

Small Business Innovation Research (SBIR)

Informational Webinar June 6, 2023

Questions and Answers

Background:

EPA's SBIR Program supports small businesses to develop and commercialize innovative environmental technologies that support the Agency's mission of protecting human health and the environment. EPA is one of 11 Federal agencies that participates in this program. SBIR projects are funded in two phases, with Phase I being "proof of concept" and Phase II being "development and commercialization" of the technology. Commercialization of the technology is stressed in both phases.

EPA issues an annual solicitation for research proposals for specific topics. For Phase I, EPA awards firm-fixed-price contracts of up to \$100,000 for 6 months for "proof of concept" of the proposed technology. Companies who have received a Phase I can submit a proposal for a Phase II award of \$400,000 to further develop and commercialize the technology. Phase II contracts are limited to small businesses that have successfully completed their Phase I projects.

****Please note, that while this information is intended to be helpful in applying to the EPA SBIR program, the solicitation is the official word on all program requirements.**

General

Can we get a copy of today's presentation?

Yes. The presentation slides and questions & answers (Q&As) from the webinar will be posted on the EPA SBIR website at <https://www.epa.gov/sbir/informational-webinar-presentation-and-qa>.

Where can I get more information on EPA's SBIR Program?

Learn more about EPA's SBIR program through the EPA SBIR website (<https://www.epa.gov/sbir>) and the About EPA's SBIR Program page (<https://www.epa.gov/sbir/about-epas-sbir-program>).

What is the address to sign up for the EPA SBIR listserv?

Sign up for EPA's SBIR listserv at: <https://www.epa.gov/sbir/sbir-listserv> to get updates on the EPA SBIR solicitation, project highlights and other resources for small businesses.

Where can I get more information on the SBIR Program in general?

Learn more about the SBIR program at: www.sbir.gov.

Does the EPA also fund STTRs?

No, the EPA does not have a Small Business Technology Transfer (STTR) program. Only the 5 largest SBIR Agencies have STTRs. (The STTR program is another program that requires the small business to formally collaborate with a research institution.)

Eligibility

Who is eligible for the SBIR program?

For the purposes of SBIR, a small business must:

- Be for profit,
- Located in the U.S., and
- Have no more than 500 employees.

For more information on eligibility, please see: <https://www.sbir.gov/faqs/eligibility-requirements>.

Can nonprofits or academic institutions apply for SBIR?

Only small businesses are eligible for SBIR. Academic institutions and nonprofits could be a subcontractor to a small business on an SBIR award. Additionally, academic institutions could partner with a small business through the STTR Program (at one of the 5 agencies that have STTR).

When is eligibility determined?

Eligibility is determined at time of award, BUT to apply to EPA SBIR, a small business must have completed the 4 registrations listed below and described in the webinar slides.

- Unique Entity Identifier (UEI)
- SBA Company Registry
- SAM
- FedConnect

Topics

What are the solicitation topics for 2023-2024?

The proposed topics for this year are listed below. Given the EPA's modest budget, proposals should be responsive to this year's topics.

2023-2024 Proposed SBIR Topics

CLEAN AND SAFE WATER

- Zero-liquid discharge and brine concentrate minimization
- Treatment and destruction of PFAS in wastewater and other waste streams
- Harmful algal blooms (HABs) sensors that can monitor cyanobacteria and toxins

AIR QUALITY & CLIMATE

- Innovative technologies to clean indoor air during wildfire smoke events and other high pollution days
- Air pollution control technologies for urban small sources

LAND

- Innovations in slurry injection technology for complex waste treatment and disposal

HOMELAND SECURITY

- AI-based indoor mapping and localization using smartphone sensor data

CIRCULAR ECONOMY/SUSTAINABLE MATERIALS

- Innovative technologies that help consumers prevent food waste in the acquisition, preparation, and storage of food
- Innovative technologies or materials that will improve the U.S. recycling system
- Innovative material reduction and reuse solutions to lower embodied carbon in the built environment

SAFER CHEMICALS

- Rubber anti-degradant technologies for tires and other rubber products that are lower concern for human health and the environment
- Innovative enhanced efficiency fertilizers

Will there be more information on the topics provided in the solicitation?

