

U.S. Department of Energy SBIR/STTR Programs

Eileen Chant

Acting Director

eileen.chant@science.doe.gov

301.578.2386

SBIR – Small Business Innovation Research (Est. 1982)

STTR – Small business Technology TransfeR (Est. 1992)

Also known as America's Seed Fund



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

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

What is the Federal SBIR/STTR Program?



- A >\$4 Billion early stage nondilutive R&D fund for small businesses
- A mechanism to fund best early-stage high-risk innovation ideas
- Funds ideas that are too high risk for the private sector
- Stimulates technological innovation



Extramural R&D ~\$100B/year



> \$4 Billion/yr
Small Business
R&D

Federally Funded Laboratories



Large & Small
Businesses



Universities



U.S. DEPARTMENT
of ENERGY

Office of
SBIR/STTR
Programs

America's Seed Fund Program Goals



SBIR

- Stimulate technological innovation using small business concerns.
- Meet Federal research and development needs.
- Foster and encourage participation in innovation and entrepreneurship by women and socially or economically disadvantaged persons.
- Increase private-sector commercialization of innovations derived from Federal research and development funding.

STTR

- Stimulate and foster scientific and technological innovation through cooperative research and development carried out between small business concerns and research institutions
- Foster technology transfer between small business concerns and research institutions



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

America's Seed Fund



SBIR/STTR are federally funded contracts & grants designed to stimulate the commercialization of technological innovation using small businesses

SBIR and STTR funding provides ***early-stage, nondilutive R&D funding*** for ***U.S. small businesses*** with ***innovative ideas*** that have ***commercial potential...too high risk*** for private sector



