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

- 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 <u>here</u>.
- Where can I find the FOA being discussed today?
 - Click <u>here</u> for the FY 2024 Phase I Release 2 FOA:
- What if my question was not answered at today's webinar?
 - If you have a question about the grant application process, please send us an email at: <u>sbir-sttr@science.doe.gov</u>
 - or call us at (301) 903-5707
- How do I find a list of the topics associated with this FOA?
 - Click <u>here</u> for the FY 2024 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 2024 Phase I Release 2 Funding Opportunity Webinar

> Eileen Chant, Outreach Program Manager <u>eileen.chant@science.doe.gov</u>, (301) 578-2386

> > January 25, 2024

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



Extramural R&D ~\$100B/year





Universities



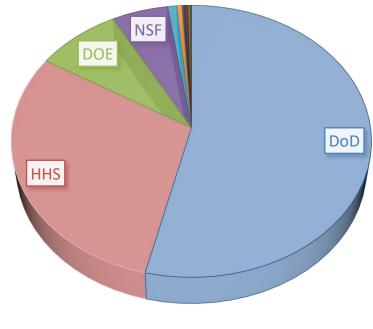


FY 2022 SBIR/STTR Budgets by Agency



Agency		Budget 1illions)	
Department of Defense (DoD)	\$	2,240	1
Department of Health and Human Services (HHS), incl. Nationa Institute of Health (NIH)	al \$	1,250	SBIR & STTR (> \$1B in extramural
Department of Energy (DOE), incl. Advanced Research Projects Agency (ARPA -E)	\$	348	R&D)
National Science Foundation (NSF)	\$	231	
National Aeronautics and Space Administration (NASA)	\$	215	
Department of Agriculture (USDA)	\$	38	
Department of Homeland Security (DHS)	\$	20	1
Department of Commerce: National Oceanic and Atmospheric			
Administration (NOAA), National Institute of Standards and	\$	12	SBIR only (> \$100M in
Technology (NIST)			extramural
Department of Education (ED)	\$	12	R&D)
Department of Transportation (DOT)*	\$	11	· ·
Environmental Protection Agency (EPA)	\$	5	Ļ
	ntracting a		

2022 BUDGETS



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



Office of SBIR/STTR Programs Contracting agency

Granting agency

Both

Are Agencies' Programs all the Same?





- 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 <u>SBIR.gov awards</u> 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

AMERICA'S SEED FUND SBIR-STTR

- 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.
- <text><text>

DOE Mission

• We offer an expansive application assistance program "Phase 0". It opens for an application cycle when the topics document are released <u>https://doephase0.dawnbreaker.com/</u>



SBIR vs STTR?



Phase I – R&D Requirements

STTR

SB, RI or Subcontractor

SBIR

Small Biz RI

Small Business Innovation Research (SBIR)	Small Business Technology Transfer (STTR)
est. 1982	est. 1992
 Allows non-profit research institution partner Principal Investigator (PI) employee of small business 	 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

100 80

> 60 40

> 20 0

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.).; or
 - A 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



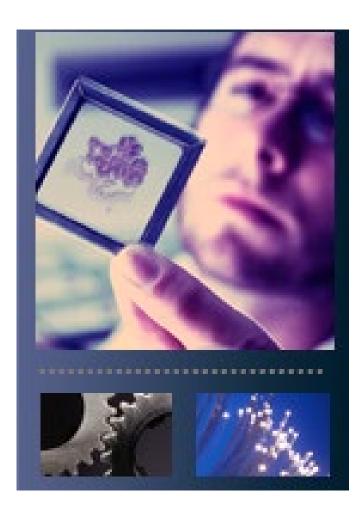
- Critical, Early-Stage R/R&D funding
 - The SBIR & STTR programs provide funding for innovative, early-stage research
 - Awards process is competitive, i.e. high quality and aligned applications are funded
 - More meritorious applications than funding available
 - SBIR & STTR awards provide credibility 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

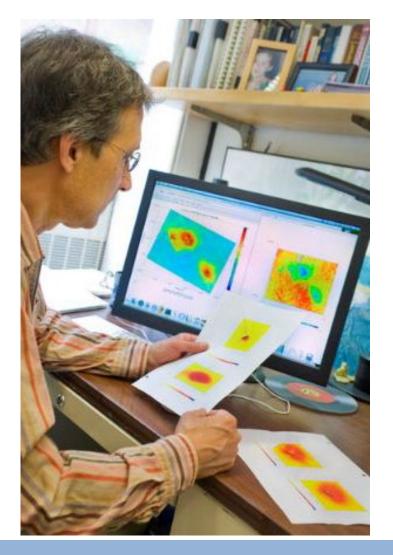




Data Protection



- 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

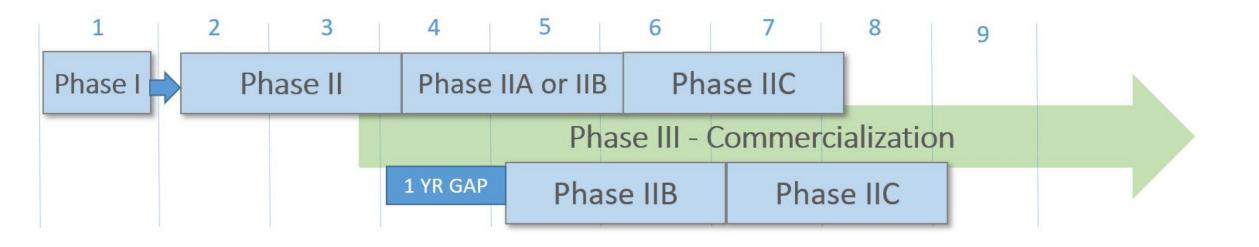
Programs



Advanced Scientific Computing Research (ASCR)Fusion Energy Sciences (FES)Nuclear Nonproliferation (NNSA)Cybersecurity, Energy Security & Emergency Response (CESER)	
Basic Energy Sciences (BES)High Energy Physics (HEP)Energy Efficiency & Renewable Energy (EERE)Electricity (OE)	
Biological & Environmental Research (BER) Nuclear Physics (NP) Nuclear Energy (NE) Nuclear Energy (NE) Management (2M)	
Fossil Energy & Carbon Management (FECM) next y	

How does our funding work?





