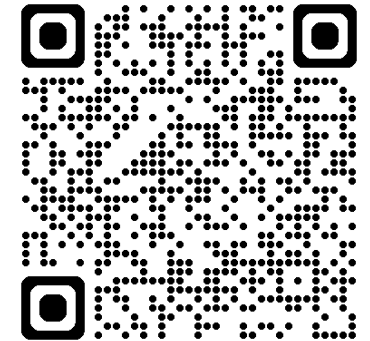


# The DOE Webinar is scheduled to begin at 2:00 p.m. EST



- **Will DOE provide access to the recorded webinar after the meeting?**
  - Yes, we will post the slides and the recorded webinar on the DOE SBIR/STTR web site [here](#).
- **Where can I find the NOFO being discussed today?**
  - Click [here](#) for the FY 2025 Phase I Release 2 NOFO.
- **What if my question was not answered at today's webinar?**
  - If you have a question about the grant application process, please send an email to: [sttr@science.doe.gov](mailto:sttr@science.doe.gov)
  - or call us at (301) 903-5707
- **How do I find a list of the topics associated with this NOFO?**
  - Click [here](#) for the FY 2025 Phase I Release 2 topics document
  - Reminder! You must find a topic that you can be responsive to as a starting point in developing a competitive application.





Department of Energy  
Small Business Innovation Research (SBIR) and Small  
Business Technology Transfer (STTR) Programs  
FY 2025 Phase I Release 2 Funding Opportunity Webinar

Eileen Chant, Acting Director  
[eileen.chant@science.doe.gov](mailto:eileen.chant@science.doe.gov), (301) 578-2386

Thursday, January 2, 2025

# 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



## Federally Funded Laboratories



## Large & Small Businesses



## Universities

# 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

# 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



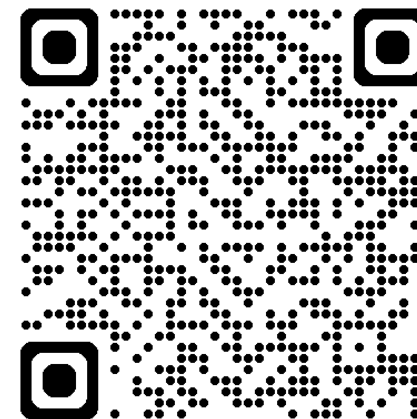
# Are Agencies' Programs all the Same?

 NO!

- There are lots of differences!
- Grants (**DOE**) vs Contracts
- Focused topics (e.g. DOE), to no topics (e.g. NSF)
- Who will be your customer? Not likely to be DOE, maybe DoD
- Application processes, systems and deadlines are all different

Search [SBIR.gov awards](https://www.sbir.gov/awards) to understand what agencies are most likely to fund your technology. Focus on a limited set of agencies.

*Select and get to know the agencies you are interested in.*



# United States Department of Energy Mission

DOE's Mission is to ensure America's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions.

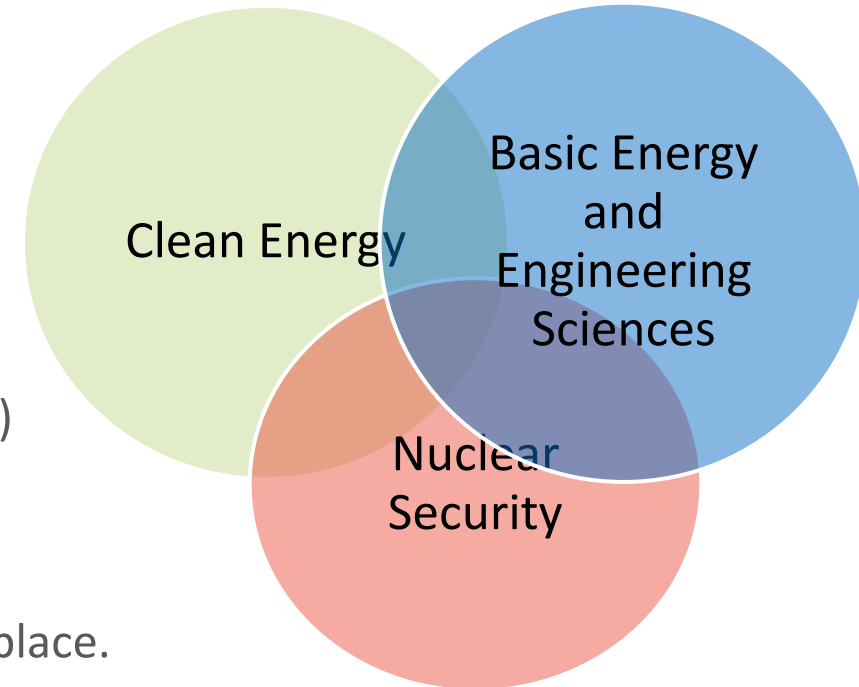
- **Goal 1:** Catalyze the timely, material, and efficient transformation of the nation's energy system and secure **U.S. leadership in energy technologies**.
- **Goal 2:** Maintain a **vibrant U.S. effort in science and engineering** as a cornerstone of our economic prosperity, with clear leadership in strategic areas.
- **Goal 3:** Enhance **nuclear security** through defense, nonproliferation, and environmental efforts.

# DOE SBIR/STTR Programs – The Specifics



- Historically awards in excess of \$300 Million per year
- Grants not contracts – your idea & your execution
- 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
- DOE unlikely to be your customer, so understand the marketplace.
- 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/>

## DOE Mission





# SBIR vs STTR?

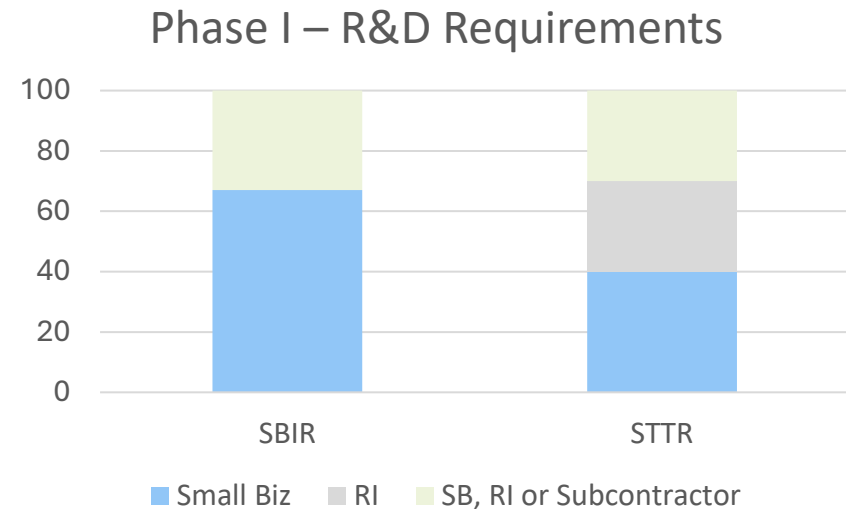
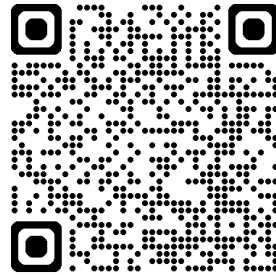


Small Business Innovation Research (SBIR) est. 1982	Small Business Technology Transfer (STTR) est. 1992
<ul style="list-style-type: none"> <li>• Allows non-profit research institution partner</li> <li>• Principal Investigator (PI) employee of small business</li> </ul>	<ul style="list-style-type: none">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

*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*



*SBIR and STTR were reauthorized on September 30, 2022*

# Small Business Eligibility for SBIR & STTR

- For-profit U.S. business
- 500 employees or fewer, including affiliates
- A majority (more than 50%) of your firm's equity (e.g., stock) must be directly owned and controlled by one of the following:
  - (1) One or more individuals who are citizens or permanent resident aliens of the U.S. Each individual you include as part of the eligible majority ownership of your company must be either a citizen or permanent resident alien of the U.S. The term "individual" refers only to actual people—it does not refer to companies or other legal entities of any sort.
  - (2) Other for-profit small business concerns (each of which is more than 50% directly owned and controlled by individuals who are citizens or permanent resident aliens of the U.S.); orA combination of (1) and (2) above.
- Performance of R&D
  - All R&D must be performed in the United States



# Small Business Eligibility for SBIR & STTR

- Is in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the form is a joint venture, there can be no more than 49% participation by foreign business entities in the joint venture
- An SBC may be owned by venture capital operating companies, hedge funds, or private equity firms only under the following circumstances:
  - An SBC may be majority owned by one or more other concerns (including a venture capital operating company, hedge fund, or private equity firm) that qualify as a small business that is majority owned and controlled by individuals who are citizens or resident aliens of the U.S.
  - Any firm may own 50% or less of an SBC so long as it does not have the power to control the SBC.



# SBIR and STTR Awards

- Critical, Early-Stage R/R&D funding
  - The SBIR & STTR programs provide funding for innovative, early-stage research
  - Awards process is competitive, i.e. high quality and aligned applications are funded
  - More meritorious applications than funding available
  - SBIR & STTR awards provide credibility when seeking investors or partners
- DOE SBIR/STTR awards are executed as grants
  - No repayment
  - No dilution of company equity
  - No cost sharing is required for Phases I and II

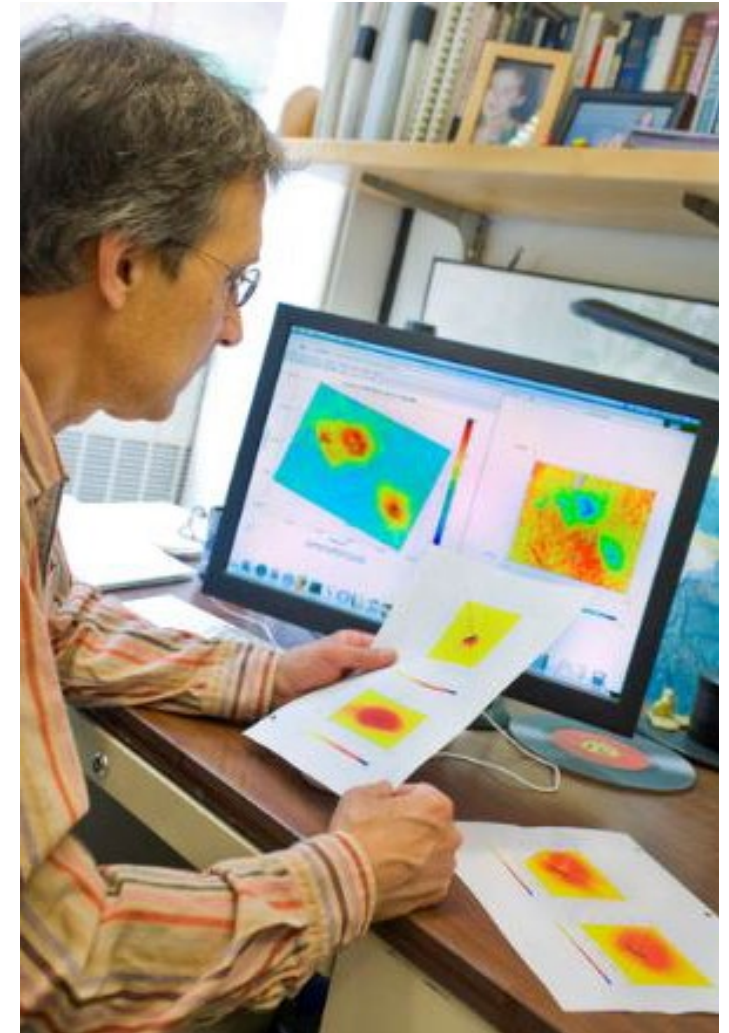
# Intellectual Property

- Patent rights
  - Small business concerns retain the principal worldwide patent rights to any invention developed with Government support
- Government Use
  - The Federal Government receives a royalty-free license for Federal Government use



# Data Protection

- Protection Period
  - Data generated from Phase I and II awards is protected from public disclosure for a minimum of 20 years from the start of your award. New policy change implemented in 2019.
- Government Use
  - The Government retains a royalty-free license for Government use of any technical data delivered under an SBIR award, whether patented or not



# Participating DOE Program Offices – 2 Releases/year



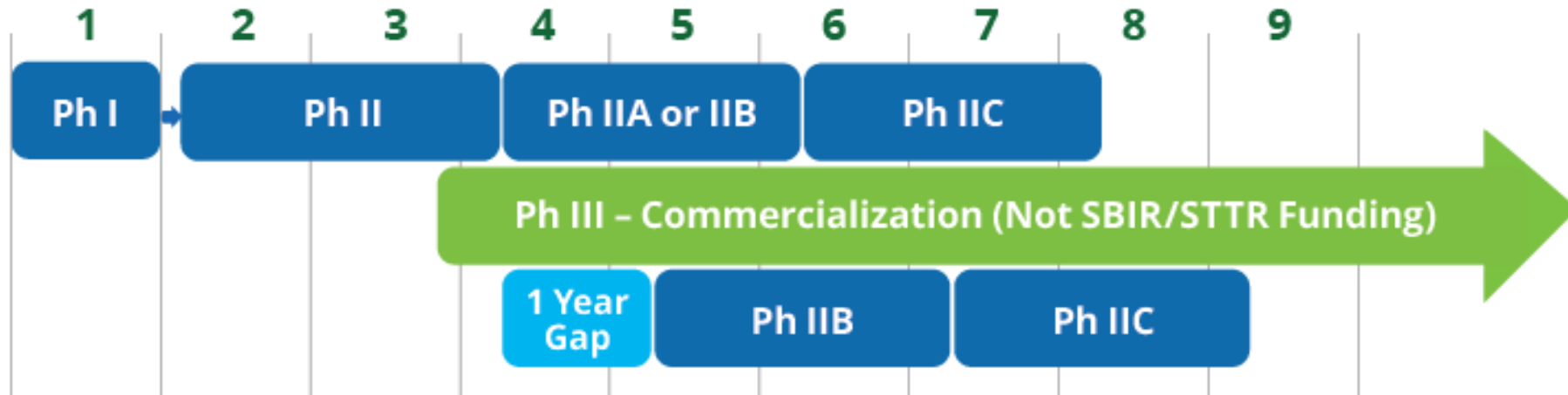
Release 1 – July 7, 2025

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 12, 2024

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)	

