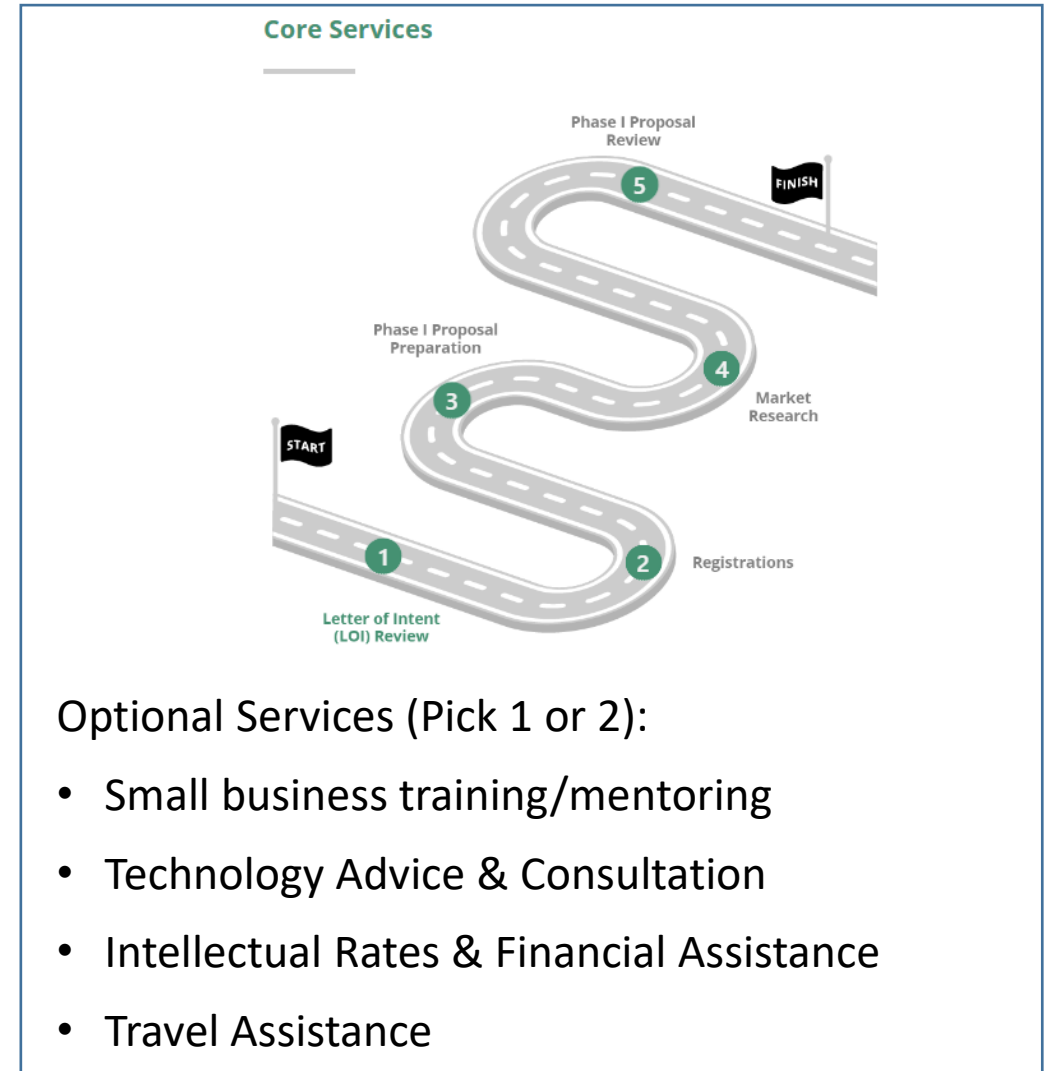
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Phase 0 Application Assistance



- Do you need help preparing your first DOE SBIR/STTR Phase I application?
- All first –timers are eligible (first come-first serve)
- Go/No-go discussion and decision:
 - Responsive to topic
 - Novel idea
 - Ability to conduct the proposed R&D
- [Apply portal](#) opens when Topics are released
- “Ample” opportunity to enroll
- Phase 0 program informational webinar hosted by provider.
- [Signup for Phase 0 mailing list](#)



What makes you a good fit with DOE?

Application Review Criteria

1/3

Technical Merit

1/3

Ability to Carry Out
the Project

1/3

Impact

- Responsiveness to the topic & subtopic
- Must be technology development R&D!
- Idea is novel
- Solid work plan to prove feasibility
- Your team is composed of the right expertise
- Potential impact if R&D is successful

More about Topics

- DOE Mission-Focused Specific Topics
- Specify grant maximum amounts and whether STTR and Fast-Track applications are being accepted
- At Topic Webinar (recorded), DOE Program Managers discuss the topic then Q&A

C56-10. JOINT TOPIC: DECARBONIZATION OF AGRICULTURE, BUILDINGS, TRANSPORT, INDUSTRY AND THEIR COMMUNITIES

Maximum Phase I Award Amount: \$200,000	Maximum Phase II Award Amount: \$1,100,000
Accepting SBIR Phase I Applications: YES	Accepting STTR Phase I Applications: YES
Accepting SBIR Fast-Track Applications: NO	Accepting STTR Fast-Track Applications: NO

The objectives of this topic on decarbonization of Agriculture, Buildings, Transport, and Industry are to enable major reductions in carbon emissions in these sectors to help meet the Biden Administration greenhouse gas (GHG) reduction objectives—50 percent reduction by 2030 and net-zero carbon economy by 2050.⁴

This joint topic is a collaboration among U.S. Department of Energy's Advanced Materials & Manufacturing Technologies (AMMTO), Building Technologies (BTO), Bioenergy Technologies (BETO), Industrial Efficiency and Decarbonization (IEDO), Vehicle Technologies (VTO), and Water Power Technologies (WPTO) Offices.^[5] This topic is not intended to comprehensively cover all aspects of decarbonization, rather, this joint topic generally supplements individual office topics with those aspects of decarbonization R&D best suited to joint efforts.