Phase I	Phase II	Phase IIA/IIB	Phase IIC
 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 	 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 	 For projects that require additional R&D funding for commercialization \$1,100,000 2 years duration ~30 awards per year 	 Pilot program to leverage 1:1 matching funds for commercialization \$1,100,000 2 years duration
			1 /

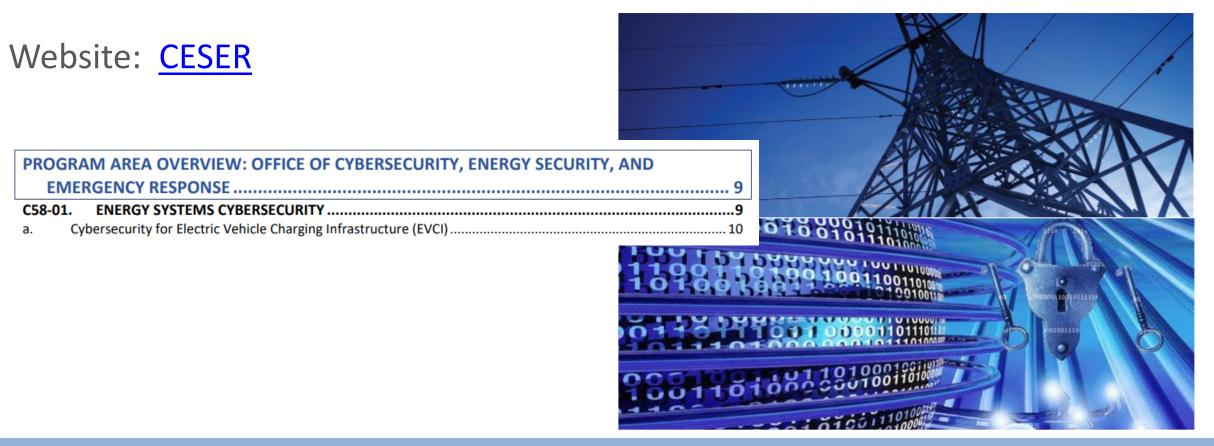








Office of Cybersecurity, Energy Security and Emergency Response





Office of Defense Nuclear Nonproliferation

PROG	RAM AREA OVERVIEW: OFFICE OF DEFENSE NUCLEAR NONPROLIFERATION RESEARCH
AN	ID DEVELOPMENT
C58-02	QUANTUM SENSORS FOR UNDERGROUND NUCLEAR EXPLOSION MONITORING
a.	Fieldable Quantum Sensors to Detect Underground Explosions
b.	Other
C58-03	RADIATION RESISTANT PLASTIC ENCAPSULATED MICROCIRUITS
a.	Radiation Resistant Plastic Encapsulated Microcircuits (PEMs) with Undiminished Performance, High-Yield, and
	Lower Cost
b.	Other
C58-04	ARTIFICIAL INTELLIGENCE
a.	Experimentation Framework for Multimodal Foundation Models
C58-05	AUTONOMOUS RADIATION SENSING AND MAPPING17
a.	Autonomous Sensors Systems for Radiation Detection and Mapping17
b.	Other
C58-06	
a.	Novel X-Ray Sources for High-Energy Field Radiography
b.	Other
C58-07	
a.	Novel Approaches to Accelerator Component Redesign to Address Supply Chain Uncertainty
b.	Other
C58-08	
a.	Imaging Focal Planes Using Quantum Resonance Effects in the Pixels that are Adjustable in Sensing Frequency
	Through Application of a Control Signal (i.e., Thermal, Electrical, etc.)
b.	Demonstration or Analysis of a Phased Array Gravity Sensor to Permit Off-Vertical Sensing Through Multi-Sensor
	Gravimeter or Gravity Gradiometer Systems Employing Atom Interferometers
с.	Maritime, Limnologic, and Oceanic Hyperspectral Imagery Analysis Advancement



Website: NNSA



Office of Electricity

Website: <u>OE</u>

PRO	GRAM AREA OVERVIEW: OFFICE OF ELECTRICITY	. 24
C58-0	9. ADVANCED GRID TECHNOLOGIES	24
a.	Extending Distribution Transformer Lifetime and Increasing Reliability Through Innovation	25
C58-1	0. ADVANCED BATTERY MANAGEMENT AND SENSORS FOR GRID-TIED ENERGY STORAGE	26
a.	Advanced In-Situ Battery/Energy Management for Next Generation Battery Energy Storage Systems	27









Office of Energy Efficiency and Renewable Energy



Website: <u>EERE</u>

- 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
 - Bio Energy
 - Building Technologies





Office of Fossil Energy and Carbon Management

PROG	RAM AREA OVERVIEW – OFFICE OF FOSSIL ENERGY AND CARBON MANAGEMENT	98
C58-23	3. CARBON CAPTURE, CONVERSION, AND STORAGE	98
a.	Synthetic Aggregates Production via Carbon Conversion (BIL Funded)	98
b.	Carbon Capture for Mobile Sources	99
с.	Al Based Forecasting Models for Amine and Degradation Product Emissions	101
d.	Carbon Transport and Injection: Asset Integrity Management/Design	101
e.	Turn-Key Service to Create a Gravity-Based Geophysical Monitoring Network for Use During Carbon Storage	
	Operations	102
f.	Other	103
C58-24	I. CARBON DIOXIDE REMOVAL	105
a.	Direct Air Capture Materials Durability Testing	105
b.	Soil Carbon Monitoring for Enhanced Rock Weathering	106
с.	Other	106
C58-25	5. HYDROGEN TECHNOLOGIES	107
a.	Advanced Thermal Barrier Coatings and Environmental Barrier Coatings for Ceramic Matric Composite	107
b.	Impurity-Resistant SOEC Fuel Electrodes	108
с.	Other	108
C58-26	5. CRITICAL MINERALS AND MATERIALS APPLICATIONS	109
a.	Development of Novel Sensors and Instrumentation for Rapid Subsurface Characterization	111
b.	In-Situ Extraction Methodologies and Technologies for Use in the Subsurface Environment	
с.	Other	111
C58-27	7. CARBON ORE PROCESSING	112
a.	Direct Use of Coal or Carbonaceous Coal Wastes as Lithium-Ion Battery Anodes	112
b.	Other	113
C58-28	3. ADVANCED REMEDIATION TECHNOLOGIES	114
a.	"Proof of Concept" Approaches for Advanced Characterization Tools for Assessing Natural Gas and Thermal	
	Energy Co-Production Potential	
b.	Produced Water Optimization – PARETO	115
с.	Other	116







Office of Nuclear Energy



Website: <u>NE</u>

- 29 topics, including "Other"
- Nuclear Energy and Nuclear Waste
- Materials, Fuel, Cybersecurity, microreactors, robotics, plant modernization and many more....