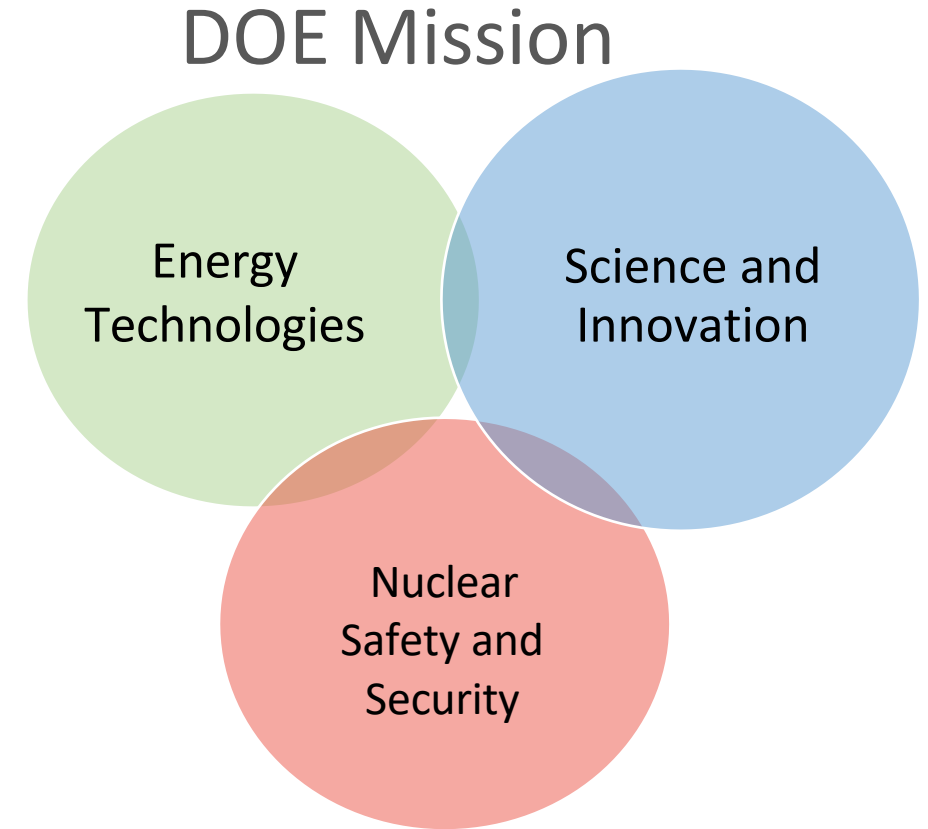
U.S. DEPARTMENT
of ENERGY

Office of
SBIR/STTR
Programs

DOE SBIR/STTR Programs – The Specifics



- Recently, awards in excess of \$250 Million per year
- Grants not contracts – your idea & your execution
- DOE unlikely to be your customer, so understand the marketplace.
- Focused topics are aligned with DOE Mission
- Topics are more wide ranging than most expect!
- Two Phase I solicitations per year (Topics in July & November)
- Letter of Intent is required



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

SBIR vs STTR?



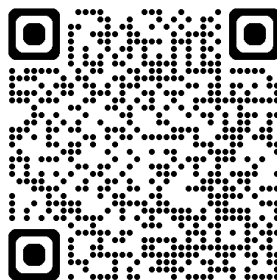
Small Business Innovation Research (SBIR) est. 1982	Small Business Technology Transfer (STTR) est. 1992
<ul style="list-style-type: none"> Allows non-profit research institution partner Principal Investigator (PI) employee of small business 	<ul style="list-style-type: none"> Foster technology transfer 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 !](#)*

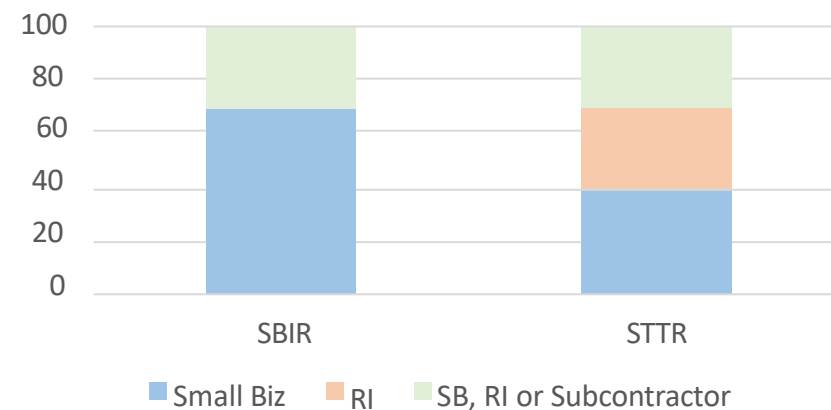
Award always goes to the Small Business

They are two pots of funding

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



Phase I – R&D Requirements



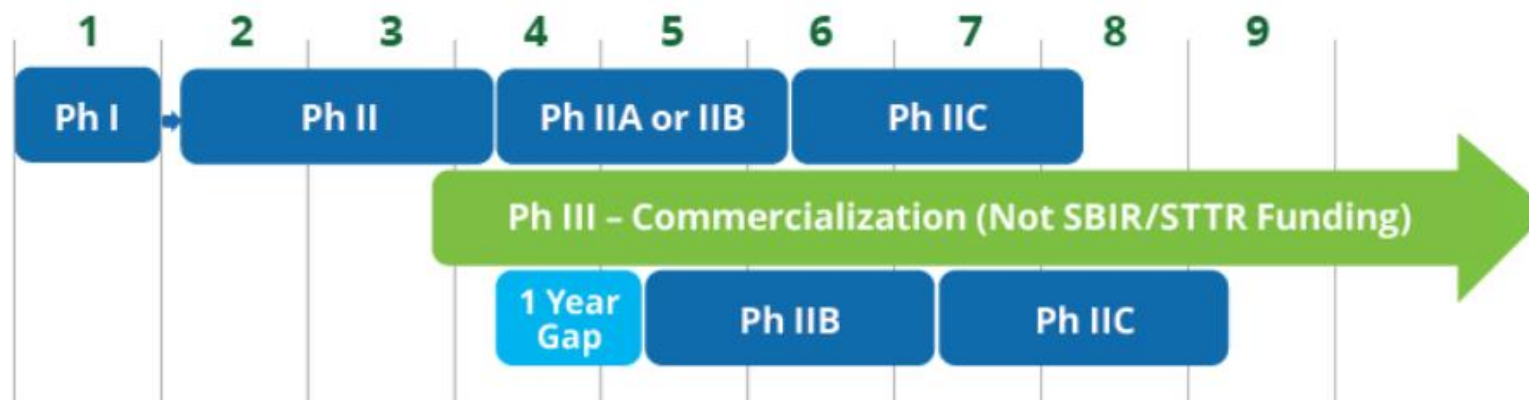
SBIR and STTR were reauthorized on September 30, 2022