# How does our funding work?



## Phase I

- Focused, mission-aligned topics
- Proof of feasibility
- \$200,000/\$250,000
- 6 - 12 months duration
- ~ 350 awards per year

## Phase II

- Phase I awardees apply for Phase II the following year
- Prototype, demonstration and commercialization
- \$1,100,000/\$1,600,000
- 2 years duration
- ~ 150 awards per year

## Phase IIA/IIB

- For projects that require additional R&D funding for commercialization
- \$1,100,000
- 2 years duration
- ~30 awards per year

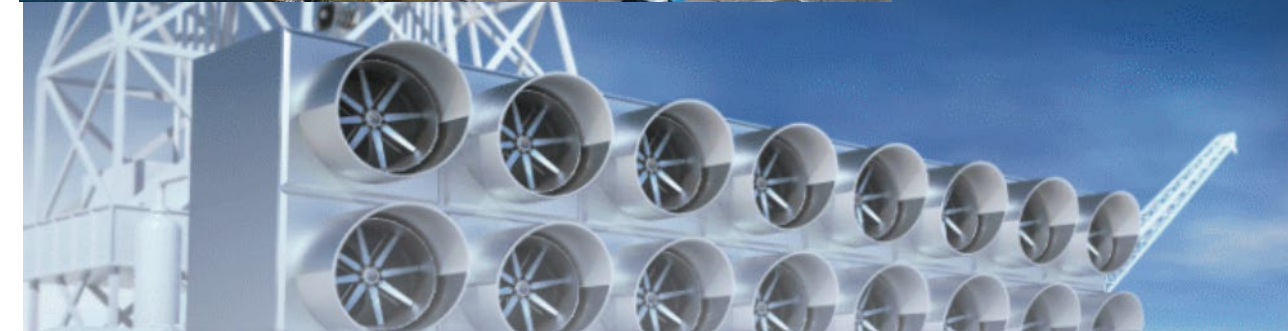
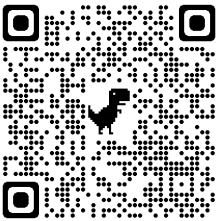
## Phase IIC

- Pilot program to leverage 1:1 matching funds for commercialization
- \$1,100,000
- 2 years duration





Release 2  
Technology  
Areas  
Topics  
Released:  
November 12



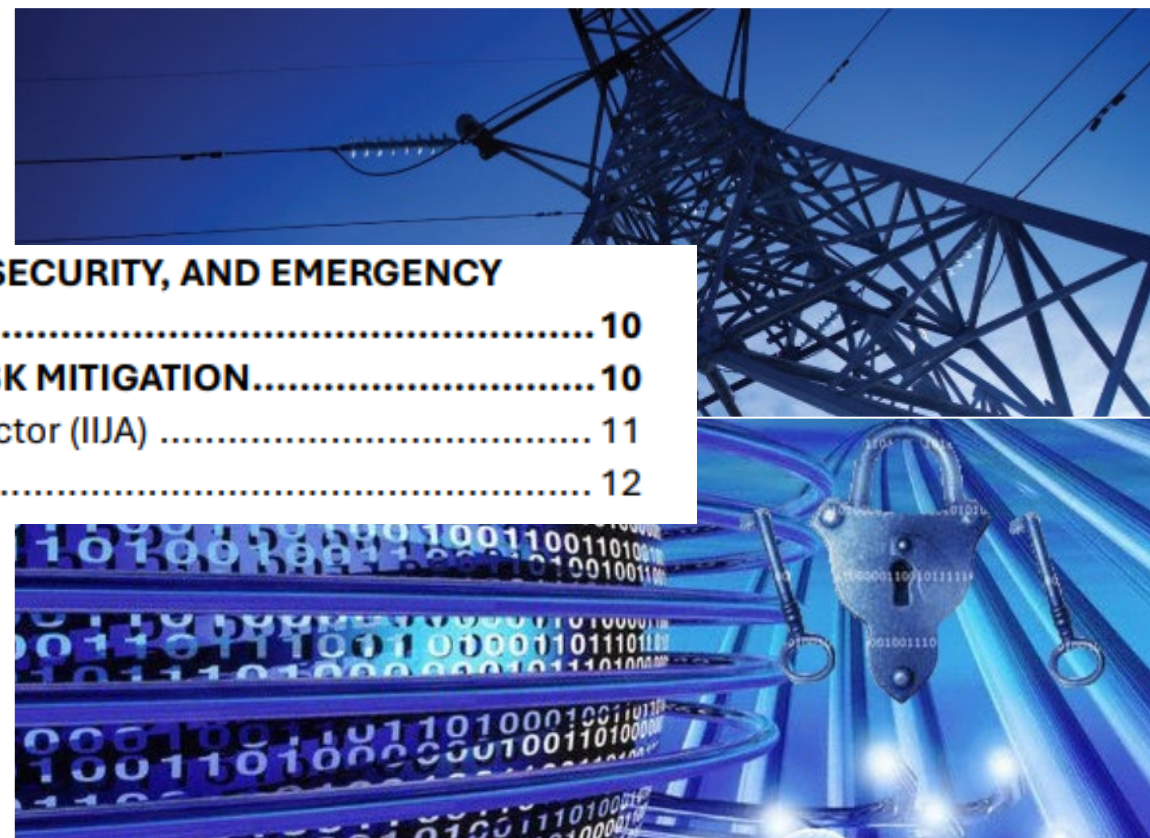
U.S. Department of

**ENERGY**

Office of  
SBIR/STTR  
Programs

# Office of Cybersecurity, Energy Security and Emergency Response

Website: [CESER](#)



**PROGRAM AREA OVERVIEW: OFFICE OF CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE**

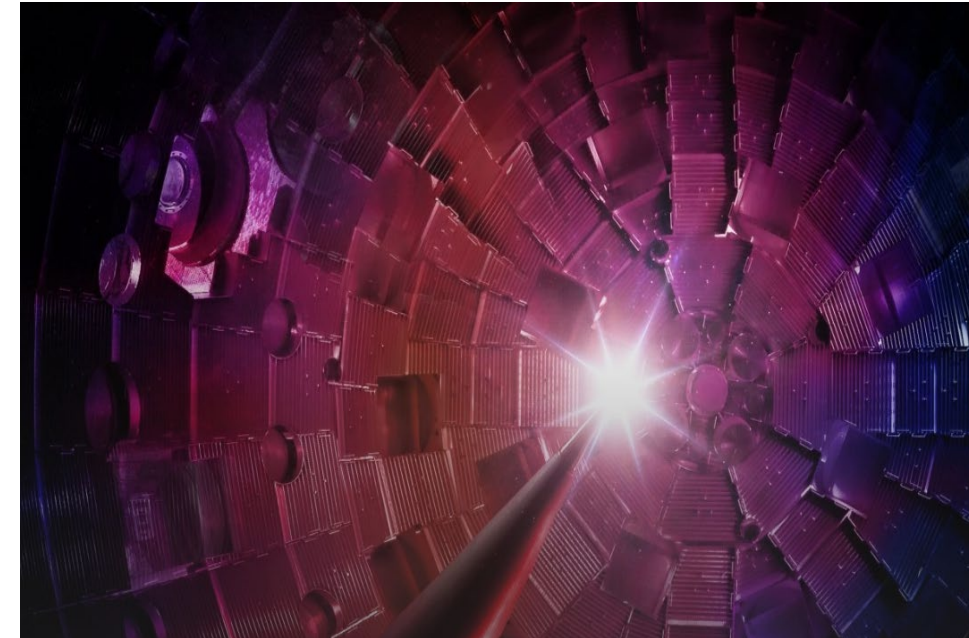
<b>RESPONSE</b> .....	<b>10</b>
<b>C60-01. MALICIOUS EVENT DETECTION, DIAGNOSIS, AND RISK MITIGATION</b> .....	<b>10</b>
a. AI for Malicious Event Detection & Diagnosis in the Energy Sector (IIJA) .....	11
b. Distribution Substation Ballistic Risk Mitigation (IIJA).....	12

# Office of Defense Nuclear Nonproliferation



Website: [NNSA](https://www.nnsa.gov)

<b>PROGRAM AREA OVERVIEW: OFFICE OF DEFENSE NUCLEAR NONPROLIFERATION RESEARCH AND DEVELOPMENT</b> .....	<b>171</b>
<b>C60-22. SENSORS FOR UNDERGROUND NUCLEAR EXPLOSION MONITORING</b> .....	<b>172</b>
a. Beta-gamma detector technology improvements.....	172
b. Fieldable Quantum Sensors to Detect Underground Explosions.....	173
c. Other.....	173
<b>C60-23. NUCLEAR FORENSICS</b> .....	<b>175</b>
a. High-Purity Separations of Rare Earth Elements from Phosphogypsum.....	175
b. Representative Milligram Subsampling of Small Powder Samples .....	176
<b>C60-24. ARTIFICIAL INTELLIGENCE</b> .....	<b>177</b>
a. Experimentation framework for secure federated learning-as-a-service (FLaaS).....	177
b. Other.....	178
<b>C60-25. RADIATION DETECTION MATERIALS</b> .....	<b>178</b>
a. Large-volume, high-performance, room-temperature operational CdZnTe (CZT) semiconductor gamma-ray detectors.....	179
b. Other.....	179
<b>C60-26. X-RAY IMAGING PANEL FOR FIELD RADIOGRAPHY</b> .....	<b>180</b>
a. High Efficiency Digital Radiographic Imaging Panel.....	180
b. Other.....	183
<b>C60-27. ALTERNATIVE RADIOLOGICAL SOURCE TECHNOLOGIES</b> .....	<b>184</b>
a. Accelerators for Industrial Radiation Processing .....	184
b. Novel Approaches to Accelerator Component Redesign and Domestic Manufacturing.....	184
c. Other.....	185
<b>C60-28. TECHNOLOGY FOR FUTURE REMOTE DETECTION SENSING</b> .....	<b>186</b>
a. Enhanced photomultiplier base technologies for data readout.....	186
b. Demonstration or analysis of Mie-tronic systems for spectroscopic collection.....	186
c. Maritime, Limnologic, and Oceanic Hyperspectral Imagery Analysis Advancement.....	187



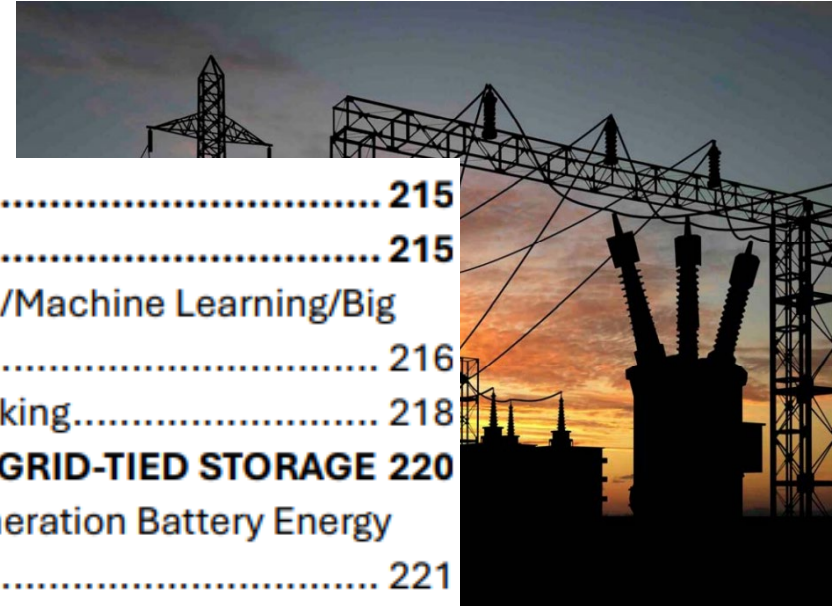
U.S. Department of



# Office of Electricity



Website: [OE](#)



<b>PROGRAM AREA OVERVIEW: OFFICE OF ELECTRICITY.....</b>	<b>215</b>
<b>C60-32. ADVANCED GRID TECHNOLOGIES .....</b>	<b>215</b>
a. Cutting-edge Microgrid Database Development with Artificial Intelligence/Machine Learning/Big Data Analytics through SBIR Innovations .....	216
b. Risk and Uncertainty Visualization Tools for the Electric Grid Decision-Making.....	218
<b>C60-33. DC-LINK CAPACITORLESS VOLTAGE SOURCE CONVERTERS FOR GRID-TIED STORAGE</b>	<b>220</b>
a. Advanced DC-Link Capacitorless Voltage Source Converters for Next Generation Battery Energy Storage Systems (Long Duration Storage Shot Topic) .....	221