All applications to this topic must:

- Clearly indicate the subtopic and area of interest;
- Explicitly and thoroughly differentiate the proposed innovation with respect to existing commercially available products or solutions-- Justify all performance claims with theoretical predictions and/or relevant experimental data.
- Propose a tightly structured program which includes clearly defined, relevant materials and manufacturing RD&D metrics (including energy savings where applicable). The program should include quantitative technical milestones, timelines, and expected deliverables that demonstrate aggressive but achievable progress;
- Provide evidence that the proposer has relevant materials and or manufacturing experience and capability; and
- Explain applications of project output and potential for future commercialization including projections for cost and/or performance improvements that are tied to a clearly defined baseline.

In addition to reducing carbon emissions to net zero in all sectors by 2050, the Biden-Harris Administration seeks a more immediate equitable economic recovery that requires the expertise and talents of small businesses. While increasing equity is a concern for the topic in general, one way to advance equity as well as accelerate carbon reduction is to develop equitable and inclusive innovative technology solutions through a



More about Topics

- Open communication permitted about the topic scope with DOE Program Managers
- *Reading references is highly recommended. Market studies are sometime included.*

C56-30. SUPERCONDUCTING MAGNETS

Maximum Phase I Award Amount: \$200,000	Maximum Phase II Award Amount: \$1,100,000
Accepting SBIR Phase I Applications: YES	Accepting STTR Phase I Applications: YES
Accepting SBIR Fast-Track Applications: NO	Accepting STTR Fast-Track Applications: NO

New or advanced superconducting magnet concepts are needed for plasma fusion confinement systems. Fusion specific magnetic confinement devices operate at higher magnetic fields (14T-20T), in higher nuclear irradiation environments, and require provide access/maintenance or allow for wider operating ranges in temperature or pulsed magnetic fields. Of particular interest are the following:

a. Superconducting Magnetic Technology

Innovative and advanced superconducting materials manufacturing processes that have a high potential for improved conductor performance and low fabrication costs. Specifically addressing manufacturing capacity (>500 km/yr) while maintaining quality assurance and quality control.

Innovative and advanced superconducting materials manufacturing processes focusing on increasing deposition area (>0.5 m²)

Radiation-resistant electrical insulators, e.g., wrap able inorganic insulators and low viscosity organic insulators that exhibit low gas generation under irradiation, less expensive resins and higher pot life; and insulation systems with high bond and higher strength and flexibility in shear.

Questions – Contact: Guinevere Shaw, guinevere.shaw@science.doe.gov

b. Other

In addition to the specific subtopics listed above, the Department invites grant applications in other areas that fall within the scope of the topic description above.

Questions – Contact: Guinevere Shaw, guinevere.shaw@science.doe.gov





Finding Topics

What problem are you currently interested in solving and how can you apply your technology in this area?

Examples:

- Your company builds a detector that analyzes particle size of solids produced in the cosmetic industry, such as powders, etc. You want to understand if there are different markets for your technology and R&D funding to develop your analyzer for new applications.
- Your company develops metal organic frameworks (MOFs) for controlling humidity in HVAC systems, by adsorbing water from the environment at low temperatures. You want to conduct R&D to see if the materials can be used for carbon capture at higher temperatures in a flue stack.
- Your company develops a coating mitigating biofouling for boat hulls. You want to know if your coating can be used in other marine and hydro environments

Note that our Partnering site will come online in July and the topics will be indexed and searchable on the

Topic Searching - DOE



topicsV412222022.pdf | 121 / 175 | 100% | purify | 2/3

Grant applications are sought in the following subtopics:

a. Novel Reactive Capture Approaches that Convert Industrially Produced CO₂ to Useful Products On-Site
Among the objectives of the Point Source Capture Program is to support the deep decarbonization of the industrial sector. Facilities of interest for decarbonation are cement and lime plants, iron and steel manufacturing plants, hydrogen production plants, ethanol plants, and chemicals and petrochemicals plants. The conventional capture approach is to first separate/capture carbon dioxide (CO₂) from process emissions or pre/post-combustion flue gases and then, as applicable, to regenerate the capture medium and to compress, transport, and store or otherwise utilize the purified CO₂ in other applications. The act of capturing CO₂ in this method is often accompanied downstream by energy intensive and costly support infrastructure and