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

How does DOE funding work?



Phase I	Phase II	Phase IIA/IIB	Phase IIC
<ul style="list-style-type: none"> • Focused, mission-aligned topics • Proof of feasibility • Feedback provided on letters of intent • \$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 • Focus on prototype, demonstration and commercialization • \$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 for 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


Small Business and Principal Investigator (PI) Eligibility Requirements

- For-profit U.S. business with 500 employees or fewer, including affiliates
- More than 50% of your company's equity (e.g., stock) must be directly owned and controlled by U.S. Citizens or permanent residents
- All R&D must be performed in the United States
- PI is the key individual designated by the applicant to direct the project
- Only one PI per project. Co-PIs are **NOT** allowed
- Primary employment requirements



Participating DOE Program Offices – 2 Releases/year



 Release 1 – July (Due in October)

Advanced Scientific
Computing Research
(ASCR)


Fusion Energy Sciences
(FES)

Basic Energy Sciences
(BES)

High Energy Physics
(HEP)

Biological & Environmental
Research (BER)

Nuclear Physics
(NP)

 Release 2 – November (due in February)

Nuclear Nonproliferation
(NNSA)

Cybersecurity, Energy
Security & Emergency
Response (CESER)

Energy Efficiency &
Renewable Energy (EERE)

Electricity
(OE)

Nuclear Energy
(NE)

Environmental
Management (EM)

Fossil Energy & Carbon
Management (FECM)



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

Specific Topics Aligned with DOE Mission



Leadership in Energy Technologies

- Advanced Turbine Technology
- 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 Science and Innovation

- 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

Many more and wide-ranging topics than you would expect!

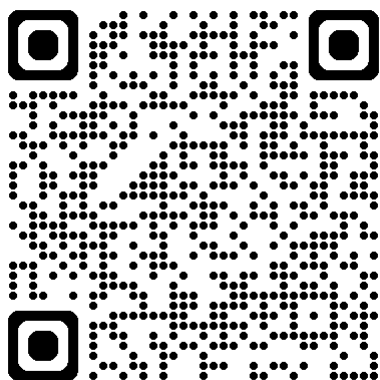


U.S. DEPARTMENT
of ENERGY

Office of
SBIR/STTR
Programs

Schedule:

FY 2026



U.S. DEPARTMENT
of ENERGY

Office of
SBIR/STTR
Programs



Phase I	Release 1	Release 2
Topics Issued	Monday, July 7, 2025	Monday, November 10, 2025
Document		
Phase 0 Application Assistance (free for first time applicants) starts	Monday, July 7, 2025	Monday, November 10, 2025
Topic Webinar, week of	Monday, July 14, 2025	Monday, November 17, 2025
FOA Issued	Monday, August 4, 2025	Monday, December 15, 2025
Document		
FOA Webinar	Friday, August 8, 2025	Friday, December 19, 2025
Letters of Intent (LOI) Due	Tuesday, August 26, 2025 5:00pm ET	Tuesday, January 6, 2026 5:00pm ET
Non-responsive LOI Feedback Provided	Monday, September 15, 2025	Monday, January 26, 2026
Full Applications Due	Tuesday, October 7, 2025 11:59pm ET	Wednesday, February 25, 2026 1:59pm ET
Award Notification	Monday, January 5, 2026	Tuesday, May 26, 2026
Projected Grant Start Date	Tuesday, February 17, 2026	Tuesday, July 7, 2026
Awardee Webinar, week of	March 9, 2026	July 27, 2026
Phase Shift I Kick-off (formerly I-Corps)	April 2026	September 2026
Principal Investigator Meeting	June 2026	October 2026
*Registration link will be posted here, one week prior to the webinars. To receive this link automatically via email, please join our Mail List.		
**Preliminary dates subject to change		