Yes, the solicitation will provide more detailed descriptions of the topics and typically links to references to provide background on the topic and why it's important to EPA.

In fitting the "specified topic areas", does that mean fitting the topics listed in this presentation?

Yes. Proposals must fit the specific topics, not just the larger, focus areas.

Does EPA accept unsolicited proposals? Can you submit a proposal for a topic other than what is listed in the solicitation?

No, proposals should be responsive to the topics listed in the solicitation.

How much focus is put on any one topic? Does each topic have its own proportion of total funding? Are proposals competing within a category or are they ranked all together?

We plan to fund the best proposals in each topic area depending on how many quality proposals we receive in each topic.

Do projects have to focus on U.S. Issues?

While only U.S. businesses are eligible for SBIR and work must be done in U.S., the application, impact, and market for the project can extend beyond the U.S.

Are there individual Topic Area/Program Managers to contact to make sure our concept is on the right track?

The EPA SBIR Program has one Program Manager, April Richards. Please contact April if you have general questions regarding your technology (Richards.april@epa.gov).

Schedule

When will the solicitation open and close?

The solicitation is scheduled to open in June 2023 and close in August 2023. Please check the solicitation for the official close date and time.

After we finish a Phase I, should we apply for Phase II in the next window?

Yes. Phase I applicants must apply for Phase II in the next window. We do not allow companies to re-submit to the next Phase II window and we do not do Direct-to-Phase II awards.

Funding Rates/Program History

What is the typical EPA funding rate for SBIR?

The Phase I funding rate has averaged approximately 20% over the last three years. Last year it was approximately 17%.

For Phase II, the funding rate is approximately 30-40%.

How much are Phase I awards?

EPA provides up to \$100,000 for 6 months for each Phase I award. This year, we intend to fund approximately 25 Phase I proposals.

Can you provide a link to last year's funded proposals?

Yes, all previously funded projects are listed on our website at:

https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/outlinks.sbir/

Other Agencies/Opportunities

Could you provide information on other SBIR Agencies that fund environmental technologies?

Information on all 11 SBIR agencies can be found at www.SBIR.gov.

Some other agencies that support environmental technologies include:

- National Science Foundation (NSF)
- National Institute of Environmental Health Sciences (NIEHS)
- Department of Energy (DOE)
- United States Department of Agriculture (USDA)
- National Oceanic and Atmospheric Administration (NOAA)

Explore the following resources for more specific SBIR environmental funding opportunities with other agencies:

- **NSF** – “Almost all areas of technology” (<https://seedfund.nsf.gov/>)
- **NIEHS/Superfund Research Program (SRP)** - Hazardous Substances Remediation and Site Characterization
(<https://www.niehs.nih.gov/research/supported/centers/srp/funding/hwaerp/index.cfm>)
- **DOE** – (<https://www.energy.gov/science/sbir/small-business-innovation-research-and-small-business-technology-transfer>)
 - Office of Biological and Environmental Research
 - Environmental Focus Area: Scientific Instrumentation to Characterize Water, Soil, and the Atmosphere
 - Office of Fossil Energy and Carbon Management
 - Environmental Focus Area: Carbon Capture and Removal
- **USDA** – (<https://www.nifa.usda.gov/grants/programs/small-business-innovation-research-program-sbir>)
 - Forests
 - Conservation of Natural Resources
 - Aquaculture
 - Biofuels and Biobased Products
- **NOAA** – Climate, weather, oceans and coasts (including clean water (oceans, Great Lakes) and air) (<https://techpartnerships.noaa.gov/sbir/>)

Do the different agencies have different application processes, requirements, and forms?

Yes, each agency has their own application process, requirements, and forms. Please check the agency's website and/or solicitation for specifics on their application process.

Can you apply to more than one agency?