U.S. Department of



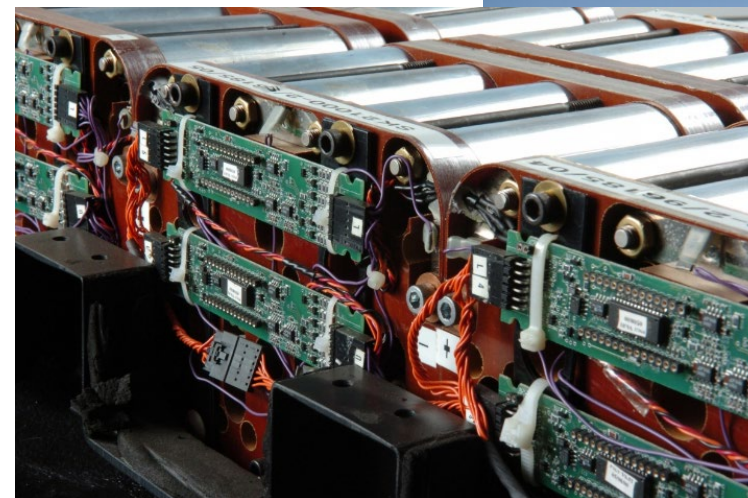
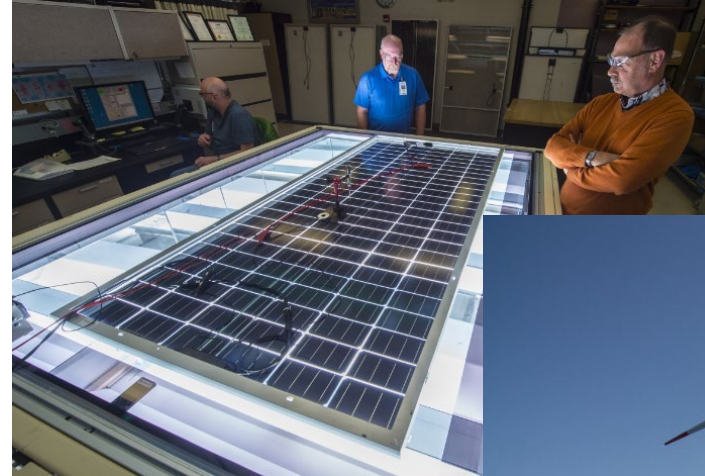
Office of  
SBIR/STTR  
Programs

# Office of Energy Efficiency and Renewable Energy



Website: [EERE](https://www.eere.doe.gov)

- Offices and Research Areas
  - Hydrogen and Fuel Cell
  - Vehicles
  - Water Power
  - Solar Energy
  - Wind Power
  - Water Power
  - Industrial Efficiency and Decarbonization
  - Advanced Materials and Manufacturing
  - Geothermal Technologies
  - Bioenergy
  - Building Technologies

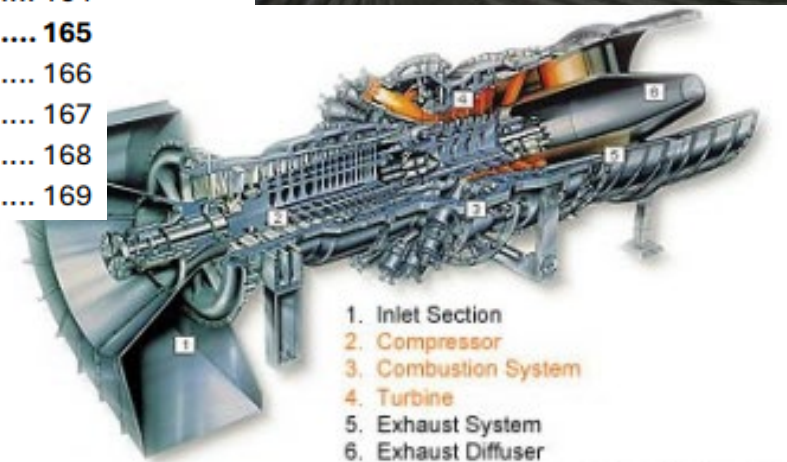


# Office of Fossil Energy and Carbon Management

Website: [FECM](http://www.fecm.gov)



<b>PROGRAM AREA OVERVIEW – OFFICE OF FOSSIL ENERGY AND CARBON MANAGEMENT</b>	<b>157</b>
<b>C60-20. CARBON CAPTURE, CONVERSION, AND STORAGE</b>	<b>157</b>
a. Catalytic Conversion of Carbon Dioxide to Fuel (BIL Funded)	158
b. Digital Tools to Support Design and Materials Selection and Assurance of Operational Asset Integrity for CO2 Transport and Storage	159
c. Asset Integrity Assurance and Corrosion Mitigation for Surface and Subsurface Carbon Transport and Storage Infrastructure	160
d. Compact Carbon Capture Technologies	161
e. Techno-economic Feasibility Analysis of CO2 Impurity Removal Processes for Carbon Capture Systems at Industrial or Electric Generation Facilities	162
f. Lab-scale Testing of Highly Efficient Components to Remove CO2 Impurities for Point Source Carbon Capture	163
g. Other	164
<b>C60-21. CARBON DIOXIDE REMOVAL</b>	<b>165</b>
a. Low-Concentration DAC Paired with Ex-Situ Mineralization	166
b. Freshwater Alkalinity Enhancement	167
c. Unconventional BiCRS Pathways	168
d. Other	169



1. Inlet Section
2. Compressor
3. Combustion System
4. Turbine
5. Exhaust System
6. Exhaust Diffuser

Courtesy of Siemens Westinghouse

# Office of Nuclear Energy

Website: [NE](#)

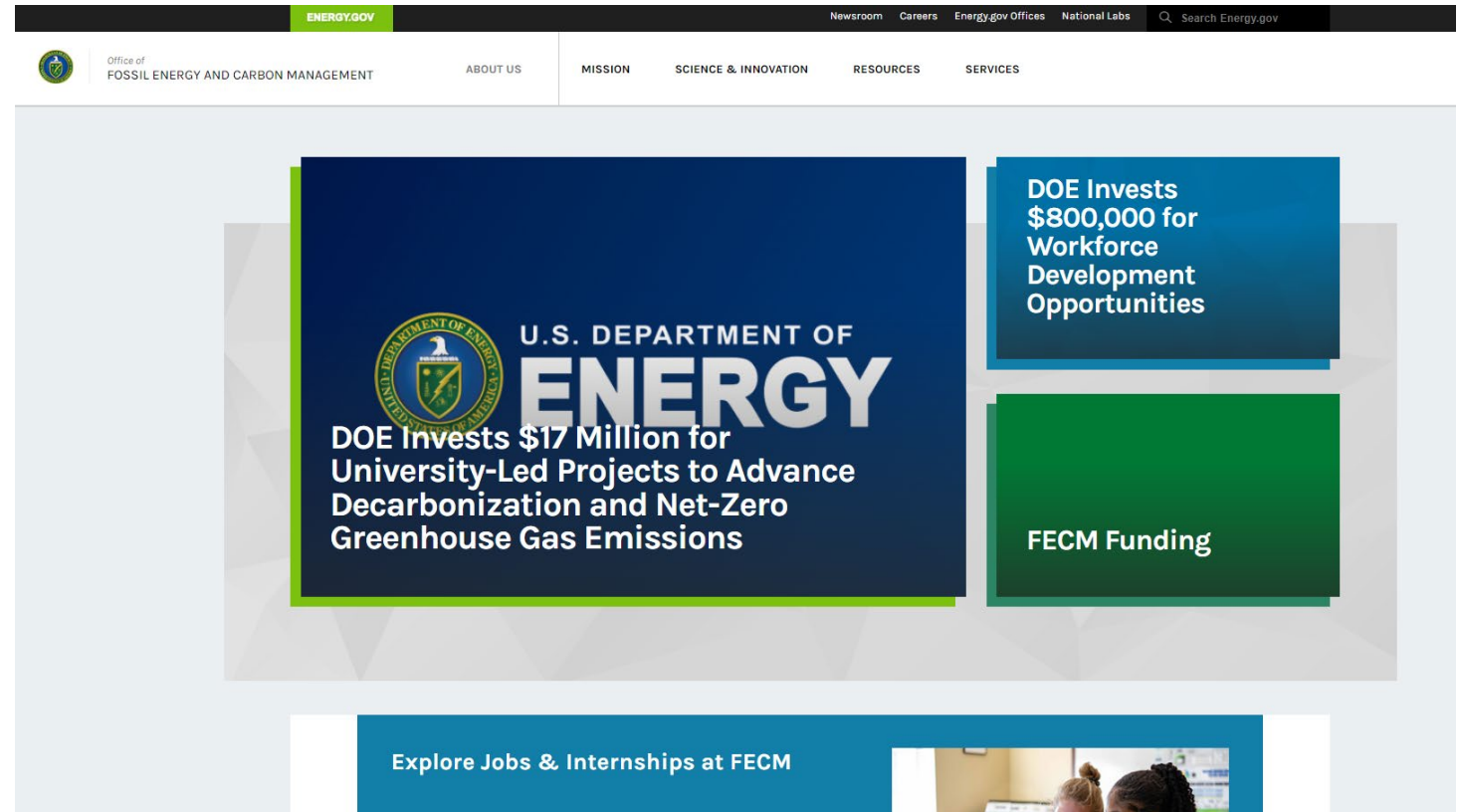
- Three topics:
  - Advanced Tech for Nuclear Energy (35 subtopics), including “Other”
  - Advanced Tech for Nuclear Waste (2 subtopics)
  - Advanced Tech for Nuclear Energy Cross Cutting Capabilities (1 subtopic)



# DOE Program Office Websites

Review the following:

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







## DOE SBIR & STTR Programs: Application & Award Process

# Schedule: FY 2025 Phase I Release 2

Awardee Programs

Phase I	Release 1	Release 2
Topics Issued	Monday, July 8, 2024	Tuesday, November 12, 2024
Document	<a href="#">Phase I Release 1 Topics</a>	<a href="#">Phase I Release 2 Topics</a>
Phase 0 Application Assistance (free for first time applicants) starts	Monday, July 8, 2024	Tuesday, November 12, 2024
Topic Webinar, week of	<a href="#">Webinar 1: Topics 1-11</a> <a href="#">Slides</a> <a href="#">Webinar 2: Topics 12-22</a> <a href="#">Slides</a> <a href="#">Webinar 3: Topics 23-33</a> <a href="#">Slides</a>	<a href="#">Webinar 1: Topics 1, 20-21, 32-33</a> <a href="#">Slides</a> <a href="#">Webinar 2: Topics 2-10</a> <a href="#">Slides</a> <a href="#">Webinar 3: Topics 11-16</a> <a href="#">Slides</a> <a href="#">Webinar 4: Topics 17-19 &amp; 22-31</a> <a href="#">Slides</a>
NOFO Issued	Monday, August 5, 2024	Friday, December 27, 2024
Document	<a href="#">DE-FOA-0003417</a>	<a href="#">DE-FOA-0003504-000001</a>
NOFO Webinar	<a href="#">Thursday, August 8, 2024 (Webinar)</a> <a href="#">Slides</a> <a href="#">Friday, August 9, 2024 (Q&amp;A)</a>	<a href="#">Thursday, January 2, 2025 (Webinar) Register</a> <a href="#">Friday, January 3, 2025 (Q&amp;A) Register</a>
Letters of Intent (LOI) Due	Tuesday, August 27, 2024 5:00pm ET	Tuesday, January 14, 2025 5:00pm ET
Non-responsive LOI Feedback Provided	Monday, September 16, 2024	Monday, February 3, 2025
Full Applications Due	Tuesday, October 8, 2024 11:59pm ET	Wednesday, February 26, 2025 11:59pm ET
Award Notification	Monday, January 6, 2025	Tuesday, May 27, 2025
Projected Grant Start Date	Tuesday, February 18, 2025	Tuesday, July 8, 2025
Awardee Webinar, week of	March 10, 2025	July 21, 2025
Phase Shift I Kick-off (formerly I-Corps)	April 2025	September 2025
Principal Investigator Meeting	June 2025	October 2025
*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		

Go back and listen to your topic info

Required or your Phase I application will be declined!