About DOE Specific & Mission-Focused Topics

- *Specify grant maximum amounts and whether STTR and Fast-Track applications are being accepted*
 - If SBIR and STTR criteria are met, you can apply to both
 - 2 different pots of funding
- *Carefully read the topic*
- *Be an expert in your technology area*

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



U.S. DEPARTMENT
of ENERGY

Office of
SBIR/STTR
Programs



C60-09. INDUSTRIAL EFFICIENCY AND DECARBONIZATION OFFICE (IEDO)

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

This topic will be providing feedback to responsive Letters of Intent.

The U.S. Department of Energy's (DOE) Industrial Efficiency and Decarbonization Office (IEDO) is working to build an efficient and competitive U.S. industrial sector with net-zero greenhouse gas emissions by 2050 [1]. IEDO provides funding, management, and the strategic direction necessary for a balanced national program of research, development, and demonstration (RD&D), as well as technical assistance and workforce development, to drive improvements in energy, materials, and production efficiency and to accelerate decarbonization across the industrial sector. IEDO's RD&D strategy focuses on two complementary approaches: tackling subsector-specific decarbonization challenges in energy- and emissions-intensive industries and pursuing cross-sector challenges that are common across many industries.

This topic focuses on disruptive industrial innovations, including RD&D, small-scale demonstrations, and technology partnerships to drive U.S. industrial decarbonization, productivity, and economic competitiveness.

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 using appropriate metrics, key performance parameters, or properties as well as justify all performance claims with theoretical predictions and/or relevant experimental data;
- The program should include quantitative technical milestones, timelines, and expected deliverables that demonstrate aggressive but achievable progress toward meeting performance parameter targets;
- Provide evidence that the applicant has relevant experience and capability to successfully accomplish the proposed scope within proposed schedule and budget;
- Explain a project's output potential for future commercialization including projections for cost and/or performance improvements that are tied to a clearly defined baseline.

The Phase I application must detail material, design and/or lab-scale systems that are scalable to a subsequent Phase II prototype development.

Subtopics

- *Response is to a topic/subtopic pair*
- *Carefully read the subtopic*
- *Open communication permitted about the topic/subtopic scope with DOE Program Managers*
- *Reading references is highly recommended.*
- Review our [market studies page](#) to see if there is anything for you



U.S. DEPARTMENT
of ENERGY

Office of
SBIR/STTR
Programs

b. Integration of ASCR-Funded Libraries

Adopting and integrating advanced ASCR-funded libraries into commercial products can lower the cost of developing new capabilities while simultaneously providing improved performance, reliability, and stability. The advanced mathematical and computational algorithms, and support for state-of-the-art hardware, can be leveraged by commercial software internally, thereby providing important capabilities without users interacting directly with the capabilities provided by the underlying ASCR-funded libraries. These commercial applications need not be targeted at HPC systems, but rather, may integrate and adapt the relevant ASCR-funded libraries for use in cloud, mobile, or other computing environments.

Grant applications are sought to take one or more ASCR-funded libraries and integrate them into new or existing, commercially supported software products to provide unique, transformative capabilities. Applicants may choose to strip out code components, harden them, or perform any other tasks necessary to meet deployment requirements in the context of the envisioned commercial product.