Yes, you can apply to more than one Agency. If you apply with the same project/technology, you can NOT get funded by more than one Agency for the duplicative work. If you did apply to multiple agencies with the same technology/application and were funded by one, you would withdraw your other proposals. You can also apply to different agencies with different projects and potentially be funded by both agencies.

Applying

Where can I find the actual solicitation?

Once released, the official solicitation will be posted on FedConnect. Instructions on how to locate the solicitation will be posted at <https://www.epa.gov/sbir/sbir-funding-opportunities>.

What is the link to register on FedConnect?

Register on FedConnect at: <https://www.fedconnect.net/FedConnect/Default.htm>.

Does EPA require a letter of intent or white paper?

No, letters of intent and white papers are not required for Phase I or Phase II.

What are the steps to apply?

Please visit: <https://www.epa.gov/sbir/how-apply-sbir-contract> to see registration and proposal submission instructions.

Can a small business submit more than one application to this solicitation?

No, a small business cannot submit multiple applications for this solicitation. Each company may only submit one (1) proposal in response to this solicitation. If multiple proposals are received, only one (1) proposal will be considered for award.

Can a small business apply under two topics?

No, a small business may only submit one (1) proposal in response to this solicitation. If multiple proposals are received only one (1) proposal will be considered for award.

Can a small business receive multiple SBIR's from different agencies?

Yes, small businesses can apply and receive multiple SBIR awards from different agencies as long as the projects are not duplicative.

What if a project fits under two topic areas? How do we choose?

It is the company's responsibility to choose the topic that is the best match for their technology. Read the full topic descriptions in the solicitation.

Can a company apply directly to Phase II?

No, EPA does not allow direct applications to Phase II. Only Phase I recipients are eligible to apply for Phase II awards.

Does EPA provide Phase 0 funding?

No, EPA does not provide Phase 0 funding.

Where can you find the specifics regarding the format and length of the proposal?

Specific instructions regarding proposal requirements will be included in the solicitation.

Does EPA keep our information confidential?

Yes, EPA will keep your proposal confidential through all phases of the review process. The proposal summary is intended for publication and should not contain any confidential information.

What about data rights?

The solicitation will contain a section devoted to Innovations, Invention and Patent Data Rights. Please read and refer to that section of the solicitation for more information. SBIR.gov also has more information on data rights (<https://www.sbir.gov/faqs/data-rights>).

Are there any resources for disadvantaged businesses to assist in this process?

There are many resources for small businesses looking to apply for an SBIR award. Explore options for SBIR/STTR assistance here: <https://www.sbir.gov/local-assistance> or contact your Small Business Development Center: <https://americassbdc.org/find-your-sbdc/>.

Is there a Phase I/II Fast Track application available?

No, EPA SBIR does not do Phase I/II Fast Track.

Are startups encouraged to apply?

Yes, startups are encouraged to apply. Please make sure that you address all of the review criteria when submitting your proposal.

Are EPA SBIR awards contracts? What makes this different from a grant?

Yes, EPA SBIR projects are awarded as contracts. The main difference is that for a contract, we require monthly progress reports and a final report as deliverables.

Registration Requirements

Does a small business have to be registered in SAM before you apply for SBIR or just by the time the award is granted?

Your small business must be registered in SAM prior to applying. Please complete SAM registration as soon as possible.

What else should small businesses know about SAM registrations?

1. Please go to SAM.gov and register your company as soon as possible if you are thinking about submitting an EPA SBIR proposal. (Please note, SAM is a system outside of EPA. We only access it for information and have no control of the timeliness of their actions.)
2. Please ensure you complete your registration in its entirety
 - a. If you have follow-up items to complete even after you have all required information that SAM generates-you will not be fully active and awardable until those items are cleared in SAM

3. Please ensure you select “contracts” during your registration and not just “grants” as EPA SBIR awards are made as contracts.
4. Please ensure you keep your information accurate and up to date on the SAM website.

Contacts

How do we contact the program manager?

General questions can be addressed to the EPA SBIR Program Manager, April Richards (richards.april@epa.gov).