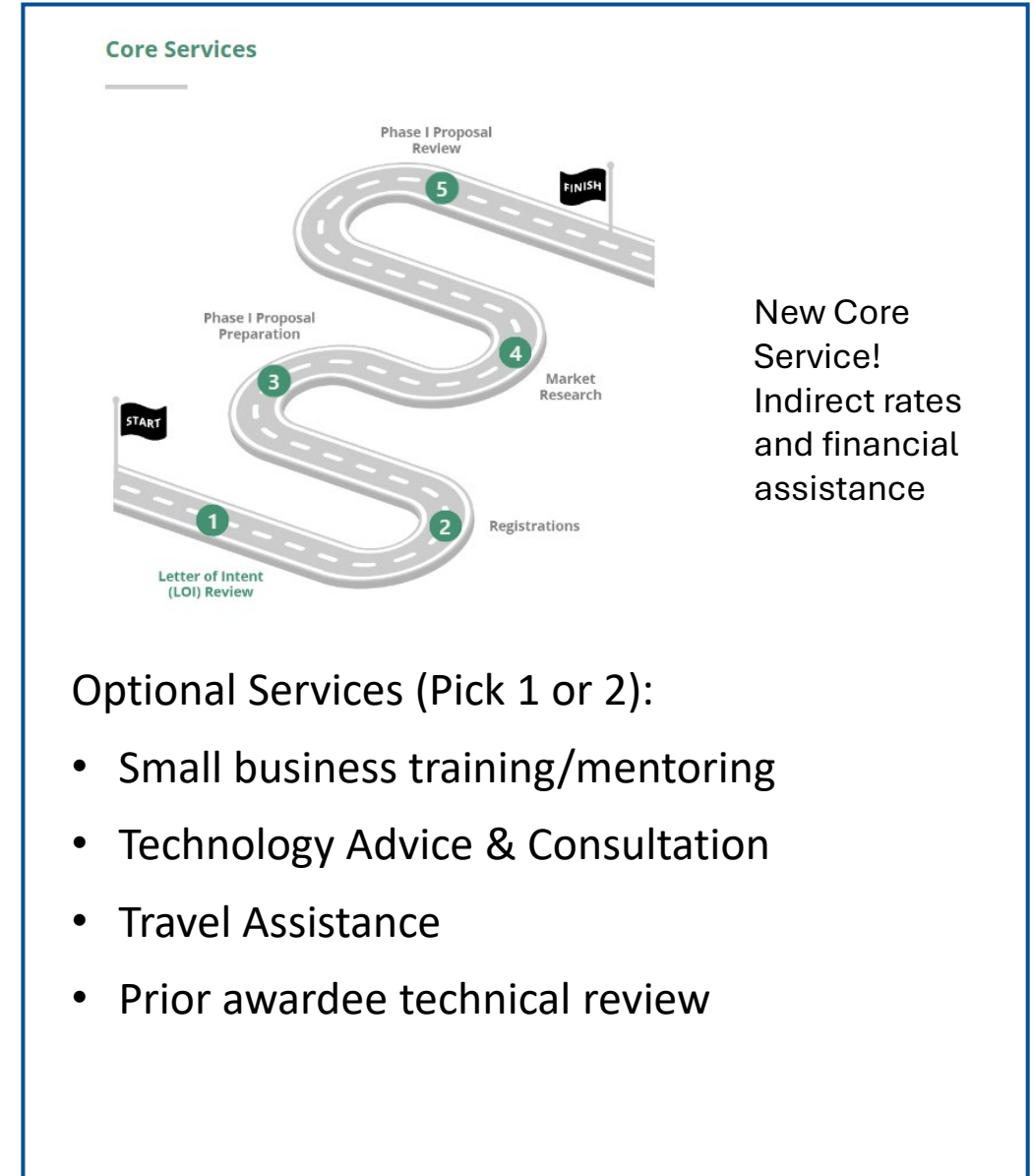
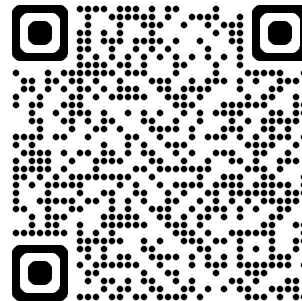
Don't wait till last minute

Award Notification

Grant Start

# 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](#) is open
- “Ample” space available right now
- [Signup for Phase 0 mailing list](#)



# Operation of the DOE SBIR and STTR Programs



## *Technical Expertise Leveraged Throughout DOE*

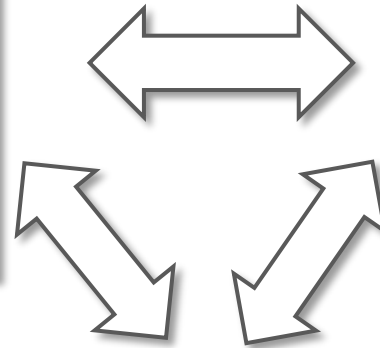
### **DOE Program Office**

- Develop Topics
- Identify Reviewers (Scientific Peer Review)
- Recommend Awardees
- Oversee Projects

## *Single Grants Office for Awardees*

### **DOE Chicago Office**

- Negotiate Grants
- Issue New and Continuation Awards
- Grant Closeout



## *Single Administrative Office for Applicants*

### **DOE SBIR/STTR Programs Office**

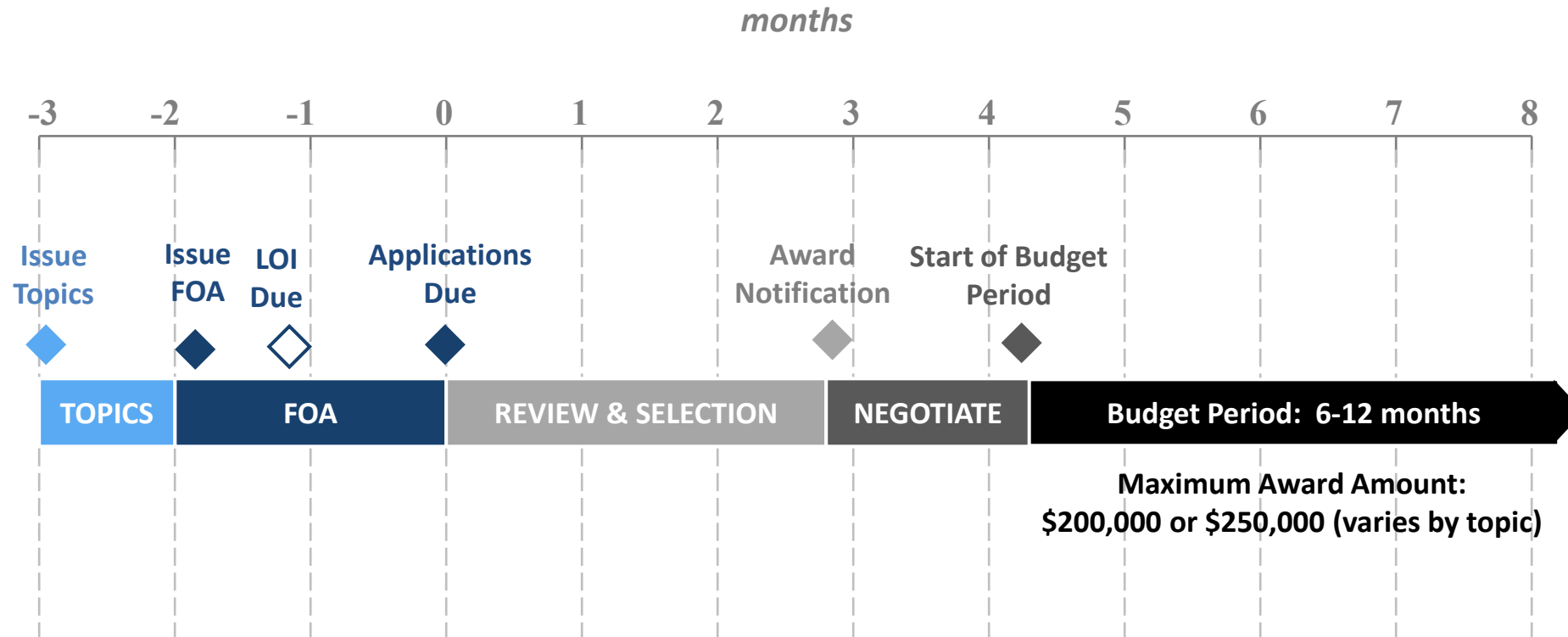
- Develop Funding Opportunity Announcements
- Administer Review and Selection Process
- Ensure Compliance with SBIR/STTR Legislation
- Conduct Outreach

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Office of  
SBIR/STTR  
Programs

# Phase I Application & Award Timelines



U.S. Department of



Office of  
SBIR/STTR  
Programs

# FY 2026 Phase I Release 1 Funding Opportunity



Phase I	Release 1
Topics Issued	Monday, July 7, 2025
Document	
Phase 0 Application Assistance (free for first time applicants) starts	Monday, July 7, 2025
Topic Webinar, week of	Monday, July 14, 2025
FOA Issued	Monday, August 4, 2025
Document	
FOA Webinar	Friday, August 8, 2025
Letters of Intent (LOI) Due	Tuesday, August 26, 2025 5:00pm ET
Non-responsive LOI Feedback Provided	Monday, September 15, 2025
Full Applications Due	Tuesday, October 7, 2025 11:59pm ET
Award Notification	Monday, January 5, 2026
Projected Grant Start Date	Tuesday, February 17, 2026

Looking ahead -  
Mark your calendar  
for July 7

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Programs

# Topics

- Topics Document
  - DOE primarily uses focused topics
  - Issued 4 weeks prior to the NOFO
- Communication with DOE program managers
  - Open communication ***permitted about topic scope***
- Webinar
  - DOE program managers discuss their topics
  - Applicants submit questions in advance or during the webinar
  - ***Webinars are recorded and available on our website***

## U.S. Department of Energy

Small Business Innovation Research (SBIR) and  
Small Business Technology Transfer (STTR) Program

### Topics

FY 2025

Phase I

Release 2

November 13, 2024

- Office of Cybersecurity, Energy Security, and Emergency Response
- Office of Energy Efficiency and Renewable Energy
- Office of Environmental Management
- Office of Fossil Energy and Carbon Management
- Office of Defense Nuclear Nonproliferation
- Office of Nuclear Energy
- Office of Electricity

# More about Topics

- DOE Mission-Focused Specific Topics
- R&D funding limits and type of applications accepted are specified
- At Topic Webinar (recorded and available [here](#)), DOE Program Managers discuss the topic then Q&A
- Letter of Intent and Application must specify same Topic and Subtopic

## C60-14. MAINTENANCE FOR NEXT GENERATION WIND PLANTS

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

Operational expenditures (OpEx) represent one of the largest contributions to the levelized cost of utility scale wind energy both on land and offshore [6]. Offshore, OpEx can be more than twice as costly per kilowatt of capacity than for land-based wind, and this is due in large part to the higher difficulty in accessing turbines and performing operations and maintenance (O&M) procedures [7]. In May 2024, WETO released “An Operations and maintenance Roadmap for U.S. Offshore Wind” [8] that details the expected challenges of maintaining the growing offshore wind fleet along with the opportunities for research and development (R&D) to mitigate some of these challenges and ensure a cost-effective and sustainable industry. Improved maintenance capabilities can contribute to reducing accessibility barriers, safety risks, and downtime, thereby reducing the overall OpEx costs for a wind farm. This topic seeks to support the development of advanced and potentially autonomous O&M technologies that can assess and perform maintenance tasks quickly and effectively while improving the productivity and reducing exposure of maintenance workers.

### a. Cranes and alternative technologies for major component exchange

Increases in turbine nameplate capacity, the height of the towers, number of turbines, and (for offshore) the growing distance from port all present challenges for in-service maintenance. For a sense of scale, there are roughly 75,000 wind turbines across the U.S. [9], average land-based wind turbine hub heights are now above 100m and trending higher [10], and an offshore 15MW hub and nacelle can weigh more than 800 metric tons [11].

Technology proposed under this subtopic should pursue one or more of the following objectives:

- Advance crane design, configuration, and deployment strategies (e.g. climbing cranes) to enable heavier and higher lifts without the cost and schedule impacts of large heavy-lift vessels and cranes [12].



# Subtopics

- Open communication permitted about the **topic scope** with DOE Technical Topic Managers
- Letter of Intent and Application must specify same Topic and Subtopic
- **Reading references is recommended**
- You are expected to be highly knowledgeable in your technology area, latest developments, what are the barriers, what are the competing technologies.

## b. Risk and Uncertainty Visualization Tools for the Electric Grid Decision-Making

The escalating complexity of modern power grids —characterized by increased interdependencies, shifts in demand trends, and increased penetration of intermittent renewable energy sources and distributed assets, coupled with the growing uncertainty associated with extreme weather and climate events— have significantly elevated the stakes of effective decision-making. Moreover, the recent explosion of ‘big data’ has facilitated the development of advanced data-driven models, providing invaluable insights for managing the sustainability, resilience, reliability, and security of the grid. However, the efficacy of these data-informed models is inherently limited by the veracity, volume, velocity, and spatiotemporal limitations of the underlying data.

Balancing supply and demand under deep uncertainties—related to policy, technology, data availability, and climate patterns— is a formidable task. Moreover,

Questions – Contact: Dr. Roshi Nateghi, [roshanak.nateghi@hq.doe.gov](mailto:roshanak.nateghi@hq.doe.gov)

### References:

1. Ferreira, S., Baggu, M., et al, 2021, *DOE OE 2021 Strategy White Papers on Microgrids: Program Vision, Objectives, and R&D Targets in 5 and 10 years – Topic*, [https://www.energy.gov/oe/articles/eac-big-data-analytics-work-product-final](#) (October 29, 2024)
2. FERC Order No. 2222: Fact Sheet; September 2020; <https://www.ferc.gov/media/ferc-order-no-2222-fact-sheet> (October 29, 2024)
3. Electricity Advisory Committee; Big Data Analytics: Recommendations for the U.S. Department of Energy; February 2021; <https://www.energy.gov/oe/articles/eac-big-data-analytics-work-product-final> (October 29, 2024)
4. Black and Veatch; *2024 Electric Report*; [2024 Electric Report | Black & Veatch \(bv.com\)](#) (October 29, 2024)
5. US Department of Energy; *2022 & 2023 Microgrid and Integrated Systems Program Report to Congress*; May 2024. (Not yet publicly available)
6. Office of Electricity; DOE; *Grid Systems*; <https://www.energy.gov/oe/grid-systems> (October 29, 2024)

# Technology Transfer Opportunities (TTOs)

- An opportunity to transfer inventions made by a DOE National Lab or university to your small business for commercialization
- Awardees receive
  - an SBIR/STTR grant and
  - an option to license the technology
- Please review TTO information section at the beginning of the topics document if you plan to submit an application to a TTO.
- ***No TTOs in this release***

# Notice of Funding Opportunity (NOFO)



Available at the [DOE SBIR website](#) or [Grants.gov](#) and includes information on:

- Anticipated number of awards and funding available
- Eligibility
- Application Requirements
- Review Criteria
- Award Administration
- Open for approximately 8 weeks

Department of Energy (DOE)  
Office of Science (SC)  
Small Business Innovation Research (SBIR) / Small Business  
Technology Transfer (STTR)



**FY25 Phase I Release 2**

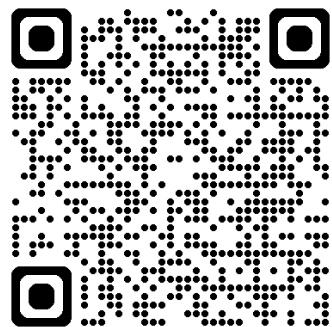
Notice of Funding Opportunity (NOFO) Number:  
DE-FOA-0003504

NOFO Type: Initial  
CFDA Number: 81.049

NOFO Issue Date:	December 27, 2024
Submission Deadline for Letters of Intent:	January 14, 2025 at 5:00PM Eastern Time A Letter of Intent is required.
Letter of Intent Response Date	January 27, 2025
Submission Deadline for Applications:	February 26, 2025 at 11:59PM Eastern Time


# Phase I Grant Online Application Guide

[DOE SBIR/STTR  
Phase I Online  
Application Guide](#)



- Fully replaces the former PDF document
- Houses all our application resources:
  - 8-week planner
  - Preparing an LOI
  - Tutorials
  - Examples
  - & More...