Questions – Contact: David Rabson, david.rabson@science.doe.gov and/or William Spatz, William.Spatz@science.doe.gov

c. Other

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

Questions – Contact: David Rabson, david.rabson@science.doe.gov and/or William Spatz, William.Spatz@science.doe.gov

References:

1. U.S. Department of Energy, 2022, *Software, Scientific Discovery through Advanced Computing (SciDAC)*, U.S. Department of Energy, <https://www.scidac.gov/software-list.html> (June 21, 2024))
2. U.S. Department of Energy, 2022, *SciDAC Feature, Scientific Discovery through Advanced Computing (SciDAC)*, U.S. Department of Energy, <http://www.scidac.gov> (June 21, 2024)
3. Heroux, M. A., Carter, J., Thakur, R., Vetter, J. S., et al, 2020, 2020, ECP Software Technology Capability Assessment Report-Public, ECP-RPT-ST-0002-2020-Public, ECP, <https://www.exascaleproject.org/wp-content/uploads/2020/02/ECP-ST-CAR-V20-1.pdf> (June 21, 2024)

DOE Program Office Websites



Review the following:

- Mission
- Funding Priorities and Announcements (non-SBIR)
- Technical Reference Data and Reports
- Workshop & Conference Proceedings
- Contact Information



U.S. DEPARTMENT
of ENERGY

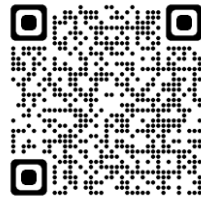
Office of
SBIR/STTR
Programs

The screenshot shows the homepage of the Building Technologies Office website. At the top is a navigation bar with the DOE logo and links for "Office of ENERGY EFFICIENCY & RENEWABLE ENERGY", "ABOUT EERE", "RESOURCES", "BUILDINGS & INDUSTRY", "RENEWABLE ENERGY", and "SUSTAINABLE TRANSPORTATION". Below this is a "BUILDINGS" dropdown menu. The main header features a large aerial photograph of a city skyline with the text "Building Technologies Office" overlaid. Three navigation links are visible: "About the Building Technologies Office", "Funding Opportunities", and "Events, Webinars, and Conferences". A text block describes the BTO's mission: "The Building Technologies Office (BTO) conducts research, development, and demonstration activities to accelerate the adoption of cost-effective technologies, techniques, tools, and services that enable high-performing, cost-efficient, reliable, comfortable, and healthy buildings for all Americans that also support the energy system and the electric grid." On the right, a "Get the Latest from BTO" section includes a sign-up form with the text "Sign up to receive BTO's news, events, and funding opportunities. Customize your subscription to hear from the programs you care about most." and a "GO" button.

Applicant Assistance Help is Available



[New! Phase I
Application
Guidance &
Planning Resource](#)



Email us!

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

Acting Director: eileen.chant@science.doe.gov

Stay Connected!



[Subscribe to our mailing list](#)



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

[SBIR Partnering Platform](#) provides searchable database where SBIR/STTR applicants (**INNOVATORS**) can find potential **PARTNERS** and **SBIR/STTR funding opportunities**, and **LOTS more**



Being on our mailing list is the most important way to stay up to date on our funding opportunities, topic, FOA and Q&A webinars!

Are you a good fit with DOE SBIR/STTR?



#1 - Responsiveness to the topic & subtopic

Phase I Application Review Criteria

Technical Merit

Ability to Carry Out the Project

Impact

- 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
- *The three review criteria are equally weighted*



U.S. DEPARTMENT
of ENERGY

Office of
SBIR/STTR
Programs

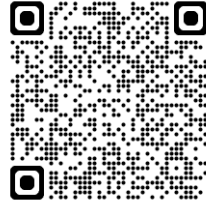
Awardee Resources



[Technical and Business Assistance \(TABA\)](#)



***Need help
preparing your
Phase II
Commercialization
Plan?***



\$6500 for Phase I Awardees (must be subaward)
\$50,000 for Phase II Awardees (must be subaward)

[Phase Shift \(formerly I-Corps\)](#)

Phase Shift I is an 8-week, 30-customer interview, learn-by-doing experience. For more details about the current Phase Shift I offering, please visit the [Phase Shift I web page](#).



[NERSC Computing Resources](#)

NERSC is the primary scientific computing facility for the DOE. All DOE SBIR/STTR grant projects requiring high performance computing support are eligible to apply to use DOE NERSC resources.