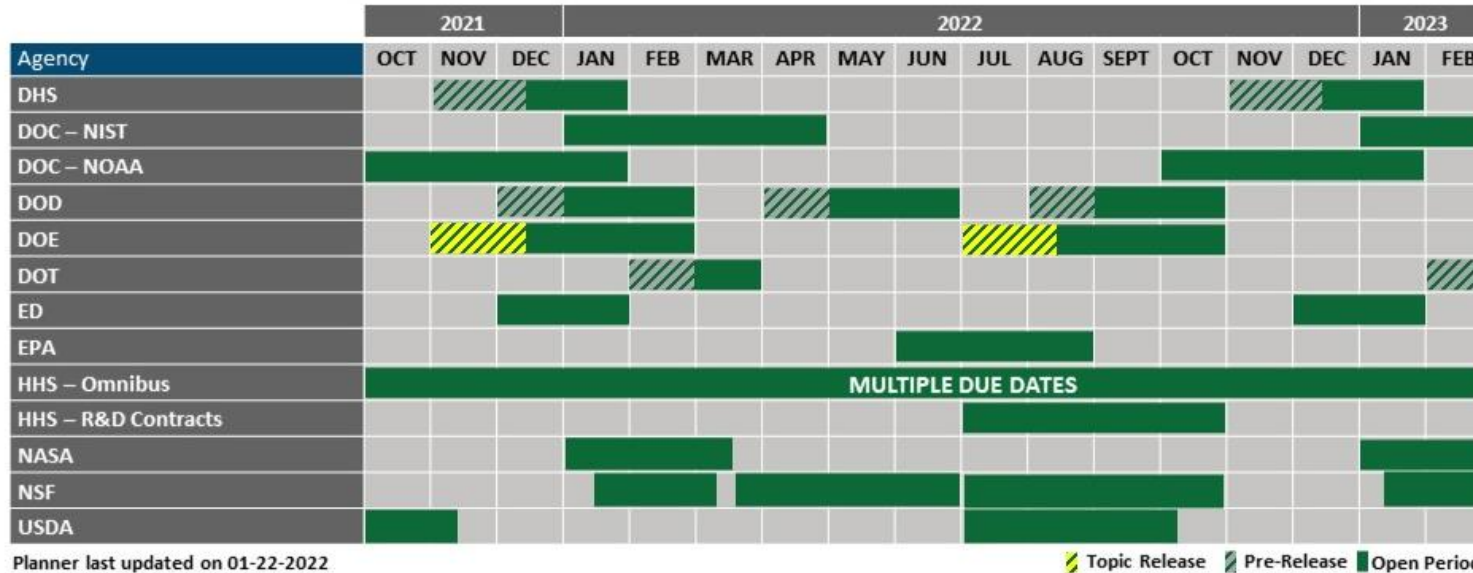
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processes to capture, purify, compress, transport and/or store the captured CO₂, and to regenerate the capture medium. It may therefore be highly advantageous in terms of energy efficiencies and costs to employ a “reactive capture” approach to carbon capture. 1 In the reactive capture approach, the act of capturing CO₂ and converting it into a higher value product is integrated into one continuous process onsite – thus eliminating the potential need to separately regenerate the capture medium and the need to purify, compress, transport, or store the captured CO₂. Removing the need for regeneration and compression steps from the carbon capture process could eliminate up to 90% of the energy loss associated with employing a typical amine capture process. 2 It is also possible that the integrated process could significantly reduce capital expenditures as well as provide distributed economic and employment opportunities.

Grant applications are desired for reactive capture approaches that integrate the CO₂ separation from diluted gas streams and the conversion of CO₂ to valuable product(s). The reactive capture process must achieve over 95% carbon capture rates and demonstrate significant progress towards a 30% reduction in the cost and 30% improvement in energy efficiency of carbon capture versus a reference conventional capture process where the acts of capture and conversion are separate. This topic area supports Infrastructure Investment and Jobs Act (IIJA) Title III: Fuels and Technology Infrastructure Investments; Subtitle A: Carbon Capture, Utilization.



Estimated SBIR Topic Release Schedule



Select and focus on several agencies to maximize your chances of receiving an SBIR/STTR award

<https://www.sbir.gov/solicitations>

While there are core parts of solicitations that are the same across the SBIR/STTR programs, solicitation guidelines are quite different at different agencies, especially between agencies that provide awards as grants and those that use contracts. The solicitations and topics listed on this site are copies from agencies to be used for general planning purposes, but they may not be the most up-to-date.

For these reasons, you should [visit the agency SBIR program sites](#) to read the official version of the solicitations and download the appropriate forms and rules.

SBA Award Topic Searching



Brainstorm 5-10 keywords that represent the problem you are trying to solve and your area of expertise, technology or innovation

- nanomaterials, sorbents, energy,
- water, purification, remote, renewable energy, filter
- artificial intelligence, software, inequality
- Detectors, monitoring

<https://www.sbir.gov/sbirsearch/award/all/>

Award Data

FILTER BY:

Agency

- Department of Agriculture (3852)
- Department of Commerce (1739)
- National Institute of Standards and Technology (410)
- National Oceanic and Atmospheric Administration (321)
- Department of Defense (95793)
- Air Force (30973)

Phase

- Phase I (140790)
- Phase II (60346)

Program

- SBIR (182412)
- STTR (18724)

Year

- 2023 (86)
- 2022 (6383)
- 2021 (6779)
- 2020 (7310)
- 2019 (7031)
- 2018 (5655)
- 2017 (6028)
- 2016 (5401)
- 2015 (5172)
- 2014 (5268)

View As: [List](#) [Chart](#) [State Map](#)

Search Keywords Company Name Topic Code

- i** For best search results, use the search terms first and then apply the filters
- i** The Award database is continually updated throughout the year. As a result, data for FY22 is not expected to be complete until September, 2023.
- i** Download all SBIR.gov award data either **with award abstracts (290MB)** or **without award abstracts (65MB)**. A data dictionary and additional information is located on the **Data Resource Page**. Files are refreshed monthly.