 Overview	 Get Ready	 Registration	 Letter of Intent (LOI)	 Step-by-Step Guide	 Additional Resources	 FAQs
---	--	---	---	---	---	---

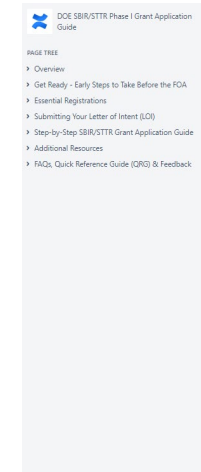
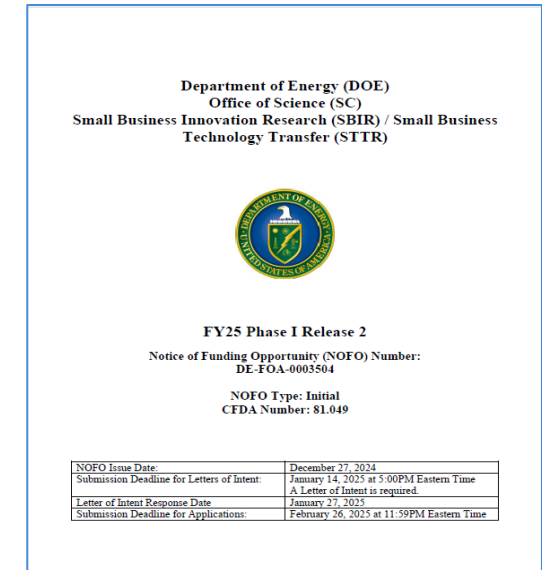
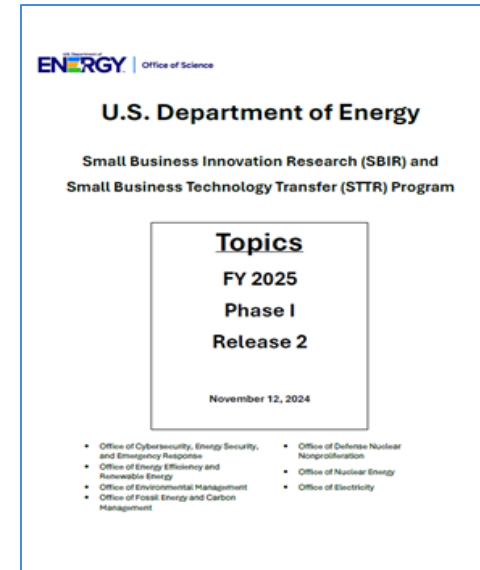
# Completing an Application



“Toolkit” documents to assist you with completing the application package

- [Topics Document & Funding Opportunity Announcement](#), & [New Application Guide Instructions](#) are available

- Online tutorials: <https://doetutorials.dawnbreaker.com/>



# Letters of Intent (LOI)



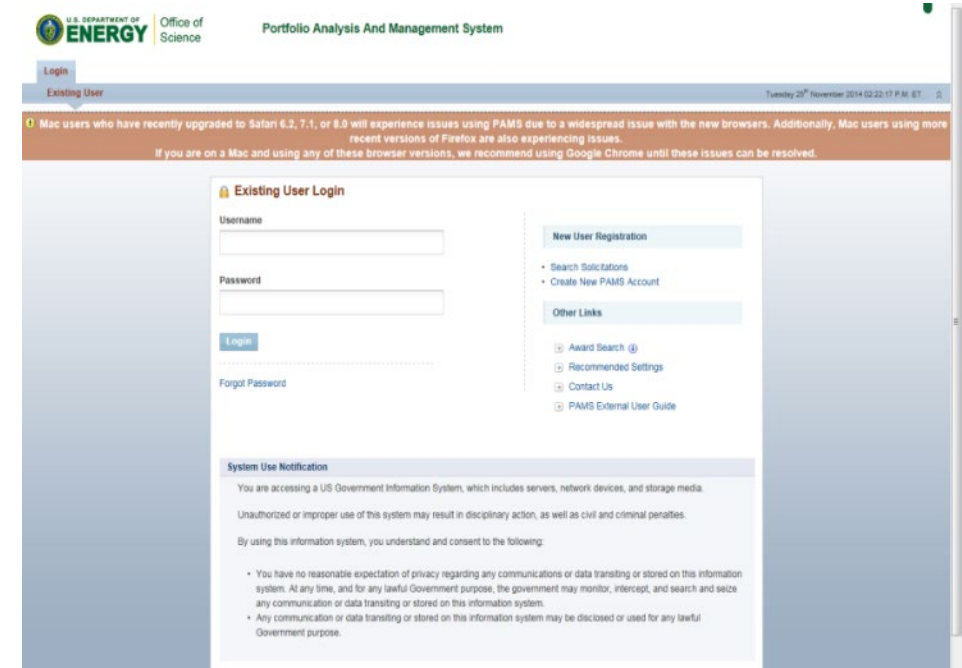
- Requirement
  - You must submit an LOI by the due date to be eligible to submit an application
- Primary purpose
  - Begin reviewer assignment to reduce award selection time
  - Due 3 weeks after NOFO is issued (**January 14, 2025**)
- Secondary purpose
  - provide email notification to applicants who appear to be non-responsive; you may submit an application if you receive this notification
  - Applicants whose LOI appears responsive will receive a notification **from some EERE offices: AMMTO, BETO, SETO, WPTO**
- Limits
  - Small businesses may submit only 10 letters of intent (and 10 applications) per solicitation
  - Each letter of intent and application must be unique

## Content of LOI

- Title
- Topic and Subtopic
- Abstract (<500 words)
  - **Provide sufficient technical detail to enable reviewer assignment**
  - Non-proprietary
- List of Subcontractors/ Consultants
- Small Business Information
  - Name, address
  - Business Official and contact information
  - Principal Investigator

# Letter of Intent (LOI) Submission is Required

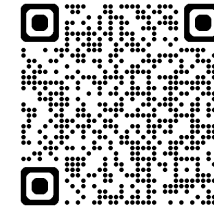
- Submit LOI online directly to the DOE Portfolio Analysis and Management System (PAMS) website:  
<https://pamspublic.science.energy.gov/>
  - Select “Create New PAMS Account” (if you do not have an account)
    - No prior registrations (SAM, etc.) are required to submit a LOI
  - Submit your abstract as a PDF file
  - [Utilize the LOI instructions and sample LOI](#) to ensure that you submit all the required information
  - For additional details on the LOI submission process, see the NOFO



The screenshot shows the 'Portfolio Analysis And Management System' login page. At the top, it features the U.S. Department of Energy Office of Science logo and the system name. A navigation bar includes 'Login' and 'Existing User' tabs. A warning banner for Mac users is visible. The main content area is titled 'Existing User Login' and contains a 'Username' field, a 'Password' field, and a 'Login' button. To the right, there is a 'New User Registration' section with links for 'Search Solicitations' and 'Create New PAMS Account', and an 'Other Links' section with links for 'Award Search', 'Recommended Settings', 'Contact Us', and 'PAMS External User Guide'. At the bottom, a 'System Use Notification' section provides a disclaimer about the system's status as a US Government Information System.

# Letter of Intent: Instructions & Sample Abstract

[Submitting Your Letter of Intent \(LOI\)](#)



ABC LLC will develop a new class of low cost battery separator materials for lithium ion batteries. It is anticipated that the cost of this separator will be 70% lower than separator materials available today and will be a critical factor in reaching the \$150/kWh cost target specified in topic 4b for lithium ion batteries for electric vehicle applications.

*Clearly explain why the proposed R&D is responsive to the subtopic*

These separators will utilize a new optically-activated method of producing pores in nano-structured polyolefin films. This optical pore formation method results in a 10x increase in the speed of creating porous films. During Phase I, ABC LLC will (1) develop the compositions and methodology for formulating the dense nano-structured polyolefin films and (2) carry out preliminary feasibility studies to characterize the appropriate optical intensities and wavelengths to achieve uniform, high speed, pore formation. It is anticipated that multiple iterations will be required to optimize the composition and nanostructure of the precursor films to achieve the desired porosity and process speeds. All processing work will be carried out at ABC LLC but polymer characterization will leverage capabilities of the Polymer Lab at State University to evaluate the structure, porosity, tortuosity, and thermal properties of the polymer films. In addition we will be collaborating with Lion Battery Inc. who will do preliminary battery testing of our separator materials to identify any manufacturing or performance issues of the separators.

*Provide sufficient technical detail about the R&D so that DOE program managers can select reviewers with appropriate technical expertise.*  
*Do not include proprietary information in a letter of intent.*

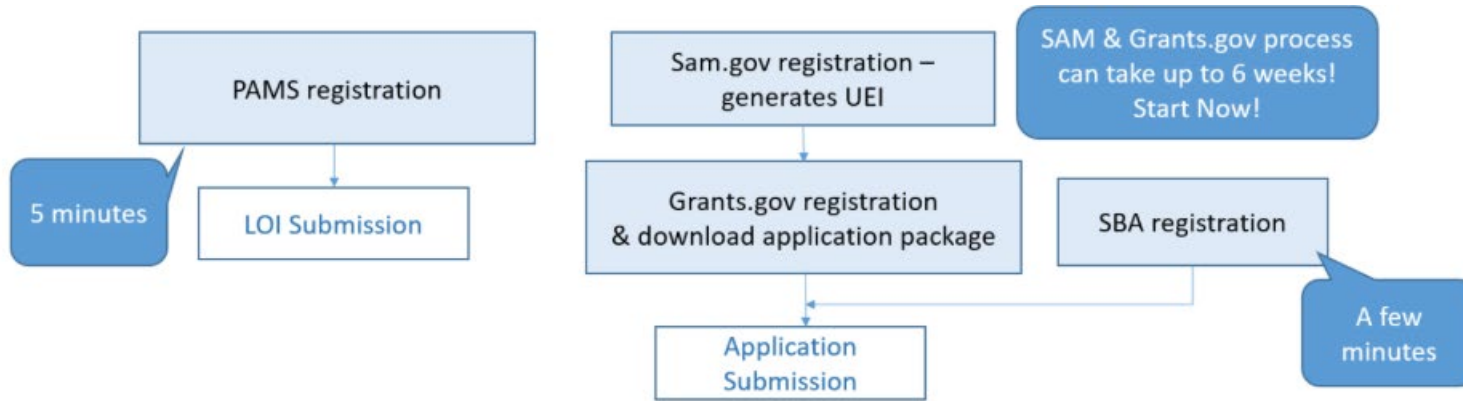
U.S. Department of



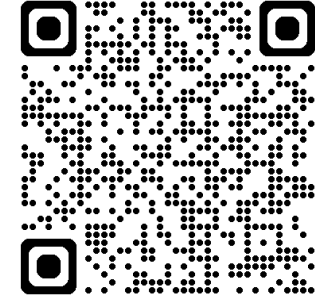
Office of  
SBIR/STTR  
Programs



# Application Process: Registrations



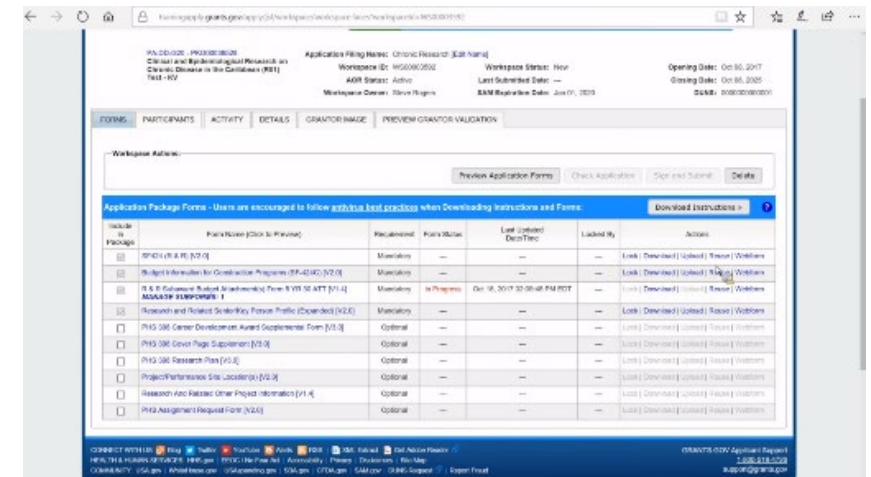
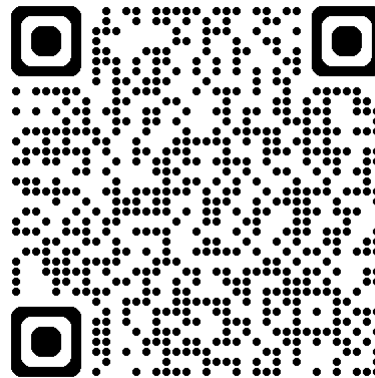
[Systems' Registrations Instructions](#)