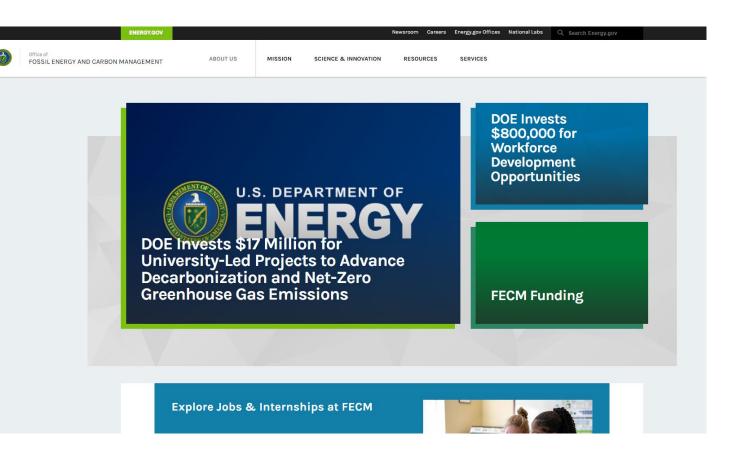
DOE Program Office Websites



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 2024 Phase I Release 2

Awardee Programs

Office of SBIR/STTR

Programs

Release 2 Phase I Monday, November 6, 2023 Topics Issued Phase | Release 2 Topics 🗋 Document Go back and listen Phase 0 Application Assistance (free for first time Monday, November 6, 2023 applicants) starts to your topic info Webinar 1: Topics 1,9-10 & 23-28 📝 Topic Webinar, week of Slides 🗋 Webinar 2: Topics 11-22 📝 Slides Required or your B Phase I application Webinar 3: Topics 2-8 & 29-30 📝 Slides 🔒 will be declined! FOA Issued Thursday, January 18, 2024 DE-FOA-0003202 🎴 Document FOA Webinar Thursday, January 25, 2024 Register 🗷 Don't wait til last Friday, February 2, 2024 Letters of Intent (LOI) Due 5:00 PM ET minute Non-responsive LOI Feedback Provided Thursday, February 22, 2024 Tuesday, March 12, 2024 Full Applications Due 11:59 PM ET Award Notification Award Notification Monday, June 10, 2024* Projected Grant Start Date Monday, July 22, 2024 wardee Webinar, week of July 2024 **Grant Start** Phase Shift | Kick-off September 2024 (formerly I-Corps) Principal Investigator Meeting October 2024 Registration link will be posted here, one week prior to the webinars. To receive this link au our Mail List

**Preliminary dates subject to change

Application Assistance

Phase 0 application assistance for first-time DOE applicants (open now for Phase I Release 1!)

Email us!

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

Get Connected!

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

Stay Connected!

Office of SBIR/STTR

Programs



Ж

Recorded Topic and FOA Webinars

Ask-Us Anything During the Application Process

Check your email next week!





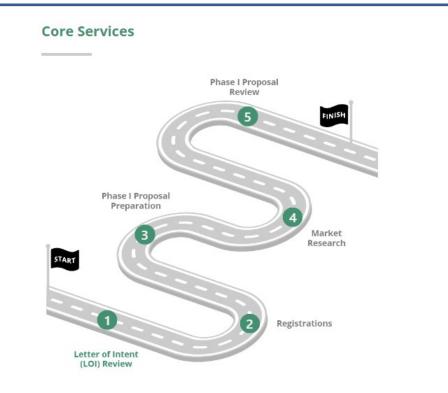
Being on our mailing list is the most important way to stay up to date on our funding opportunities!



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
- <u>Apply portal</u> is open
- "Ample" space available right now
- <u>Signup for Phase 0 mailing list</u>



Optional Services (Pick 1 or 2):

- Small business training/mentoring
- Technology Advice & Consultation
- Intellectual Rates & Financial Assistance
- Travel Assistance



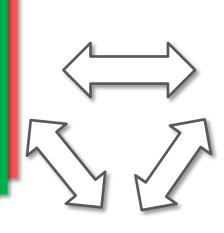
Operation of the DOE SBIR and STTR Programs



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

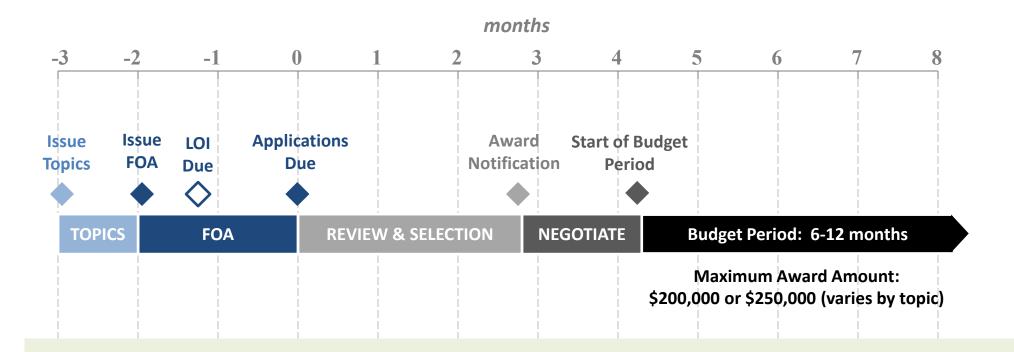
DOE SBIR/STTR Programs Office

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



Phase I Application & Award Timelines





Due to delayed FY 2024 Phase I Release 2 FOA, the FY 2025 Phase II Release 2 timeline is TBD, but approximately ~9.5 months after start of Phase I award, your Phase II application is due.