Displaying 1 - 10 of 201136 results

SIMPLIFIED STEAM ELECTROLYSIS: HYDROGEN FOR HARD-TO-ABATE INDUSTRIES

SBC: *Advanced Ionics, Inc.* Topic: *NA*

Advanced Ionics, Inc. (AI)—proposes to advance its breakthrough, high-efficiency low-cost hydrogen electrolyzer technology to gigawatt-scale production within the next decade, supporting rapid decarbonization of heavy industry 10 to 20 years earlier than possible under typical industry-led R&D timeframes. Targeting the multi-billion-dollar hydrogen industry, AI's system will generate volumes ...

SBIR **Phase I** **2023** **Department of Energy**

Efficient Recovery of Dilute Helium Gas Using Molecular Sieve Membranes

SBC: *Osmoses Inc.* Topic: *NA*

Diminishing domestic helium supplies and a growing dependence on foreign sources of helium, such as helium produced in Russia, have created severe shortages of this critical gas for various facets of the U.S. economy, including medicine, research, manufacturing, and consumer goods. This proposal aims to address this vulnerability in the U.S. supply chain through the development of a novel family o ...

SBIR **Phase I** **2023** **Department of Energy**

Simplifying Reactor Setup for Cell-Free Biofuel Production



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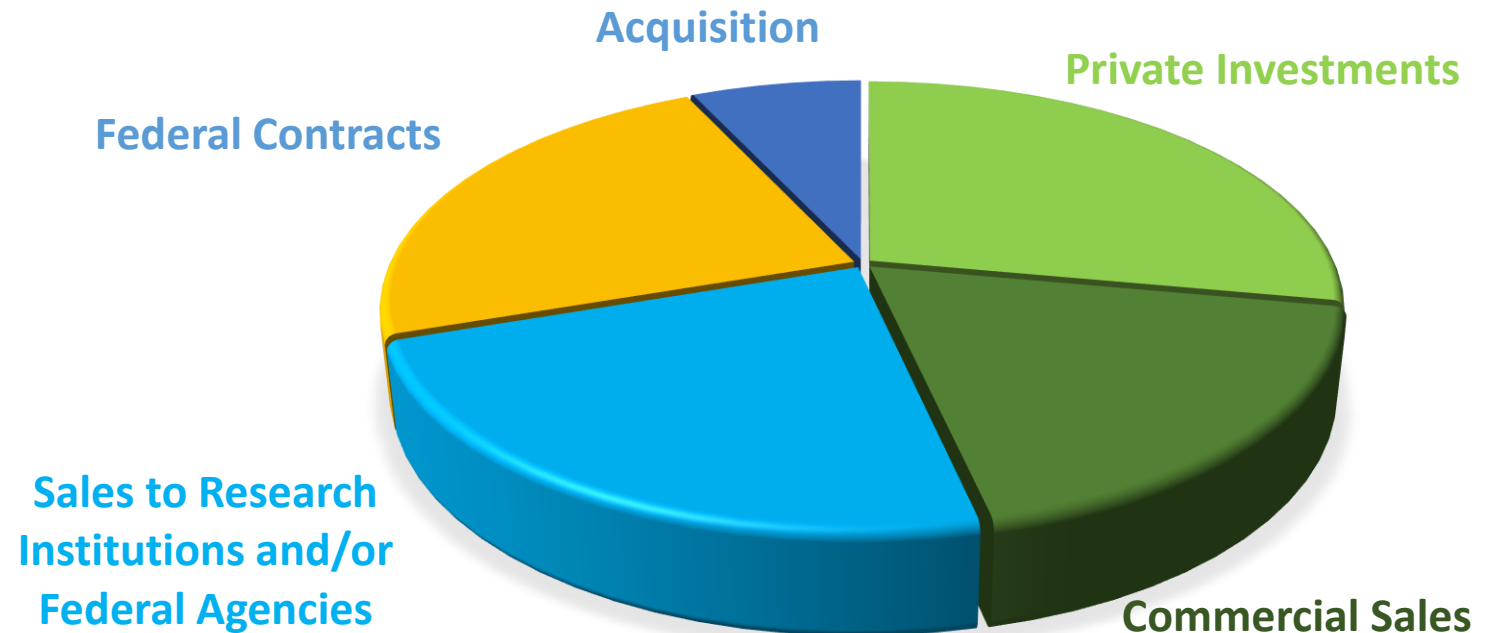
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Commercialization is a statutory goal of the SBIR/STTR programs

- *“Increase private sector commercialization of innovations derived from Federal R-R&D, thereby increasing competition, productivity and economic growth.”*
- Agencies are required to evaluate the commercial potential of R&D conducted under SBIR/STTR.
- “Commercialization” encompasses different aspects of early commercial activity: product launch, licensing, patenting, raising non-SBIR funds.