- Applications must be submitted through [Grants.gov](#)
- Registration at Grants.gov is a 3-step process
  - Applicants must register with [SAM](#) at and obtain a Unique Entity Identifier (UEI)\*
    - Complete a SAM registration. **Can take 8 weeks!**
    - Must be updated annually
  - Complete Grants.gov registration
    - Start this process as early as possible!
    - See the Grants.gov website for instructions
- Small Business Administration (SBA) company registry
  - Small businesses must register at the [SBA company registry](#) and submit a copy of their registration with their grants.gov application

# Completing a Grants.gov Application

- Workspace
  - Online application completion and submission
  - Online tutorials are available
  - <https://www.grants.gov/applicants/workspace-overview.html>



# Elements of Your Phase I Application

- Project Narrative
  - Page and word limits
    - Phase I: 15 pages
- **Foreign Relationship Disclosure Form**
- Budget & Budget Justification
- Key Personnel
  - Provide a resume for each person listed on the budget form
- Commercialization Plans
  - Phase I commercialization plan (4, pages 2000 words)
  - [Detailed instructions and sample plan here](#)
- SBIR/STTR Information form
- Data Management Plan



Required Forms	Required Attachments PDF format	Additional Attachment If applicable, PDF format
Application for Federal Assistance, SF-424	none	none

Research and Related: Budget Form	Budget Justification <i>Attach to Field K</i>	Additional Senior Key Persons <i>Attach to Field A. 9</i> Additional Equipment <i>Attach to Field C. 11</i>
Research and Related: Senior/Key Person Profile Form	Biographical Sketch for each person <i>Attach to Appropriate Block</i>	Current and Pending Support for each person <i>Attach to Appropriate Block</i>
Research and Related: Other Project Information	Project Abstract and Summary <i>Attach to Field 7</i>	Letter of Commitment for consultant, subaward, or research institution <i>Attach to Field 12</i>
	Project Narrative <i>Attach to Field 8</i>	STTR only: Company Commercialization Report from SBIR.gov <i>Attach to Field 12</i>
	Data Management Plan <i>Attach to Field 12</i>	Authorization for DOE/NNSA FFRDC <i>Attach to Field 12</i>
	Disclosure of Foreign Relationships <i>Attach to Field 12</i>	Authorization for non-DOE/NNSA FFRDC <i>Attach to Field 12</i>
	Level of Effort & Max Funding Worksheet <i>Attach to Field 12</i>	
	SBA Company Registration <i>Attach to Field 12</i>	
Project/Performance Site Locations	none	none
SBIR/STTR Information Form	Phase I Commercialization Plan Including Letters of Support <i>Attach to Field 8</i>	SBIR only or Both SBIR/STTR: Company Commercialization Report from SBIR.gov <i>Attach to Field 9</i>

Additional Forms If applicable	Attachments PDF format
Research and Related Sub-award Budget Form	Budget Justification for each sub-award
SF-LLL Disclosure of Lobbying Activities	none

# Fast-Track Applications

## C60-06. GEOTHERMAL HEATING AND COOLING



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: YES	Accepting STTR Fast-Track Applications: YES

Geothermal energy is secure, reliable, flexible, and constant. It continues to be one of America's best choices for low-cost renewable energy in power generation and in direct-use applications for heating and cooling of American homes and businesses. The Geothermal Technologies Office (GTO) focuses on applied research, development, and innovations that will improve the competitiveness of geothermal energy and support the continued expansion of the geothermal industry across the U.S. [1]. Specifically, GTO is focused on significantly increasing geothermal electricity generation and the use of geothermal heat pumps and district heating by 2050 [2].

- Fast-Track applications propose Phase I and Phase II awards in one application
- NOFO provides specific guidance on the Fast-Track applications:
  - SBIR & STTR level of effort requirements for Phase I and Phase II stages of Fast-Track projects remain the same
  - Guidance begins on IV.E (p. 47)
- There will be one Q&A webinar devoted to Fast-Track Applications

# Elements of Your Fast-Track Application

- Project Narrative
  - 25 page max
- Budget & Budget Justification
- Key Personnel
  - Provide a resume for each person listed on the budget form
- Commercialization plan
  - **15 page max**
- SBIR/STTR Information form
- Data Management Plan
- Technical and Business Assistance (TABAs)
  - \$56,500 in total
  - \$6,500 to be used in Phase I
  - \$50,000 to be used in Phase II
- Cybersecurity Self-Assessment

Required Forms	Required Attachments PDF format	Additional Attachment If applicable, PDF format
Application for Federal Assistance, SF-424	none	None
Research and Related: Budget Form (1)	Budget Justification <i>Attach to Field K</i>	Additional Senior Key Persons <i>Attach to Field A. 9</i> Additional Equipment <i>Attach to Field C. 11</i>
Research and Related: Senior/Key Person Profile Form	Biographical Sketch for each person <i>Attach to Appropriate Block</i>	Current and Pending Support for each person <i>Attach to Appropriate Block</i>
Research and Related: Other Project Information	Project Abstract and Summary <i>Attach to Field 7</i> Fast-Track Project Narrative (2) <i>Attach to Field 8</i> Data Management Plan <i>Attach to Field 12</i>	Letter of Commitment for consultant, subaward, or research institution <i>Attach to Field 12</i> STTR only: Company Commercialization Report from SBIR.gov <i>Attach to Field 12</i> Authorization for DOE/NNSA FFRDC <i>Attach to Field 12</i>

	Disclosure of Foreign Relationships <i>Attach to Field 12</i> Level of Effort & Max Funding Worksheet (3) <i>Attach to Field 12</i> SBA Company Registration <i>Attach to Field 12</i> Cybersecurity Self-Assessment <i>Attach to Field 12</i>	Authorization for non-DOE/NNSA FFRDC <i>Attach to Field 12</i> Cooperative Agreements Only: Go/No Go Milestones <i>Attach to Field 12</i>
Project/Performance Site Locations	none	none
SBIR/STTR Information Form	Fast-Track Commercialization Plan Including Letters of Support (4) <i>Attach to Field 8</i>	SBIR only or Both SBIR/STTR: Company Commercialization Report from SBIR.gov <i>Attach to Field 9</i>

Additional Forms If applicable	Attachments PDF format
Research and Related Sub-award Budget Form	Budget Justification for each sub-award <i>Attach to Appropriate Block</i>
SF-LLL Disclosure of Lobbying Activities	none

# New CP Specifications for Fast Track Applications

- Phase II Commercialization Plan specifications have been updated!
  - 4 sections of the plan remain unchanged – but review the specifications for each as they have been updated
  - No longer require ROI worksheet
  - [Proforma templates](#) have been updated
  - Limitation of five (5) letters of support (LOS)
- **All Phase II applications** (Phase II, Phase IIA, Phase IIB or Phase IIC) require an updated commercialization plan. Upload as **ONE PDF** that includes your 15-page commercialization plan, ≤ 5 LOS and your proforma income statement.

# Data Management Plan

- Purpose – Disseminate, as widely as possible, data generated with public funding
- Requirement – All SBIR and STTR applications must select one of the two Data Management Plan (DMP) options below:
  - Option 1
    - The Option 1 DMP is: “It is anticipated that all generated digital data will be protected as SBIR/STTR data and therefore will not be publicly shared during the applicable SBIR/STTR data protection period.” If any data generated under this award are published, an effort will be made to also release any related digital data that is not protected SBIR/STTR data.”
    - Please note that if you do not include a DMP with your application, Option 1 for the DMP will be assumed for your application. However, If you plan to publicly disclose generated digital data, you must provide a DMP under Option 2.
  - Option 2
    - If you plan to publicly disclose technical data during the data protection period or, for data not expected to be asserted as protected SBIR/STTR rights data, please submit a DMP. Use the DMP requirements outlined in the NOFO.

# Bipartisan Infrastructure Law (BIL) Funded Topics & Fast-Track

<b>C60-13. VEHICLE TECHNOLOGIES OFFICE</b> .....	<b>112</b>
a. Innovative Electric Vehicle Battery Cells and Components.....	113
b. Improving EV Battery Recycling Efficiency (BIL-Funded).....	115
c. Improving Consumer Electronic Battery Recycling Efficiency (BIL-Funded) .....	116
d. Modular Heavy-Duty Vehicle Batteries.....	117
e. Material Innovations for Thermal Runaway Mitigation in High-Energy Battery Enclosures .....	119
f. EV Battery Firefighting Technologies .....	122
g. Electrified Hydraulic Components for Off-road Equipment .....	123
<b>PROGRAM AREA OVERVIEW – OFFICE OF FOSSIL ENERGY AND CARBON MANAGEMENT</b> .....	<b>157</b>
<b>C60-20. CARBON CAPTURE, CONVERSION, AND STORAGE</b> .....	<b>157</b>
a. Catalytic Conversion of Carbon Dioxide to Fuel (BIL Funded) .....	158
b. Digital Tools to Support Design and Materials Selection and Assurance of Operational Asset .....	...

*BIL is an investment in upgrading American infrastructure to enhance U.S. competitiveness, drive the creation of good-paying union jobs, tackle the climate crisis, and ensure strong access to economic, environmental, and other benefits for disadvantaged communities.*

- Check whether your topic is identified at BIL Funded
- All BIL Funded topics may require additional reporting requirements (see section II.H.).



# Foreign Relationships Disclosure Form



- Per the SBIR/STTR Extension Act of 2022, you are now **required** to submit a Disclosure of Foreign Relationships using the form on: <https://science.osti.gov/sbir/Applicant-Resources/Grant-Application>
- Your application may be declined if the form is not included
- The disclosure is attached to Field 12 of the Research and Related Other Project Information Form
- Even if your small business has no foreign relationships, you must complete the form *and sign it* to certify

# Proprietary Data



An application may include technical data and other data, including trade secrets and commercial or financial information that are privileged or confidential, which the applicant does not want disclosed to the public or used by the Government for any purpose other than application evaluation.

Certain documents may contain proprietary information.

# Proprietary Data



To protect such data, the following guidelines must be followed:

The following legend must appear on the title page of the document:

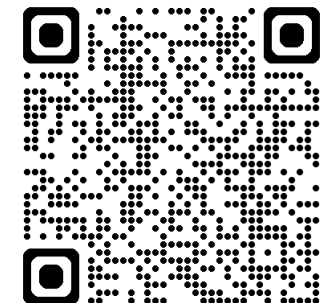
*This proposal contains information that shall not be disclosed outside the Federal Government and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than evaluation of this proposal, unless authorized by law. The Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract if award is made as a result of the submission of this proposal. The information subject to these restrictions are contained on all pages of the proposal except for pages [insert page numbers or other identification of pages that contain no restricted information.]*

The following legend must appear on each page of the proposal that contains information the Applicant wishes to protect:

*Use or disclosure of information contained on this sheet is subject to the restriction on the title page of this proposal.*

There are no longer marking requirements (highlight, asterisks, brackets) of specific text containing protected information.

[Instructions & Example](#)



# Top Application Errors



Updating SAM registration at the last minute – and unable to submit on Grants.gov

Fail to submit letter of intent by the deadline

Fail to check level of effort is compliant (see slide 6)

Fail to meet PI effort requirements (a minimum of 3 hours/week on average)

Incorrect/missing marking of proprietary data. Instructions in FOA

Missing letters of commitment, required for each consultant and subaward

Proposing a technology that is not new

**Unresponsive to the subtopic/ Not clearly addressing technology need**

Not including the required documents such as Foreign Relationships Disclosure Form

Proposal reflects unfamiliarity with the current literature

Budget form and budget justification are in agreement (to the penny). Subawards too!