Looking ahead – Plan to be ready to submit your Phase II application around May 2025



FY2025 Phase I Release 1 Funding Opportunity



Phase I	Release 1
Topics Issued	Monday, July 15, 2024
Document	
Phase 0 Application Assistance (free for first time applicants) starts	Monday, July 15, 2024
Topic Webinar, week of	Monday, July 22, 2024
FOA Issued	Monday, August 12, 2024
Document	
FOA Webinar	Friday, August 16, 2024
Letters of Intent (LOI) Due	Tuesday, September 3, 2024 5:00pm ET
Non-responsive LOI Feedback Provided	Tuesday, September 24, 2024
Full Applications Due	Tuesday, October 15, 2024 11:59pm ET
Award Notification	Monday, January 6, 2025
Projected Grant Start Date	Tuesday, February 18, 2025

Looking ahead -Mark your calendar for July 15



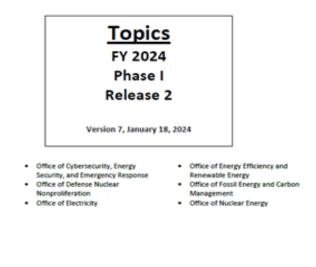
Topics

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



U.S. Department of Energy

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





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



Office of SBIR/STTR Programs

C58-24. CARBON DIOXIDE REMOVAL

(Maximum Phase I Award Amount: \$200,000	Maximum Phase II Award Amount: \$1,100,000	
I	Accepting SBIR Phase I Applications: YES	Accepting STTR Phase I Applications: YES	
	Accepting SBIR Fast-Track Applications: NO	Accepting STTR Fast-Track Applications: NO	Γ
l	Accepting SBIK Fast-Hack Applications. NO	Accepting STTK Past-Track Applications. NO	

Direct air capture (DAC) involves the extraction of carbon dioxide (CO₂) directly from ambient air in either motive (fan-powered) or passive (wind-driven) contactors that cycle through capture, conditioning, and regeneration stages to ultimately release CO₂ for purification and secure geologic storage or conversion. The Carbon Dioxide Removal (CDR) Program is maturing DAC processes, including solid sorbent, aqueous solvent, mineral looping, electrochemical, and membrane-based technologies coupled with secure geologic storage and conversion to long-lived products.

For this topic, the National Energy Technology Laboratory is not eligible to act as a subawardee.

Applications are sought for the following subtopics:

a. Direct Air Capture Materials Durability Testing

DAC materials are exposed to air and typically undergo cyclical temperature, pressure, electrochemical and/or moisture swings to desorb CO_2 and regenerate the materials, which may result in eventual degradation and capacity fade. DAC material replacement costs can be significant, driving interest in durable materials that offer stable performance over thousands of DAC process cycles.[1] Gaining a better understanding of material degradation processes and identification of potential degradation products released into the environment by solvents and solid sorbents are also of interest. Past projects have evaluated the effects on material durability over a relatively limited set of operating conditions and durations. Thus, more information is needed on the mechanism and rate of degradation and durability of materials over significantly longer operating times to better inform techno-economic and life cycle analyses (TEA/LCA).[2]

Grant applications are desired for studies that will assess the longevity and degradation mechanisms of DAC advanced materials currently under development. Technologies developed from these grants may be implemented in future Regional DAC Hubs. 32





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. Soil Carbon Monitoring for Enhanced Rock Weathering

pathways for the drawdown of CO₂ from the atmosphere. For example, rocks containing alkaline materials are exposed to the atmosphere through weathering processes, inducing a chemical reaction that consumes CO₂ and eventually locks it away in the form of solid carbonate materials. New approaches to accelerate the rate of this CO₂ drawdown focus on breaking down naturally-occurring alkaline materials, mine tailings, and industrial byproducts that can act as reactive species. The carbonate materials formed from these methods may have positive impacts on agricultural and coastal soil quality through fortification and de-acidification. However, they may also induce environmental harms through the introduction of dust into the air and toxic materials into the biosphere. Extensive studies of the durability of the carbonate materials and the impacts on soil quality are limited currently, as effective monitoring systems are actively being developed for this approach. [1,2]

Grant applications are desired for studies that will assess ERW approaches and tailored methods for soil carbon monitoring at climate relevant scales. The durability of carbonate storage and potential biosphere impacts are also of interest.

Applicants shall focus their applications on:

- Field studies to analyze effects of mineralogy, mineral particle size/reactive surface area, mineral
 application rate, rainfall, temperature, soil properties, plant-mineral interactions, and mineral pretreatment steps on CO2 removal, with tailored quantification technologies incorporated;
- Development and deployment of soil carbon monitoring methods to efficiently establish baselines, evaluate real-time CO2 removal rates and permanence, and observe impacts on soil quality following ERW implementation;
- · Development of an ERW process design and data-driven model;
- Analysis and quantification of ERW co-benefits and disbenefits;
- Analysis of pathways to integrate and/or co-optimize ERW and the extraction of critical minerals;
- Analysis of process scalability with consideration of feedstock availability, sourcing, transportation, and processing requirements; and
- Preparing a preliminary techno-economic analysis (TEA) and life cycle analysis (LCA) for the ERW
 process, including all upstream and downstream steps.

Questions - Contact: Richard (Mike) Bergen, richard.bergen@netl.doe.gov

c. Other

In addition to the specific subtopics listed above, grant applications in other areas relevant to this topic are invited.

Questions - Contact: Richard (Mike) Bergen, richard.bergen@netl.doe.gov

References: Subtopic a:

 X. Shi, H. Xiao, H. Azarabadi, J. Song, X. Wu, X. Chen, and K. S. Lackner, 2019, Sorbents for the Direct Capture of CO2 from Ambient Air, Angewandte, 59 (18), 6984-7006. https://doi.org/10.1002/anie.201906756 (October 24, 2023)



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



Funding Opportunity Announcement (FOA)

Available at the <u>DOE SBIR website</u> or <u>Grants.gov</u> 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) SMALL BUSINESS INNOVATION RESEARCH (SBIR) SMALL BUSINESS TECHNOLOGY TRANSFER (STTR)



FY 2024 PHASE I RELEASE 2

FUNDING OPPORTUNITY ANNOUNCEMENT (FOA) NUMBER: DE-FOA-0003202

> FOA TYPE: INITIAL CFDA NUMBER: 81.049

FOA Issue Date:	January 18, 2024
Submission Deadline for Letters of Intent:	February 2, 2024 5:00PM Eastern Time
Submission Deadline for Applications:	March 12, 2024 11:59PM Eastern Time