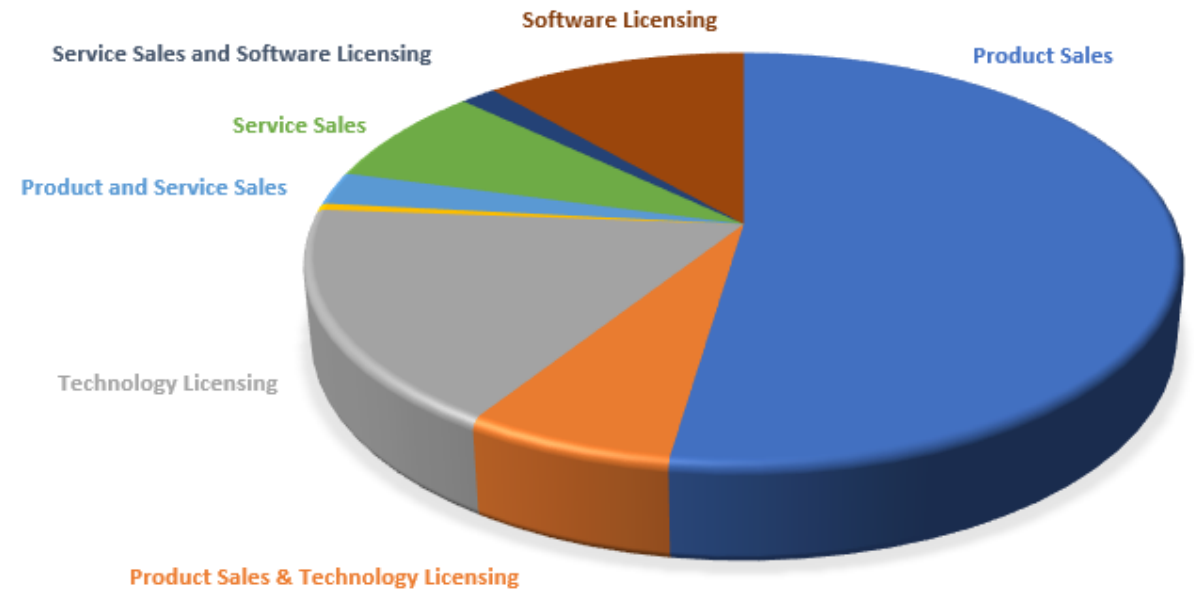
Commercialization (Phase III) defined

- *Sale of Product/Service*
- License or acquisition
- Government contract (non-SBIR funds)



Myriad of Business Models

- Many different business models for revenue generation.
- Some agencies are their own customers
- No one “model” fits all



Phase I Commercialization Plans

Although there are similar key elements, available information varies greatly based on the technology and application (target market).

- For those delivering innovative solutions into an existing market:
 - More information on your market, potential customers and competitors.
- For those delivering new technologies into emerging markets:
 - Market information will be more challenging
 - Competitors may be unknown and/or less known



DOE Phase I Commercialization Plan



- Use the [example plan](#) and PI [FOA](#) for guidance; separate 4-page Phase I commercialization plan; 4 individual sections that mirror the DOE Phase II commercialization plan
- Moving from Phase I to Phase II requires you to develop and validate what you suggest in Phase I; taking it from a few pages to 15 pages



Start Customer Discovery Now (Pre-Phase I)

- Use customer discovery to **understand your stakeholders; validate the need** for your technology; and insure you can meet their **price, specifications, and quality requirements** as you start development
 - *Customer*
 - *End-users*
 - *Value Chain/Supply Chain and where **YOU** fit*
- As you develop your Phase I proposal you should know these customers/end-users by name. **Begin developing a relationship** so that by the time you submit a Phase II proposal you can revisit to build and nurture the relationship getting feedback and letters of support where possible.
- Be realistic in your assessment of potential sales; do not assume widespread and immediate adoption of your technology by the entire customer base. Provide a brief explanation of the basis for your revenue forecast – **what did you learn during customer discovery (% that need solution)**
- Competitors may be developing new technology that they are not publicly disclosing. Check publications and presentations – look for collaborations with key players. **Use customer discovery to understand who is supplying solutions today and the limitations. Seek to understand price and customer loyalty where possible.**



Why Customer Discovery *NOW* –



Use interactions with stakeholders to open the door to relationships that can be nurtured **over time**. Long-term, some may be **potential partners**.

- *Can I come back to you in a couple of months to talk to you about progress on a potential solution?*
- *Would you be interested in beta-testing a potential solution?*
- *Does your company provide letters of support?*

Don't stop – make customer discovery and interacting with your ecosystem the norm for your company; test and retest hypotheses as you develop new products/services



Awardee Commercialization Resources

- New for *Applicants and Awardees!* [DOE SBIR/STTR Partnering Resources](#)
 - Looking for SMEs, collaborators, subcontractors?
 - Understand related research being done at research institutes
 - Email carol.rabke@science.doe.gov to discuss your partnering needs



Technical and Business Assistance (TABA)