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

Other DOE Resources* - Stage of Technology Relevant



Early-Stage
Innovation
SBIR & STTR

Commercialization
Private Funding



Partnering with National Laboratories

National Labs – POCs and Core Capabilities

Lab-Embedded Entrepreneurship Program (LEEP)
& NM LEEP

American-Made Challenges

IMPEL and Cradle-to-Commerce

Demonstration Facilities: Idaho, NREL, ORNL

Loan Programs Office

Technology Commercialization Fund (TCF)

EnergyWerx, TechWerx and ConnectWerx

National Energy Research Scientific Computing Center (NERSC)



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

* Programs availability subject to change

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
- Congress wants to see **ROI** of taxpayer dollars: **taxable revenues, job creation**, and/or **scientific or societal benefit**
- It is never too early to develop your commercialization strategy
- Your businesses’ success depends on it



Phase I Commercialization Plan MUST HAVES



1. Customer discovery –

- *Is there anyone out there that needs your solution?*
- *What are they using now and what are the limitations?*
- *What are they willing to pay for a solution?*
- *Who are stakeholders?*

2. Understand your **target market** and the **opportunity**.

3. Understand your **competition** and the industry.

4. Team – often strong technically; put together a time-phased plan to incorporate key business functions if not in place today; ***do you need partners?***

5. **Strategy for IP**

6. Model for **revenue generation**

7. ***Funding Required*** and where it might come from (***early but begin to think about it...***)



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

DOE SBIR/STTR Programs



Some initial steps

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

sbir.gov



- **DOE Specific**

- Begin registrations, **especially SAM.gov**
- Mark your calendars for topics releases in July & November
- 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 [online application guidance](#)



Award Data Company Data

Company Name

Keywords

Topic Code

Research Institution

- ! For best search results, use the search terms first and then apply the filters
- ! The Award database is continually updated throughout the year. As a result, data for FY23 is not expected to be complete until September 2024.
- ! Please allow a minimum of 24 hours for newly added awards to the system to be reflected in the search results below.
- ! 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 Resources Page](#). Files are refreshed monthly.
- ! The SBIR.gov award data files now contain the required fields to calculate award timeliness for individual awards or for an agency or branch. Additional information on calculating award timeliness is available on the Data Resource Page.

Filter Results

Agency

☐ Department of Agriculture
↳ National Institute of Food and Agriculture

☐ Department of Commerce
↳ National Institute of Standards and Technology
↳ National Oceanic and Atmospheric Administration

☐ Department of Defense
↳ Air Force

Demographic

☐ HUBZone Owned

☐ Socially and Economically Disadvantaged

☐ Woman Owned

Phase

☐ Phase I

Showing 1-10 of 46 results

[SBIR Phase II: High Energy-Density Hydrogen-Halogen Flow Batteries for Energy Storage](#)

SBC: SKIP TECHNOLOGY INC | Topic: EN

The broader impact/commercial potential of this Small Business Innovation Research (SBIR) project is directly related to the utilization of renewable energy sources in the electrical grid. Due to the variability of supply, renewable energy generators (e.g.,...

[SBIR Phase II: Development of a Flow Battery Using Common Materials and Proprietary Electrolytes](#)

SBC: XL BATTERIES INC | Topic: EN

The broader impact/commercial potential of this Small Business Innovation Research (SBIR) Phase II project is the development of a grid-scale battery to enable large-scale, long-duration energy storage. New technologies for long-duration energy storage are...



U.S. DEPARTMENT
of ENERGY

Office of
SBIR/STTR
Programs

Thank you!



Get organized!

- Take advantage of resources if you are a first-timer!

Reach out to us:

- sbir-sttr@science.doe.gov (Application Questions)
- eileen.chant@science.doe.gov (Acting Director)



Read about our [Outcomes and Phase III success stories](#), which contain a wealth of case studies on successful startups!



U.S. DEPARTMENT
of **ENERGY**

Office of
SBIR/STTR
Programs

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