Completing an Application

- "Toolkit" documents to assist you with completing the application package
 - <u>Topics Document & Funding</u>
 <u>Opportunity Announcement</u>, &
 <u>New Application Guide</u>
 <u>Instructions</u> are available
 - Online tutorials:
 <u>https://doetutorials.dawnbreak</u>
 <u>er.com/</u>





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 FOA is issued
- Secondary purpose
 - provide email notification to applicants who appear to be nonresponsive; you may submit an application if you receive this notification
 - Applicants whose LOI appears responsive will NOT receive a notification
- 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 Collaborators
- 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: <u>https://pamspublic.science.energy.gov/</u>
 - Due Friday, February 2 by 5 PM EDT
 - 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
 - <u>Utilize the LOI instructions and sample LOI</u> to ensure that you submit all the required information



• For additional details on the LOI submission process, see the FOA

ENERGY Office	Port Portfolio Analysis And Management Syn nce		
Existing User			Tuesday 29 th November 2014 02:22:17 P.M. ET
Mac users who have recently	upgraded to Safari 6.2, 7.1, or 8.0 will experience issues usi		ers. Additionally, Mac users using mo
	recent versions of Firefox are on a Mac and using any of these browser versions, we r	are also experiencing issues. ecommend using Google Chrome until these issues car	
	🔒 Existing User Login		
	Username	New User Registration	
		Search Solicitations	
	Password	Create New PAMS Account	
		Other Links	
	Login	Award Bearch (i)	
		Recommended Settings	
	Forgot Password	Contact Us	
		 PAMS External User Guide 	
	System Use Notification You are accessing a US Government Information System, wh	ich includes servers, network devices, and storane media	
	Unauthorized or improper use of this system may result in dis		
	By using this information system, you understand and consen		
		any communications or data transiting or stored on this information	
	system. At any time, and for any lawful Government purp	ose, the government may monitor, intercept, and search and seize	
	any communication or data transiting or stored on this int • Any communication or data transiting or stored on this int		
	Government purpose.		





Letter of Intent: Sample Abstract

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.

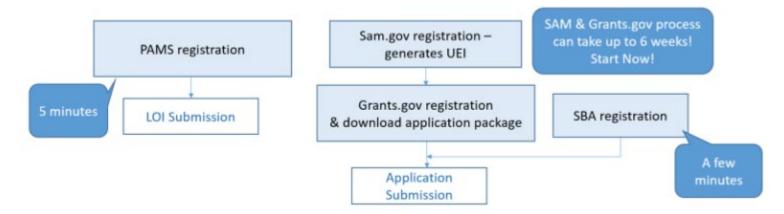
These separators will utilize a new optically-activated method of producing pores in nanostructured polyolefin films. This optical pore formation method results in a 10x increase in the speed of creating porous films. During Phase I, ABC LLC will (1) develop the compositions and methodology for formulating 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. Clearly explain why the proposed R&D is responsive to the subtopic

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.



Application Process: Registrations





• Applications must be submitted through Grants.gov

- Registration at Grants.gov is a 3 step process
 - Applicants must register with <u>SAM</u> 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 <u>SBA company registry</u> and submit a copy of their registration with their grants.gov application



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*DUNS was replaced by UEI in April 2022. No more DUNS & Bradstreet https://www.grants.gov/web/grants/applica nts/applicant-training.html



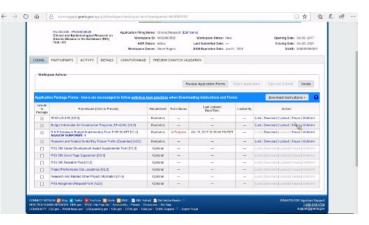
Completing a Grants.gov Application

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











Elements of Your Phase I Application

- Project Narrative
 - Page and word limits
 - Phase I: 15 pages, 7,500 words
 - New Requirement PIER Plan
- Foreign Relationship Disclosure
- 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



U.S. DEPARTMENT OF ENERGY

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Phase I Application Checklist			
Name of Document	Format	Attach to	
Application for Federal Assistance, SF-424 Form	PDF	N/A	
Research and Related: Budget Form	PDF	N/A	
Additional Senior Key Persons, if applicable	PDF	Field A. 9	
Additional Equipment, if applicable	PDF	Field C. 11	
Budget Justification	PDF	Field K	
Research and Related: Senior/Key Person Profile Form	PDF	N/A	
Biographical Sketch for each person	PDF	Appropriate Block	
Current & Pending Support for each person, if applicable	PDF	Appropriate Block	
Research and Related: Other Project Information Form	PDF	N/A	
Project Abstract and Summary	PDF	Field 7	
Project Narrative (PN) New – Promoting Inclusive and Equitable Research (PIER) Plan	PDF	Field 8 PIER Plan is included as an appendix to PN	
Bibliography and References Cited, if applicable	PDF	Include in Project Narrative	
Facilities and Other Resources, if applicable	PDF	Include in Project Narrative	
Equipment, if applicable	PDF	Include in Project Narrative	
Other— Data Management Plan	PDF	Field 12	
Other— Disclosure of Foreign Relationships	PDF	Field 12	
Other-Level of Effort & Max Funding Worksheet	PDF	Field 12	
Other—Letter of Commitment for consultant, sub-award, or research institution, if applicable	PDF	Field 12	
Other-Letters of Support, if applicable	PDF	Field 12	
Other—SBA Company Registration	PDF	Field 12	
Other – Company Commercialization Report from SBIR.gov for STTR-Only applications, if applicable	PDF	Field 12	
Authorization for non-DOE/NNSA FFRDCs, if applicable	PDF	Field 12	
Authorization for DOE/NNSA FFRDC, if applicable and if available	PDF	Field 12	
Research and Related: Sub-award Budget Form, if applicable	PDF	N/A	
Budget Justification for each Sub-award	PDF	Appropriate Block	
SF-LLL, Disclosure of Lobbying Activities, if applicable	PDF	N/A	
Project/Performance Site Location(s)	PDF	N/A	
SBIR/STTR Information Form	PDF	N/A	
Phase I Commercialization Plan	PDF	Field 8	
Company Commercialization Report from SBIR.gov for SBIR or Both SBIR/STTR applications, if applicable Note: N/A is for a Grants.gov supported form	PDF	Field 9	