\$6,500 above maximum award amount in Phase I

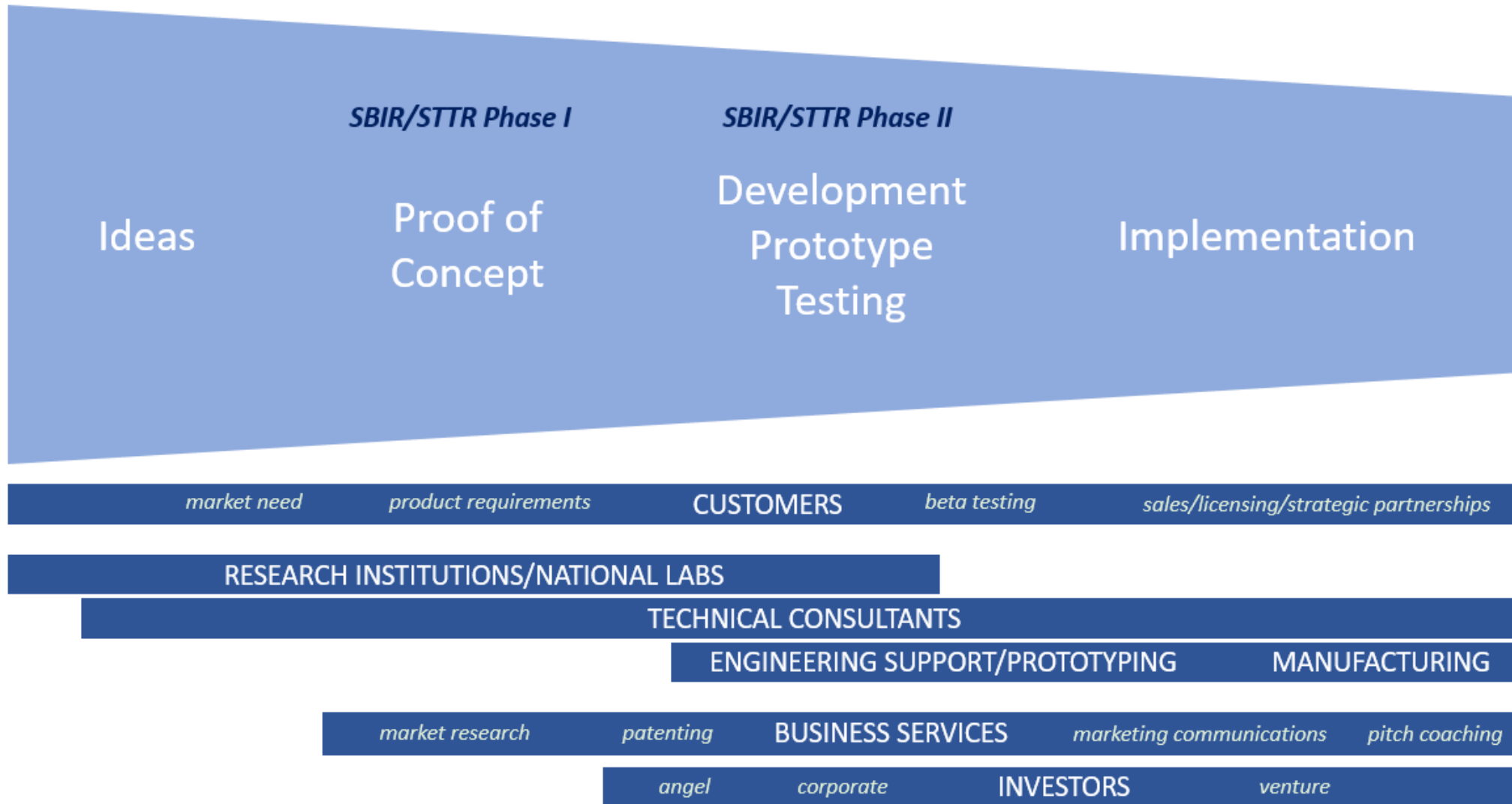
- a) Select your own vendor
- b) Use DOE vendor

\$50,000 above maximum award for Phase II

- Phase Shift I & II (formerly Energy I-Corps)
 - Designed to educate on entrepreneurial concepts
 - 2 months training at no cost to participants
 - Customer discovery process



Partners vary by development stage...



Partnering Resources



About

Funding Opportunities

Applicant Resources

Awardee Resources

Partnering Resources

SBIR/STTR Partnering Blog

Other DOE Resources

Manufacturing

Engineering Design

Test/Certification

Commercialization Services

Phase II Awardee Events

Frequently Asked Questions

Research Areas & Impact

Awards

SBIR/STTR Phase III Success Stories

Outreach

Reporting Fraud

- Developing public facing, searchable **SBIR Partnering Platform** – available July 2023; a repository where SBIR/STTR applicants/awardees (**INNOVATORS**) can find potential partners (**PARTNERS**) and partners can access 1000+ vetted technologies; AI used for matchmaking
- **Interim** Solution - [Partnering Resources Page](#)
- Introduced **virtual** [Phase II Awardee Partnering Events](#)
- [SBIR/STTR Partnering Blog](#)



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<https://science.osti.gov/sbir>

Partnering Resources Available



- Manufacturing Resources

- *Manufacturing USA (newer, state-of-the-art)*
<https://www.manufacturingusa.com/institutes>
- *MEP centers (traditional)*
<https://www.nist.gov/mep/centers>

- Engineering Design Resources

- Test/Certification Resources

- Commercialization Service Resources

- *Check State and local resources – see, <https://www.sbir.gov/resources>*



Partnering with the National Labs



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Labs Explore ▾ Patents ▾ Funding ▾ How to Partner 🔍

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<https://labpartnering.org/>