Contractual questions should be addressed to the contracts officer, Matt Huber (Huber.Matthew@epa.gov).

Please note, it is the responsibility of the small business to determine whether they think their technology is appropriate to a specific topic and whether they should submit a proposal or not.

Can we email you for a preliminary discussion to talk about our technology?

Yes, the EPA SBIR program manager can provide general advice in a discussion- but please reach out before solicitation opens.

Review Process

How are proposals reviewed at EPA?

Proposals will be reviewed by both internal and external experts in three main areas (all equally weighted) including commercial, technical and relevancy/impact. The official solicitation will provide detailed guidance on EPA’s evaluation process.

Will lack of commercialization experience count against a new company?

EPA makes funding decisions based on the evaluation criteria provided in the solicitation. EPA encourages startups to apply. If a company is a new business, then they need to show that they have potential to commercialize and demonstrate that in the responses to the evaluation criteria. On the flip side, if the company is an experienced company, then they must demonstrate that they’ve been able to commercialize past technologies (within and outside of the SBIR program). Please read the solicitation and make sure to address all of the review criteria to the best of your ability to ensure the best review results.

How do you ensure the confidentiality of proposals? Do reviewers sign a confidentiality agreement?

EPA will keep your proposal confidential through all phases of the review process. All reviewers are required to sign an agreement to protect the confidentiality of all proposal material and certify that no conflict of interest exists between them and the offeror.

If not selected for award, do you provide reasoning why?

If a small business is not selected for award, they can request a de-briefing which contains reviewer feedback.

Do letters of support from industry and/or educational institutions make an application more attractive?

Letters of support can help bolster your responses to the review criteria especially for the commercialization evaluation. Please note that letters of support do count toward the Phase I page limit. Companies should decide what information they want to include given the page limit.

For letters of support, is a potential client or academic review considered of higher status?

As the goal of the SBIR Program is commercialization, a letter of support from a potential buyer/end-user would probably be more impactful than an academic review. The small business should determine how best a letter of support might help them address the evaluation criteria.

What is the time from submission to award funding?

The anticipated submission deadline is August 2023, and we plan on awarding Phase I contracts in December 2023.

If we can accomplish the work without requiring the full \$100,000 budget, does that give us a competitive advantage?

No. EPA budgets for all Phase I projects to be funded in full so there is no advantage for requesting less money.

What are the evaluation criteria for the commercial review?

The commercial review includes evaluation of innovation/IP, market opportunity, company/team (commercial) and commercialization approach. Specific criteria for each of these areas will be detailed in the solicitation.

Projects

Do you require preliminary data for Phase I?

Phase I of the SBIR Program is designed for “proof of concept” of the proposed technology. The technology should be beyond a literature search, should have some data to demonstrate its performance but should not be commercially viable yet. It could be for a new application for an existing technology, but not solely for effectiveness testing of an existing technology. For more general information on the SBIR program, see <https://www.sbir.gov/about/about-sbir#sbir-program>.

Do we need to have a prototype?

A prototype is not required but depending on the type of technology being developed may be an important step towards commercialization.

Do we need a commercialization plan for Phase I?

No, a commercialization plan is not required for Phase I proposals.

Is it required to collaborate with a university on research?

No. While SBIR-funded small businesses are welcome to collaborate with a university on research, it is not required.

Are co-PIs allowed?

Yes, co-PIs are allowed if a small business wants another PI to balance out the expertise or time commitment.

Will it affect EPA SBIR award if we have SBIR awards from other agencies such as NSF?

Many companies have multiple SBIR awards from different agencies. Per the solicitation, we would like to see that the small business has been successful in commercialization with prior investments.

What are the limitations on use of subcontractors?

For Phase I, a small business must perform a minimum of 2/3 of the research and/or analytical effort. One third may be subcontracted to another firm or research organization. For more FAQs on SBIR, see: <https://www.sbir.gov/faqs/other>.

Is there a place learn about what the funding is used for- if you dedicate 100% of your time and you have no revenue yet? Is Salary allowed as part of the funding?