**Not fully reading the FOA!!**

# Are you a good fit with DOE SBIR/STTR?

## Phase I Application Review Criteria

Technical Merit

Ability to Execute Project

Impact

## ***#1 - Responsiveness to the topic & subtopic***

### Technical Merit

- Must be technology development R&D
- Idea is novel

### Ability to Execute Project

- Solid work plan to prove feasibility
- Your team is composed of the right expertise

### Impact

- Potential impact if R&D is successful

*The three review criteria are equally weighted and*

# Review and Selection of Applications

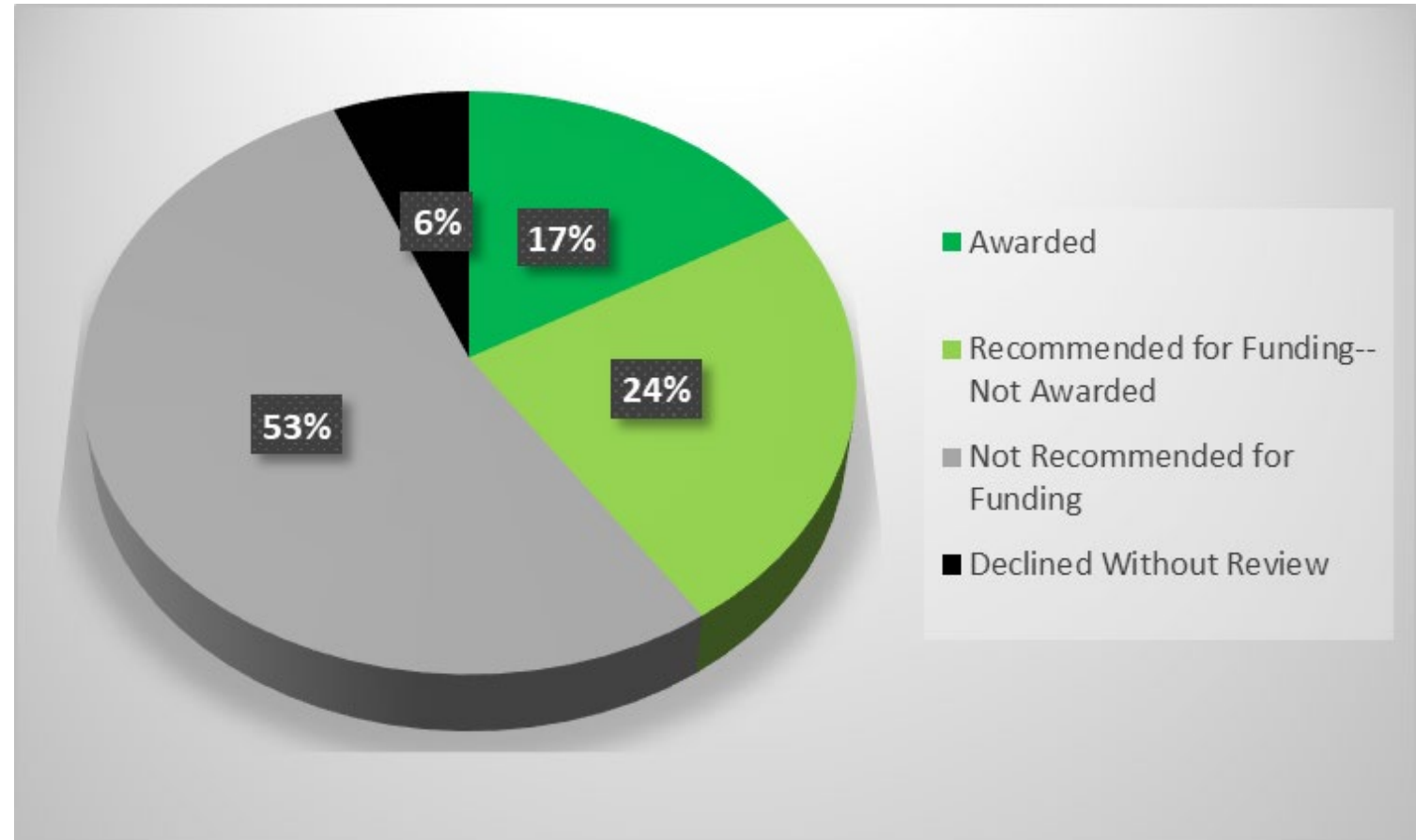
- DOE primarily uses external peer review to evaluate your applications
  - Typically at least 3 technical reviewers
- Selection
  - **DOE ranks the most meritorious applications—award selections are made based on available funding**
- You will be notified of the decision on your application within 90 days of the application deadline
  - Reviewer comments will be made available to you through PAMS. Use this feedback constructively to improve future applications



# Phase I Application & Award Statistics for FY 2024

## Phase I

- 2088 applications
- 348 awards

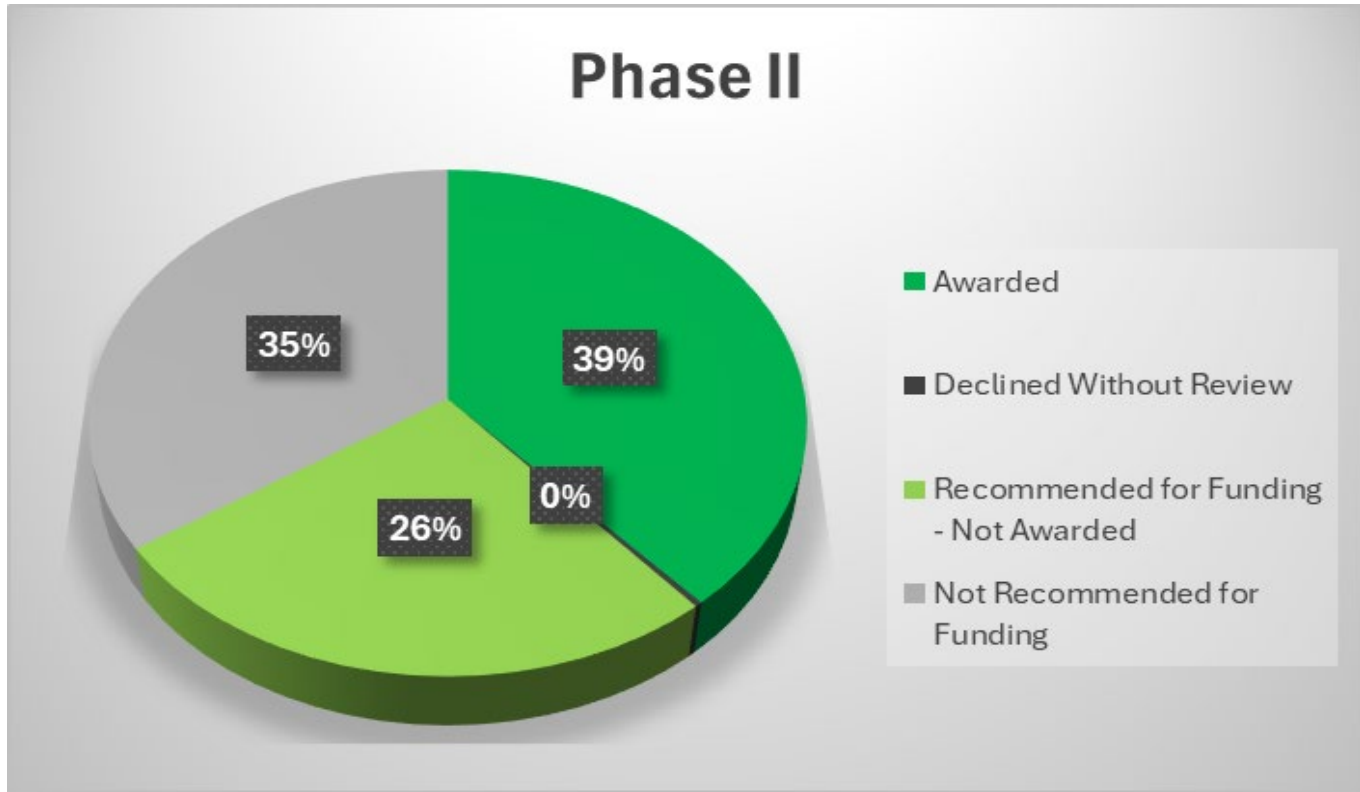


# Phase II Application & Award Statistics for FY 2024



## Phase II

- 324 applications
- 125 awards



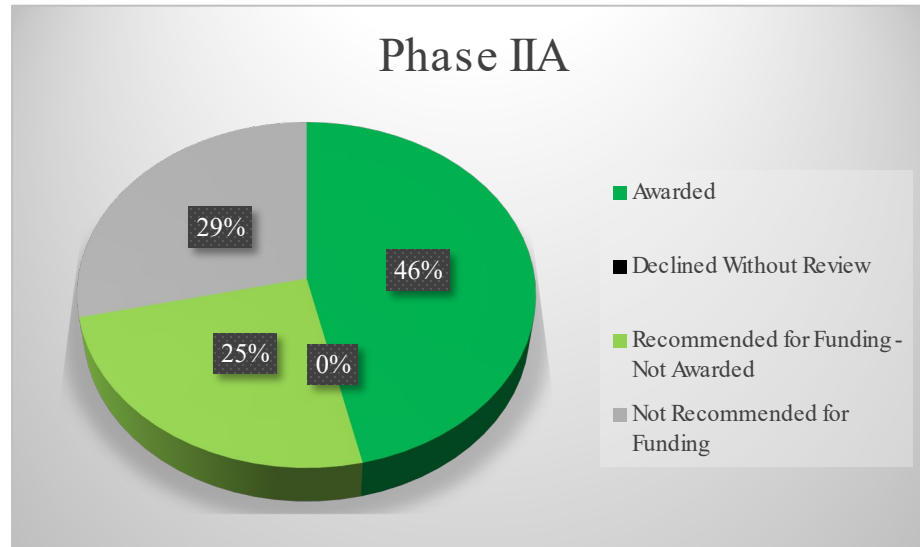


# Phase II Application & Award Statistics for FY 2024



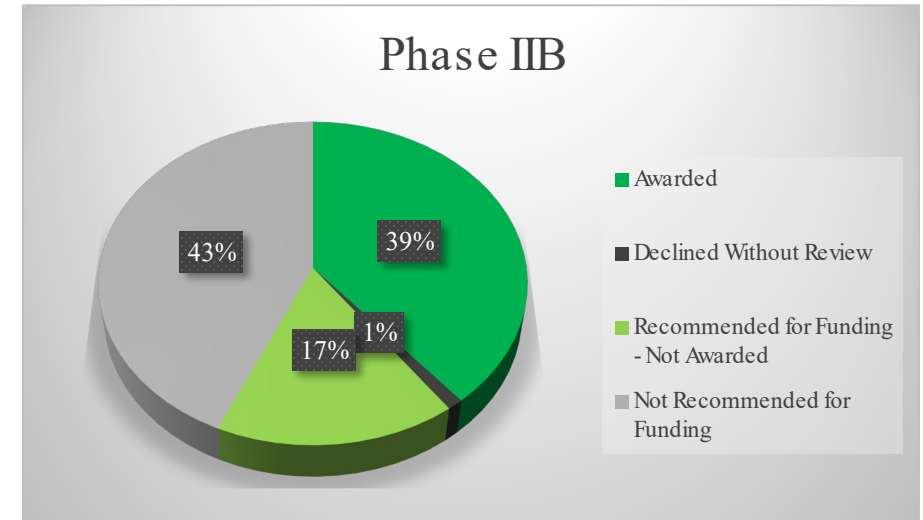
## Phase IIA

- 28 applications
- 13 awards



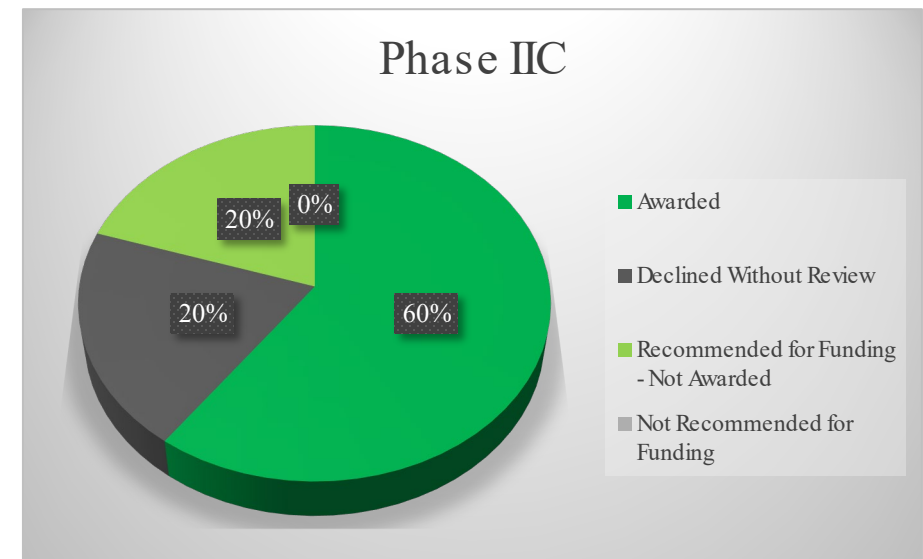
## Phase IIB

- 90 applications
- 35 awards



## Phase IIC

- 5 applications
- 3 awards



# Phase I Principal Investigator Meeting



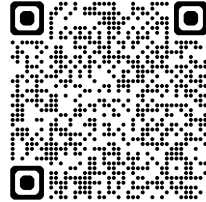
- Phase I Principal Investigators are expected to attend a two-day DOE SBIR/STTR Principal Investigator Meeting held in the DC area
  - Release 1: June
  - ***Release 2: October***
- Objectives
  - In-person meetings with DOE program managers and DOE Commercialization Assistance provider
  - Presentations relating to Phase II and Commercialization
  - Small business networking
- You may include the cost for the trip (registration, travel) in your Phase I budget
- Exceptions
  - If the DOE program office that funds your topic has a separate principal investigator meeting, you will be notified that your participation in the Phase I PI meeting is optional

# Awardee Resources

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



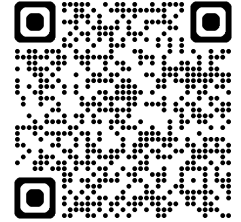
***Need help  
preparing your  
Phase II  
Commercialization  
Plan?***



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

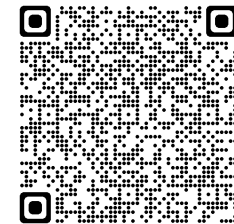
## [Phase Shift \(formerly I-Corps\)](#)

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](#)