Demonstration Facilities at the National Labs

- Idaho National Lab
 - [https://factsheets.inl.gov/FactSheets/Electric Grid Security Capabilities.pdf](https://factsheets.inl.gov/FactSheets/Electric%20Grid%20Security%20Capabilities.pdf)
- Oak Ridge National Lab
 - <https://www.ornl.gov/gridc>
- National Renewable Energy Lab
 - <https://www.nrel.gov/workingwithus/partnering-facilities.html>
 - [Energy Systems Integration Facility](#)
 - [Solar Energy Research Facility](#)
 - [Wind Field and Technology Research Validation Sites](#)



Technology Commercialization Fund (TCF)



- Operated out of DOE's Office of Technology Transitions (OTT), the TCF is a nearly \$30M funding opportunity that leverages funding in the applied energy programs to mature promising energy technologies with the potential for high impact.
- Solicitations look for collaboration between the national labs and the private sector. Solicitations are typically announced at the beginning of the year.

<https://www.energy.gov/technologytransitions/technology-commercialization-fund>



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Lab-Embedded Entrepreneurship Program (LEEP)



- Managed by EERE and sponsored by its Advanced Manufacturing Office (AMO), LEEP provides clean tech scientists turned entrepreneurs with a two-year funded fellowship within a LEEP node
- LEEP nodes are currently located at ***Argonne National Laboratory, Oak Ridge National Laboratory, Lawrence Berkeley National Laboratory*** and ***National Renewable Energy Laboratory***
- Provides funds, scientific and business mentorship and access to state-of-the-art facilities

https://www.energy.gov/sites/default/files/2022-04/CRI_DOE_LEEP_Flyer_R5_0.pdf



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American-Made Challenges

- Clean energy prize competitions administered by the National Renewable Energy Laboratory on behalf of DOE's Office of Energy Efficiency and Renewable Energy (EERE)
- Register to be part of a network of *connectors* that have committed time and personnel to support the prize competitions
- Topics include solar, buildings, advanced manufacturing, geothermal, and geothermal, and inclusive energy innovation



<https://americanmadechallenges.org/>



Office of Clean Energy Demonstrations



- Established in December 2021 as part of the Bipartisan Infrastructure Law to accelerate clean energy technologies from the lab to market to help our nation reach its climate goals of net zero emissions by 2050.
- Enable clean energy demonstration projects at scale to efficiently commercialize critical clean energy technologies including clean hydrogen, carbon capture, advanced nuclear reactors, grid-scale energy storage, industrial emissions reductions, and more.
- OCED fills the gap between R&D and early-stage demonstration projects and initial deployments supported by the private sector and/or other DOE programs.

<https://www.energy.gov/oced/office-clean-energy-demonstrations>



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Loan Programs Office provides...



- Provides access to adequate **debt capital for final milestones** to commercialization
- Provides a **bridge to bankability** for innovative and high-impact energy technologies
- Provides access to needed loans and loan guarantees when private lenders cannot or will not until a given technology has reached full market acceptance



Outcomes & Successes



- All 2014-2016 Awardees, sourced from Pitchbook

Follow on funding by cohort (mm)	Follow on		M&A	
All 2014 SBIR/STTR Awardees	\$	1,746.00	\$	740.00
Added in 2015*	\$	759.00	\$	681.00
Added in 2016*	\$	780.00	\$	21.00
Total	\$	3,285.00	\$	1,442.00

*Partial totals

Also visit our success stories page:

<https://science.osti.gov/sbir/SBIR-STTR-Phase-III-Success-Stories>



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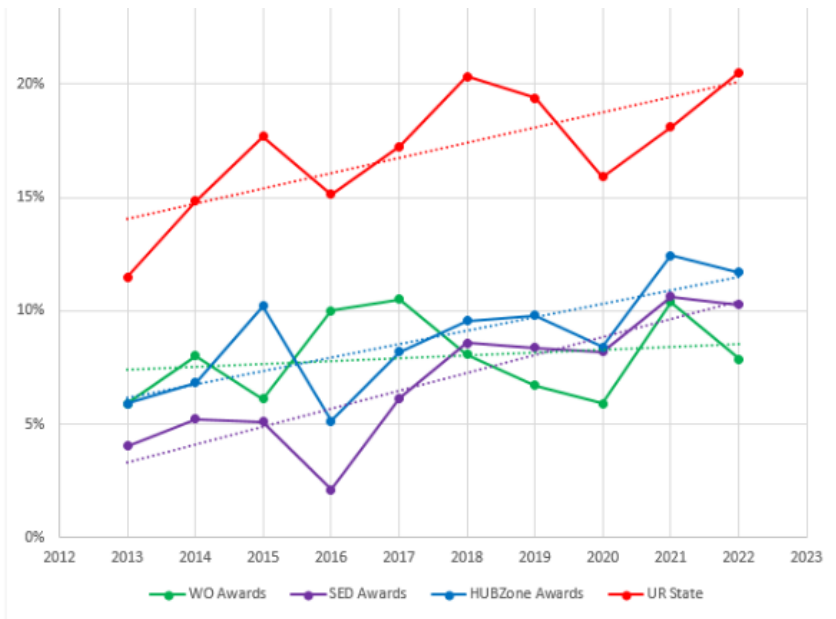
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Diversity, Equity and Inclusion