This information is detailed in the solicitation language and will be available to view once the solicitation is released. Salary is allowed as part of funding. Find helpful information on this topic from SBIR.gov here: <https://www.sbir.gov/tutorials/accounting-finance/tutorial-4>.

Does EPA provide commercialization assistance or allow TABA?

Yes, EPA provides commercialization assistance (TABA – technical and business assistance) to Phase I awardees (in addition to their award) and Phase II awardees can claim TABA expenses as part of their award.

Does EPA set a limit for overhead charges?

No. But the contracting officer will review your budget based on industry standards for reasonableness.

Can the technology that is developed through SBIR be patented afterwards or is it not eligible?

Yes, the technology a small business develops with an EPA SBIR award can be patented.

Is EPA's SBIR program similar to an Airforce SBIR/STTR where you are developing technology the agency would buy as a customer?

Typically, EPA will not be the customer. Small businesses should determine the appropriate market for their technology.

Does all work need to be performed in the United States? For example, could you collaborate or subcontract with a foreign university or company?

Essentially, yes, SBIR-funded work should be performed in the U.S. There are exceptions that would first need to be discussed with the Program Manager and Contract Officer. There is a very high bar that must be met to authorize work outside of the U.S.

Can your technology be a service instead of a product?

Any technology that is commercializable could be appropriate for SBIR.

Can we shift the time frame of the Phase I award if, for example, our project requires environmental sampling during a specific time of the year?

EPA SBIR is unable to change award/project dates as all Phase I winners move through the cycle at the same time.

Who is the commercialization contractor for EPA SBIR?

Foresight Science and Technology.

How many awards does EPA plan to make this cycle?

EPA SBIR plans to fund approximately 25 Phase I projects this cycle.

How is IP managed following Phase I and II funding?

IP ownership remains with the small business. It is not co-owned with EPA.

How is funding distributed to Phase I awardees? Is it partially distributed or a lump sum?

Funding is partially distributed throughout the project period. Phase I awardees sign firm-fixed-price contracts which means they bill each month throughout the 6-month project.

If a technology has already been created, can EPA SBIR funds be used to (1) refine it and (2) pilot its use?

Yes, this could be an acceptable use of EPA SBIR funding.

Firm fixed price means deliverable must be met. What if the technology just doesn't work?

The deliverable in this case is the status of your technology upon completion of your Phase I project. It is best effort so while we hope your technology succeeds, we understand that in this case it is research and this might not always be the case.

Is there a matching program that can align small business owners with resources needed to drive their project further? We are a research center at a university that employs undergrad students to execute project work with a variety of industry partners including small businesses.

EPA does not have any matching programs of this kind. SBIR.gov has a comprehensive list of local assistance for small businesses that may be helpful: <https://www.sbir.gov/local-assistance>

Can we use resources (e.g., office space, lab) from a university or non-profit medical center or does this exclude us from being able to apply?

Yes, you could include those resources as a subcontract on your Phase I proposal.

Can you elaborate on what the “patent” bullet means in the slide on Security Risks?

EPA plans to utilize publicly available sources to search on patents of companies selected for award to identify any potential ties to foreign governments or foreign companies.

The problem with commercialization criterion is reviewers will ask for unreasonable evidence for this stage of technology development, e.g., letters from investors and customers, marketing plan, etc. Do you instruct reviewers to not expect a commercialization plan that is applicable to a mature technology/product?

The commercialization reviewers are aware that these are Phase I “proof of concept” projects. All Phase I companies are evaluated against the same criteria.

Would a proposal be considered more competitive if the technology being developed will have impact across multiple solicitation topics? (e.g., technology applies to circular economy as well as clean & safe water)

If a technology has impacts across multiple topic areas, these should definitely be explained to address the “relevancy/impact” evaluation criterion. The company still needs to pick the “best” topic to respond to.

Can research in a US national lab (non-EPA) be included in the budget?

Yes, a non-EPA lab could be included as part of an EPA SBIR proposal.