Note: N/A is for a Grants.gov supported form

C58-18. WATER POWER TECHNOLOGIES (FAST-TRACK ONLY)

Fast-Track Applications

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



C58-02. QUANTUM SENSORS FOR UNDERGROUND NUCLEAR EXPLOSION MONITORING

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

- Fast-Track applications propose Phase I and Phase II awards in one application
- FOA 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. 39)

Office of SBIR/STT

Programs

SECTION IV – APPLICATI	ON AND SUBMISSION INF	ORMATION20
IV.A. ADDRESS TO REQ	UEST APPLICATION PACK	XAGE20
IV.B. LETTER OF INTEN	NT (LOI) AND PRE-APPLICA	ATION
IV.C. GRANTS.GOV API	PLICATION SUBMISSION A	ND RECEIPT PROCEDURES21
IV.D. CONTENT AND A	PPLICATION FORMS (PHAS	SE I ONLY)21
IV.E. CONTENT AND A	PPLICATION FORMS (FAST	G-TRACK ONLY)



Elements of Your Fast-Track Application

- Project Narrative
 - 25 page max, 12,500 words
- 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 (TABA)
 - \$56,500 in total
 - \$6,500 to be used in Phase I
 - \$50,000 to be used in Phase II

• Additional PIER Plan Requirements for BIL topics



Name of Document	Format	Attach to
Application for Federal Assistance, SF-424 Form	Form	
Research and Related: Budget Form	Form	
Additional Senior Key Persons, if applicable	PDF	Field A. 9
Additional Equipment, if applicable	PDF	Field C. 11
Budget Justification	PDF	Field K
Research and Related: Senior/Key Person Profile Form	Form	
Biographical Sketch for each person	PDF	Appropriate Block
Current & Pending Support for each person, if applicable	PDF	Appropriate Block
Research and Related: Other Project Information Form	Form	
Project Abstract and Summary	PDF	Field 7
Fast-Track Project Narrative	PDF	Field 8
Bibliography and References Cited, if applicable	PDF	Include in Project Narrative
Facilities and Other Resources, if applicable	PDF	Include in Project Narrative
Equipment if applicable	PDF	Include in Project Narrative
Promoting Inclusive and Equitable Research (PIER) Plan	PDF	Include in Project Narrative
Other - Data Management Plan	PDF	Field 12
Other-Disclosure of Foreign Relationships	PDF	Field 12
Other-Level of Effort & Max Funding Worksheet	PDF	Field 12
Other - Cybersecurity Self -assessment	PDF	Field 12
Other—Letter of Commitment for consultant, sub-award, or research institution, if applicable	PDF	Field 12
Other-Letters of Support, if applicable	PDF	Field 12
Other—SBA Company Registration	PDF	Field 12
Other – Company Commercialization Report from SBIR.gov for STTR-Only applications, if applicable	PDF	Field 12
Authorization for non-DOE/NNSA FFRDCs, if applicable	PDF	Field 12
Authorization for DOE/NNSA FFRDC, if applicable and if	PDF	Field 12
available		
	Form	
available Research and Related: Sub-award Budget Form, if	Form PDF	Appropriate Block
available Research and Related: Sub-award Budget Form, if applicable		

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."
 - <u>Please note that if you do not include a DMP with your application, Option 1 for the DMP will</u> <u>be assumed for your application. However, If you plan to publicly disclose generated digital</u> <u>data, you must provide a DMP under Option 2.</u>
 - 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 FOA.





DOE SBIR & STTR Programs: What's New?

New 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
 - PIER Plan
 - Tutorials
 - Examples
 - & More...







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



C58-1	6. HYDROGEN AND FUEL CELL TECHNOLOGIES	53
a.	Novel Applications for Stationary Fuel Cell Systems	54
b.	Novel Materials for Use in Liquid Hydrogen Service	55
c.	Novel Concepts for Hydrogen Infrastructure and Storage	55
d.	Power Take-off Units for Medium-Duty Fuel Cell Electric Vehicles	56
e.	High Temperature Membranes and Membrane-Electrode Assemblies for Fuel Cell Operation (BIL Funded)	57
f.	Advanced Proton Exchange Membrane (PEM) Electrolyzer Bipolar Plates (BIL Funded)	58
g.	Novel Water Electrolyzer Concepts (BIL Funded)	59

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.).
- Fast-Track applications to BIL funded topics will have different PIER plan requirements (see section IV.E.2.)
- PIER Plan A workforce section of the PIER Plan articulating the future workforce implications of the innovation or a milestone-driven plan for understanding those implications.



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: <u>https://science.osti.gov/sbir/Applicant-Resources/Grant-</u> <u>Application</u>
- 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



NEW FY 2024 REQUIREMENT - Promoting Inclusive and Equitable Research (PIER) Plan



All applications must include a Promoting Inclusive and Equitable Research (PIER) Plan as an appendix to the research project narrative. The PIER Plan will be evaluated as part of the overall technical merit review.

The PIER plan should describe the strategies and activities of the applicant to promote equity and inclusion as an integrated element of the research and development project within the proposing small business concern.

Plans may include, but are not limited to:

- Plans of your small business concern and collaborating institutions (if applicable) to recruit individuals from diverse backgrounds and groups historically underrepresented in the research community;
- Plans to contribute to a research and development environment that fosters a safe, positive, and inclusive workplace, a sense of belonging among all personnel; and/or
- Supporting training, mentoring, and partnering with underrepresented communities. Plans may leverage existing diversity, equity, accessibility, and inclusion efforts of the applicant small business concern, but should not be a statement of broad principles.



Promoting Inclusive and Equitable Research (PIER) Plan



Applicants are encouraged to focus on areas, including but not limited to:

- The composition of the project team and partnering institutions
- The research environment—cultivating respectful, professional and accessible environments
- Equitable and inclusive implementation of the research project
- Partnering with underrepresented institutions and/or underserved communities

PIER Plan Requirements:

- Provided as an Appendix to the Project Narrative and 1-3 pages in length.
- May leverage existing Diversity, Equity, Inclusivity and Accessibility (DEIA) plans, but the plan should be tailored to and integral to the proposed project.
- Should include at least one specific, measurable, attainable, realistic and time-bound (SMART) milestone.
- The progress relative to the milestone will be a reporting requirement.
- The complexity and detail of PIER Plans are expected to increase with the size of the small business and the number of personnel supported.
- Funds may be requested for execution of PIER Plan consistent with allowable cost guidelines for financial assistance.