- Our office collaborates across the Office of Science (SC) to advance organizational best practices for promoting diversity, equity, and inclusion (DEI) in SC's business practices for awarding and managing competitive research
- Our methodology is to track, educate, support and innovate
- We are always looking for opportunities to elevate awareness to under-represented groups (URG), feel free to reach out to us to speak at your event!
- We have a number of relatively new DEI initiatives
 - *Tracking diversity performance*
 - *Phase 0 for first-time applicants*
 - *Diversity Supplement for Phase II awardees*
 - *Improving accessibility of application process*
 - *Using AI and software tools such as LinkedIn to identify and reach out to URGs who are a fit with DOE*

Phase I Award Percentages by Demographic



WO – Women-owned

SED – Socially and economically disadvantaged-owned

HubZone – In historically underrepresented business zone

UR State – In underrepresented state – Arkansas is a UR state

DOE SBIR/STTR Programs

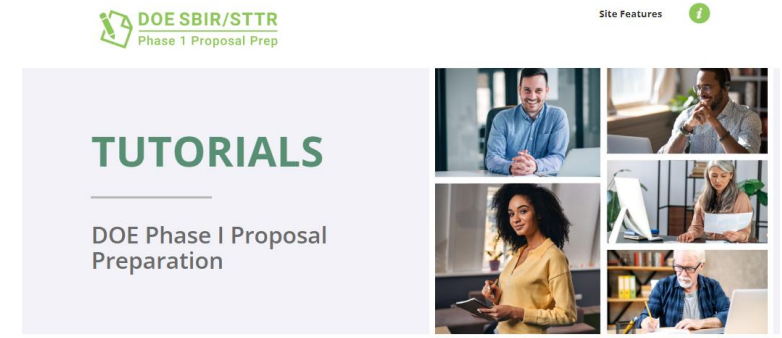
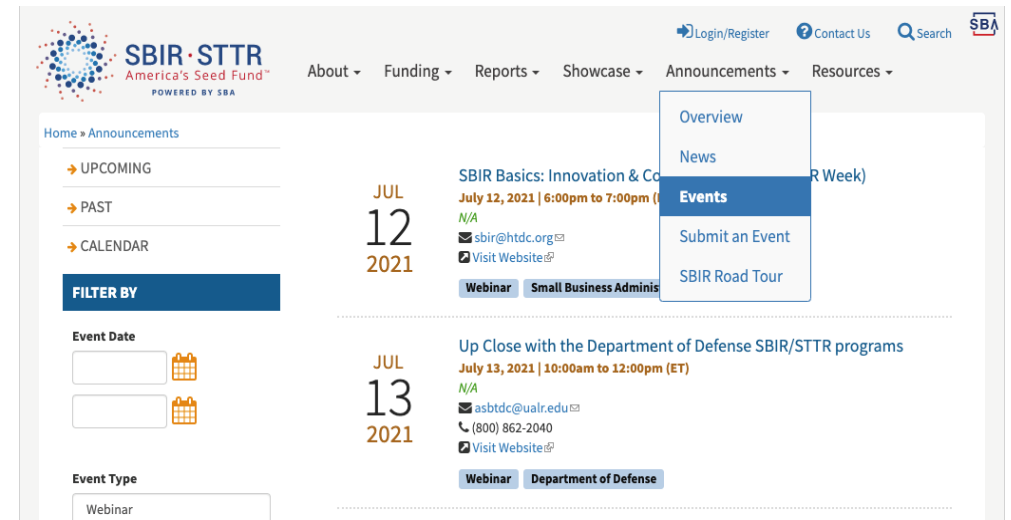


Take the next steps!

- General:
 - Attend SBIR/STTR training events - <https://www.sbir.gov/events>
 - Review SBIR.gov tutorials - <https://www.sbir.gov/tutorials>
 - Research SBIR local assistance in your state/region <https://www.sbir.gov>
 - Search awards, using 5 – 10 keywords to see what agencies are a fit with your technology - <https://www.sbir.gov/award/all>

DOE Specific

- Begin registrations, **especially SAM.gov**
- Perform an initial topic search using 5-10 keywords in our closed topic documents to get a feel for what we have funded and whether your technology may fit - <https://science.osti.gov/sbir/Funding-Opportunities>
- Review our Overview and Getting started tutorials - <https://doetutorials.dawnbreaker.com/>



The DOE SBIR/STTR Phase 1 Proposal Preparation site is available to help teach Small Businesses how to prepare a proposal in response to the DOE Funding Opportunity Announcement (FOA).

Welcome to the Department of Energy's SBIR/STTR Phase I Proposal Preparation site. These tutorials are designed to help new applicants prepare a responsive application package to submit to the Department of Energy (DOE) when applying for a Phase I Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) award. The tutorials are grouped by category on the tabs below. We hope that you find the Tutorials to be useful as you begin your journey to prepare a responsive DOE SBIR/STTR application package.

- SBIR/STTR Overview
- Getting Started
- The LOI and Registrations
- Project Narrative
- Staffing and Budgets
- The Application Package



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Q & A

Along your journey, feel free to reach out to us

eileen.chant@science.doe.gov, (301) 576-2386, Outreach Program Manager

carol.rabke@science.doe.gov, (301) 489-1128, Tech-to-Market Advisor - Partnering

sbir-sttr@science.doe.gov, (301) 903-5707, Application Questions