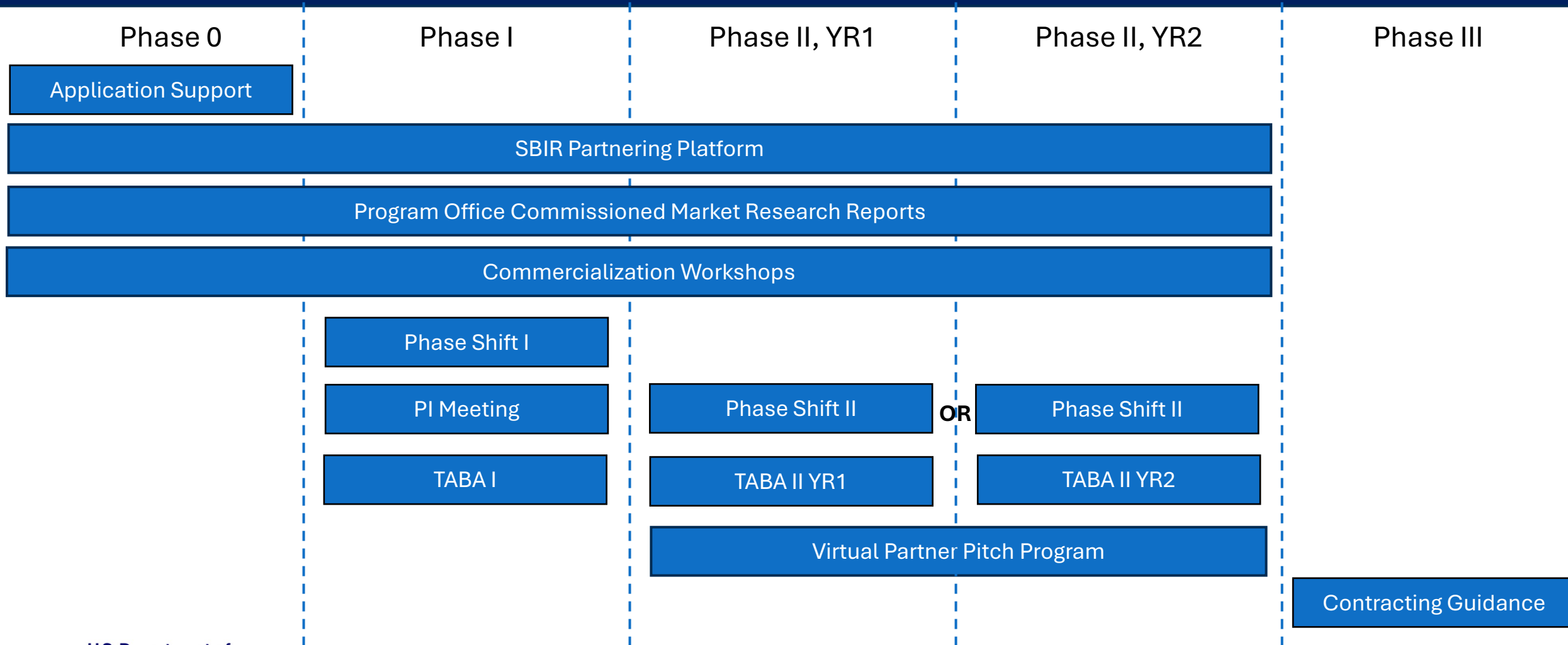
NERSC is the primary scientific computing facility for the DOE. All DOE SBIR/STTR grant projects requiring high performance computing support are eligible to apply to use DOE NERSC resources.



# 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

# DOE Commercialization Resources



# DOE Commercialization Resources

- **Commercialization Training** for Awardees (optional)
  - **TABA** – additional funds provided; DOE selected vendor program in Phase I or use own third-party vendor; *MUST* use third-party vendor in Phase II
  - **Phase Shift I** – customer discovery
  - **Phase Shift II** – deeper dive on financial models, cash flow and customer sales cycles
- **Virtual Quarterly Commercialization Workshops** focus on topics that are typical areas of weakness; [recordings and FY24 schedule posted](#) and on the **RESOURCE** page on [SBIR Partnering Platform](#).
  - FY22 Q4 - **Commercialization and the Power of Partnering**
  - FY23 Q1 - **Preparing to Pitch**
  - FY23 Q2 - **Financial Modeling**
  - FY23 Q3 - **Navigating Phase III Contracting**
  - FY23 Q4 – **Licensing**
  - FY24 Q1 – **Preparing to Manufacture**
  - FY24 Q2 - **Financial Modeling based on Cash Flow**
  - FY24 Q3 – **Preparing for Product Launch**
  - FY24 Q4 - **Developing a Strategic Cap Table**



<https://bit.ly/DOECommercializationWorkshops>

**ALL WELCOME!!**

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<https://science.osti.gov/sbir/Commercialization-Resources>

# SBIR Partnering Platform

- [SBIR Partnering Platform](https://www.sbirpartnering.org) provides searchable database where SBIR/STTR applicants (**INNOVATORS**) can find potential **PARTNERS** and network with other **INNOVATORS** to complete your team through collaboration and/or subcontract
  - Find **PARTNERS** using keyword and AI searching; myriad of filtering options
  - Find SBIR funding opportunities **across all agencies**
  - Bookmark favorites; **Confidential messaging**
  - **Network** with other **INNOVATORS** on the **Community Page**
  - Find opportunities posted by **PARTNERS** on the **Community Page**
  - Newsfeed for applicable industry/stakeholder news
  - **NEW** resource page!
- As an SBIR/STTR applicant, register as an **INNOVATOR**
- NIH's National Heart Lung & Blood Institute (NHLBI) is a new addition!



<https://www.sbirpartnering.org/doi>

# SBIR Partnering Platform



- Features:
  - Find PARTNERS using keyword and AI searching; myriad of filtering options
  - Find SBIR funding opportunities **across all agencies**
  - Bookmark favorites; Confidential messaging
  - Network with other **INNOVATORS** on the **Community Page** to collaborate/subcontract with other **INNOVATORS** to complete your team or add SMEs
  - Newsfeed for applicable industry/stakeholder news
- As a DOE SBIR/STTR applicant, register as an **INNOVATOR**; check out the [Platform Overview for Innovators](#) webinar
- Reach out to [Carol Rabke](#) with any questions

The screenshot shows the 'Community Social Feed' interface. At the top, there is a navigation bar with 'My Dashboard / Community' and a 'Create Post' button. Below this is a header for the 'Community Social Feed' with a note: 'This community is meant to foster collaboration and partnering among innovators. Posts containing excessive business sales/solicitation information will be removed.' There are two dropdown menus for 'Filter by' (set to 'All') and 'Sort by' (set to 'Recent'). The main feed contains three posts:

- Post 1:** By Gilberto D. (January 23 | innovator). Title: 'Battery and Solar Panel Sourcing.' Content: 'Delphire has created the Sentinel FD3 (Please see https://www.delphiretech.com/products). We are looking for the following: 1) Battery (ideally paired with a charge controller with CAN bus). LiFePo4,....' It has 18 views and 0 likes/comments.
- Post 2:** By Michael F. (January 19 | innovator). Title: 'NGA - Boosting Innovative GEOINT - Science & Technology Broad Agency Announcement'. Content: 'I am seeking a PI who can work on this effort with me. I can bring some of the IP and code along with the project management skill set to make this a success.' It has a red callout box: 'Looking to collaborate/subcontract on a particular topic and/or project'. It has 29 views and 0 likes/comments.
- Post 3:** By Michael F. (January 19 | innovator). Title: 'DOE - Data Reduction for Science Funding Opportunity - DE-FOA-0003266'. Content: 'I am seeking a PI who can work on this effort, leveraging existing technology and techniques. I have the code, background, and project management skills to assist this effort.' It has a red callout box: 'Looking to collaborate/subcontract on a particular topic and/or project'.

On the right side, there is an 'Announcements (past 30 days)' section with two items:

- January 23 - 25 | America's Seed Fund Week Virtual Road Tour (January 12 | Carol R. | admin)
- Now Accepting Applications for the DOE SBIR/STTR FY24 virtual Partner Pitch Program (January 12 | Carol R. | admin)

Below the announcements is a note: 'To see older announcements, set the filter in the social feed to "Admin announcements"'



# DOE Office of Inspector General: Fraud, Waste & Abuse



# DOE Office of Inspector General

## Combating Fraud

### *What types of fraud are found in the SBIR Program?*

- Application Process
  - submitting a plagiarized proposal
  - providing false information regarding the company, the Principal Investigator (PI), or work to be performed
  - seeking funding for work that has already been completed
- During Award
  - using award funds for personal use or for any use other than the proposed activities
  - submitting plagiarized reports or reports falsely claiming work has been completed
  - claiming results for an award that were funded by a different source

# DOE Office of Inspector General

## Knowing the Rules

### *Which SBIR rules should you be particularly familiar with?*

- Duplicate or overlapping proposals may not be submitted to multiple agencies without full disclosure to all agencies.
- The company must meet SBA's requirements for a small business, including being majority American owned and have 500 employees or fewer.
- For SBIR: The PI's primary employment must be with the company during the grant period. The PI may not be employed full time elsewhere.
- For SBIR: For Phase I, a minimum of two thirds of the research effort must be performed by the grantee company; for Phase II, a minimum of one-half of the research effort must be performed by the grantee company. Work performed by a university research lab is NOT work completed by the grantee company.
- University employees participating on an SBIR award should disclose their involvement to the university as well as their use of university facilities.
- R&D must be performed in the United States.

# DOE Office of Inspector General

## Consequences

### *What Happens If You Break the Rules?*

- If you commit fraud or other wrongdoing in applying for or carrying out an SBIR award, we will investigate.
- We refer violations of civil or criminal law to the Department of Justice (DOJ). If DOJ prosecutes you for fraud or false statements, you may be sentenced to prison and required to pay full restitution. If DOJ pursues a civil action under the False Claims Act, you may have to pay treble damages and \$11,000 for each false claim. In addition, DOE may terminate your awards and debar you from receiving grants or contracts from any federal agency.
- DOE OIG coordinates with other agencies, NSF, EPA, etc.

# Recent Prosecution

October 4, 2022

## Lexington Woman Sentenced for Wire Fraud and Money Laundering

The United States District Court, Eastern District of Kentucky, sentenced Jyoti Agrawal (Agrawal) to **42 months in federal prison** for conspiracy to commit wire fraud, wire fraud, and money laundering.

According to evidence at her trial, Agrawal was a co-owner of the company ScienceTomorrow, with Subhadarshi Nayak. In December 2013, Agrawal agreed with Nayak to electronically submit a proposal containing a fabricated letter of support from a key subcontractor, in order to increase their chances of receiving a Phase II SBIR grant from the Department of Energy (DOE), in the amount of \$999,266.00, to research and develop a scanning electron microscope detector. Agrawal knew the fake letter inflated the budget an out-of-state university had provisionally authorized in support of the project.

In 2014, the DOE awarded the Phase II grant to ScienceTomorrow, in part relying on this misrepresentation. Agrawal ultimately received more than a million dollars for the project from DOE, and **\$500,000** from Kentucky's state matching funds program, which depends on the lawful receipt of a federal grant award.

The evidence further showed that Agrawal had controlled the money and that Nayak left the project early on. Ultimately, the out-of-state university did not work on the project, as proposed, and received no payments. Bank records established Agrawal had personally accumulated over \$440,000 of DOE grant funds during the two-year performance period. Agrawal also spent an additional \$146,000 of the DOE Phase II funds on an MBA degree in Chicago, during this time, partially supporting her money laundering conviction. Subsequently, Agrawal submitted false certifications to the DOE, stating all funds had been expended in accordance with DOE terms/conditions; however, the evidence at trial revealed she had unlawfully retained over \$300,000 of the DOE funds she certified she had spent on the project.

**Nayak was also convicted and sentenced in December 2021.**

As part of her sentencing, Agrawal was ordered to pay restitution in the amount of **\$1,048,255.00 to DOE and \$500,000 to Kentucky**. Nayak was also assigned restitution in conjunction with Agrawal.

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# DOE Office of Inspector General Reporting Fraud

- The Department of Energy's Office of Inspector General (OIG) promotes the effective, efficient, and economical operation of DOE's programs and operations through audits, inspections, investigations, and other reviews.
- Within DOE OIG, the Office of Investigations is responsible for investigating any fraudulent acts involving DOE, its contractors or subcontractors, or any crime affecting the programs, operations, Government funds, or employees of those entities.

- *If you want additional information or to report wrongdoing:*

Internet: [ig.energy.gov](http://ig.energy.gov)  
E-mail: [ighotline@hq.doe.gov](mailto:ighotline@hq.doe.gov)  
Telephone: 202-586-4073  
Hotline: 800-541-1625  
Fax: 202-586-5697

U.S. DEPARTMENT OF ENERGY  
OFFICE OF INSPECTOR GENERAL  
ATTN: OFFICE OF INSPECTIONS  
1000 INDEPENDENCE AVENUE, SW  
MAIL STOP 5D-031  
WASHINGTON, DC 20585

# DOE SBIR/STTR Resources



Early-Stage  
Innovation  
SBIR & STTR

Commercialization  
Private Funding



Applicant Resources

Phase 0 Application Assistance

Free for first-time applicants

Phase Shift I & Phase Shift II (formerly I-Corps)

TABA funds (\$6,500 Ph I and \$50,000 Ph II)

Partnering Resources

Virtual Commercialization Workshops

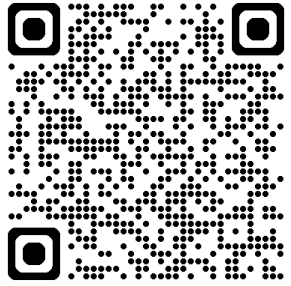
NERSC Computing Resources

Workforce Development Supplement for Phase II Awardees

Awardee resources

Stayed tuned for more!

# 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

Office of Clean Energy Demonstrations

Loan Programs Office

Technology Commercialization Fund (TCF)

EnergyWerx, TechWerx and ConnectWerx

National Energy Research Scientific Computing Center (NERSC)



# Thank you!

## Get organized!

- Take advantage of [Phase 0](#) and other resources if you are a first-timer!
- Start [SAM.gov](#) today!

## Reach out to us:

- [sbir-sttr@science.doe.gov](mailto:sbir-sttr@science.doe.gov) (Application Questions)
- [eileen.chant@science.doe.gov](mailto:eileen.chant@science.doe.gov) (Phase 0 & Outreach)
- [carol.rabke@science.doe.gov](mailto:carol.rabke@science.doe.gov) (Partnering)



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

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