Promoting Inclusive and Equitable Research (PIER)

Phase I Note:

Since the Phase I award is of limited duration (6 - 12 months) and the award size is \$200,000 to \$250,000, it is expected that, one-page PIER Plans are suitable and will be most typical. The PIER Plan should be simple, focused, and relevant to the scope and duration of the award.

Visit our new web page providing <u>PIER Plan resources</u>

Genuine PIER plans are sought!





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.



Office of SBIR/STTR Programs

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.







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

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!!



What makes a competitive application?



Application Review Criteria



- 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
- The first three review criteria are equally weighted and of greater weight than the fourth criterion



Review and Selection of Applications



- DOE primarily uses external peer review to evaluate your applications
 - Typically at least 3 technical reviewers
- Selection
 - <u>DOE ranks the most meritorious applications—award selections are</u> <u>made based on available funding</u>
- 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





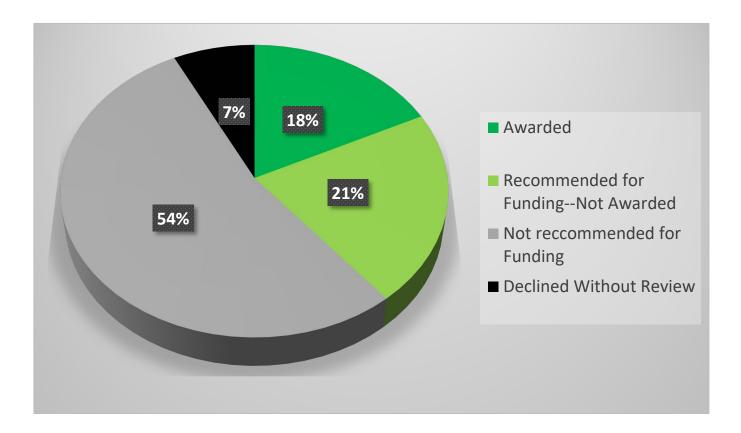
Office of SBIR/STTR Programs

Phase I Application & Award Statistics for FY 2023



Phase I

- 2110 applications
- 374 awards





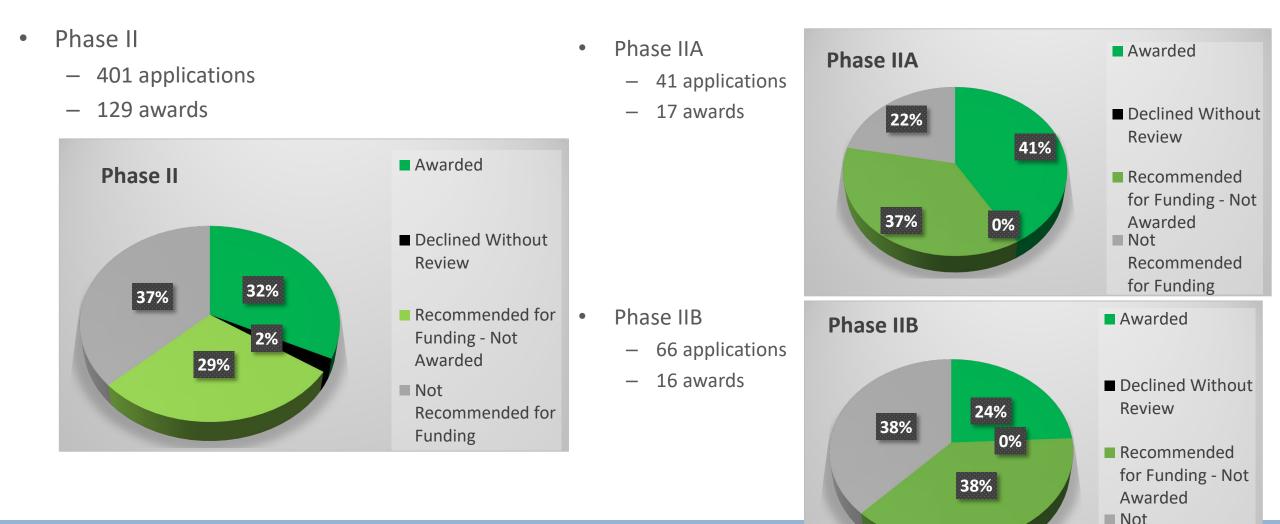
Office of SBIR/STTR Programs

Phase II Application & Award Statistics for FY 2023



Recommended

for Funding



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



Commercialization Assistance





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

Current vendor: http://www.larta.org/doecap

- Energy I-Corps
 - 40 are selected
 - Designed to educate on entrepreneurial concepts
 - 2 months training at no cost to participants
 - Customer discovery process







Office of SBIR/STTR Programs

Commercialization





- DOE topics are drafted by program managers who are aware of the important technology roadblocks that are preventing progress in their mission areas.
- Small business applicants are expected to address the commercialization challenges and ensure that there is a profitable, self-sustaining, business opportunity
 - Phase I Applications must include Commercialization Plans
 - Commercialization Plans can accommodate long commercialization timeframes
 - Ability to address adjacent markets can also be included in your commercialization plan
- DOE performs follow-up surveys to track commercialization outcomes of its SBIR/STTR awards.



Partnering Resources for Phase I Applicants



- Looking to partner with a national lab check out the <u>Lab Partnering site</u> to find relevant SME and facilities. The site is easily searchable by key word, industry, and technology areas.
 - Find SBIR contacts for each NL https://science.osti.gov/sbir/Applicant-Resources/National-Labs-Profiles-and-Contacts
 - Learn about Lab-Entrepreneurial Embedded Program <u>https://www.energy.gov/sites/default/files/2022-04/CRI_DOE%20LEEP%20Flyer_R5_0.pdf</u>
 - Learn about a program offering commercialization support at NREL <u>https://www.nrel.gov/docs/gen/fy10/48888.pdf</u>
- New <u>SBIR Partnering Platform</u> 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





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https://science.osti.gov/sbir/Partnering-Resources

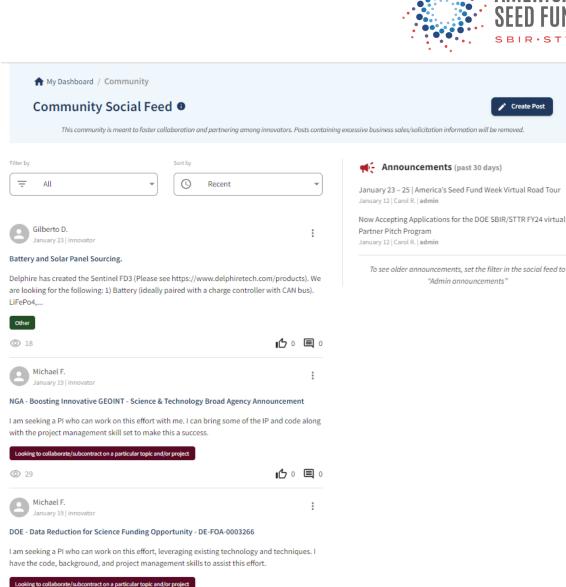
SBIR Partnering Platform

- 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 <u>Platform Overview for</u> <u>Innovators</u> webinar

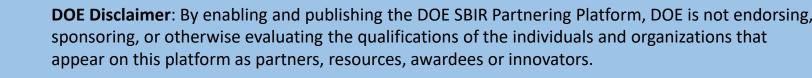
Office of SBIR/STTR



Programs



cooking to consolvately sourcent act on a particular topic and/or project



DOE Office of Inspector General: Fraud, Waste & Abuse





Office of SBIR/STTR Programs

65

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



Office of SBIR/STTR Programs

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.



Recent Prosecution

Friday, September 11, 2015



Scientists Sentenced To Prison For Defrauding The Small Business Innovation Research Program

Tampa, Florida – U.S. District Judge Virginia Hernandez Covington has sentenced Mahmoud Aldissi (a/k/a Matt) and Anastassia Bogomolova (a/k/a Anastasia) for conspiracy to commit wire fraud, wire fraud, aggravated identity theft, and falsification of records. Aldissi was sentenced to 15 years in federal prison and Bogomolova was sentenced to a term of 13 years. As part of their sentences, the court entered a money judgment in the amount of \$10.6 million, representing the proceeds of the crime, and ordered them to pay \$10.6 million in restitution. Aldissi and Bogomolova were found guilty on March 20, 2015.

According to testimony and evidence presented during the month-long trial, through their two companies, Fractal Systems, Inc., and Smart Polymers Research Corp., Aldissi and Bogomolova fraudulently obtained approximately \$10.5 million of small business research awards from the federal government. In order to be awarded contracts, they submitted proposals using the stolen identities of real people to create false endorsements of and for their proposed contracts. In the proposals, they also lied about their facilities, costs, the principal investigator on some of the contracts, and certifications in the proposals.

https://www.justice.gov/usao-mdfl/pr/scientists-sentenced-prison-defrauding-small-business-innovation-research-program



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:

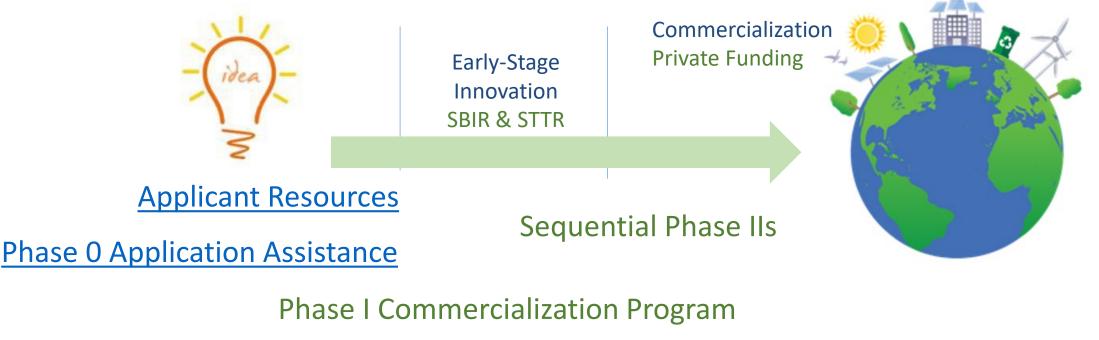
Internet: ig.energy.gov E-mail: ighotline@hq.doe.gov Telephone: 202-586-4073 Hotline: 800-541-1625 Fax: 202-586-5697

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





Phase Shift I & Phase Shift II

TABA funds

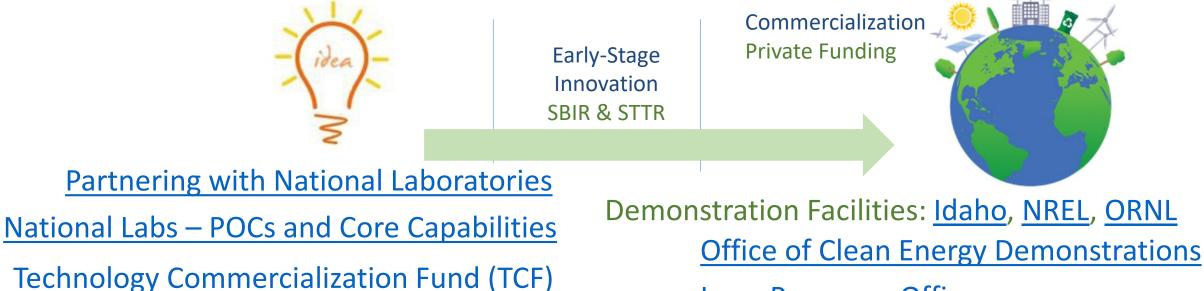
Partnering Resources and Phase II Workshops

Diversity Supplement for Phase II Awardees



Other DOE Resources





Loan Programs Office

Lab-Embedded Entrepreneurship Program (LEEP)

American-Made Challenges

National Energy Research Scientific Computing Center (NERSC)



Thank you!





- Get organized!
- Take advantage of <u>Phase 0</u> and other resources if you are a first-timer!
- Reach out to us:

eileen.chant@science.doe.gov

sbir-sttr@science.doe.gov

(301) 578-2376





Office of SBIR/STTR Programs