



EPA and NSF Small Business Innovative Research (SBIR) Environmental Technology Funding Opportunities

EPA SBIR Environmental Technology Opportunities

The EPA's 2009 Phase I Small Business Innovation Research (SBIR) Solicitation is now open:

[2010 Phase I Solicitation - HTML](#) | [PDF](#) (68 pp, 279 K, [about PDF](#)) | [MS Word](#) - **Open: March 19, 2009 - Closing: May 20, 2009**

The EPA SBIR Program supports small businesses in developing new environmental technologies. EPA anticipates the total funding that will be available for Phase I projects issued under this RFA will be \$1.8M. EPA anticipates tight competition for these limited funds. A total of \$70,000 is available in funding for each EPA Phase I award.

EPA's current SBIR solicitation includes topics in two areas, GREEN BUILDINGS and EPA TECHNOLOGY NEEDS. There are 10 subtopics in these areas: Green Building Materials and Systems, Innovation in Manufacturing, Nanotechnology, Greenhouse Gases, Drinking Water and Water Monitoring, Water Infrastructure, Air Pollution, Biofuels and Vehicle Emissions Reduction, Waste Management and Monitoring, and Homeland Security.

Companies with fewer than 500 employees are eligible and encouraged to apply to both EPA and NSF SBIR RFAs, **however they may accept funding from only one source**. For additional basic information about EPA's SBIR Phase I and Phase II programs as well as small business definitions please see our [SBIR Background Page](#).

NSF SBIR Environmental Technology Opportunities

In addition, the National Science Foundation (NSF) has an expanding SBIR Program which supports the development of a wide range of technologies, including environmental technology. The NSF's SBIR Phase I solicitation is also now open and will close on June 9, 2009:

[NSF SBIR Phase I Solicitation](#)

NSF anticipates the total funding that will be available for Phase I projects issued under their RFA will be \$30M and that 175 to 225 awards will be made. As a result of new "stimulus package" funding, NSF has increased the funding amount for its Phase I projects to \$150,000 per award. Environmental technologies are covered by these NSF topics: Biotechnology (BT), Chemical Technology (CT), Information and Communication (IC), Nanotechnology (N), Advanced Materials (AM) and Manufacturing (M).

For information on the NSF's SBIR Program, visit the NSF Web site at: <http://www.nsf.gov/eng/iip/sbir/>.

Submission Requirements

While most environmental topics are covered in both the EPA and NSF solicitations, **the SBIR solicitation and submission processes at NSF and EPA are different. Small businesses need to read the solicitations carefully before applying.** Small businesses applying under the NSF RFA must comply with NSF (not EPA) application requirements, including proposal instructions, electronic FastLane application submission procedures, administrative requirements and technical issues.

Funding Requirements

If a small business submits equivalent or overlapping proposals to both EPA and NSF and receives an NSF award, it is necessary to withdraw the EPA proposal. NSF is expected to make awards prior to EPA, giving small businesses an opportunity to win the larger NSF award while still having the opportunity to be funded by EPA if unsuccessful with NSF.

EPA and NSF Technology Needs Crosswalk

The EPA Solicitation provides detailed descriptions of EPA technology needs, while the NSF Solicitation lists NSF Topics. In many cases EPA needs do not correspond exactly to NSF Topics but almost all EPA needs can find a corresponding NSF Topic.

EPA TECHNOLOGY NEEDS (TOPICS)

Green Building
Innovation in Manufacturing
Nanotechnology
Greenhouse Gases
Drinking Water and Wastewater
Water Infrastructure
Air Pollution
Vehicle Emissions and Biofuels
Waste Management
Homeland Security
Monitoring and Remote Sensing

Corresponding NSF TOPICS

NSF Topics CT4
NSF Topics M2, N2
NSF Topics N1, N2
NSF Topics CT1
NSF Topics BT1, BT3, BT5
NSF Topics IC4, AM4
NSF Topics BT3, CT3, CT5
NSF Topics BT6, CT1
NSF Topics BT7, CT4, AM4
NSF Topics BT3, BT5
NSF Topics BT1, BT3, BT5

Questions about EPA environmental technologies can be addressed to Jim Gallup (gallup.james@epa.gov) or April Richards (Richards.april@epa.gov) or James Gentry (gentry.james@epa.gov).

Questions about NSF Topics can be addressed to: Greg Baxter (gbaxter@nsf.gov) for Biotechnology (BT), Cynthia Znati (cznati@nsf.gov) for Chemical Technologies (CT), Juan Figueroa (jfigueroa@nsf.gov) for IC4 Components, Bill Haines (whaines@nsf.gov) for Nanotechnology (N), Joseph Hennessey (jhennes@nsf.gov) for Advanced Materials (AM) and Cheryl Albus (calbus@nsf.gov) for Manufacturing (M). Communication via email is strongly encouraged.

NSF Topics are very broad and include the descriptive phrase “technologies include but are not limited to ...” to allow small businesses to submit proposals that stimulate technological innovation. Most environmental technologies are in the following NSF Topics: Biotechnology (**BT**), Chemical Technology (CT), Information and Communication (**IC**), Nanotechnology (**N**), Advanced Materials (**AM**) and Manufacturing (**M**). Visit the NSF Website for complete descriptions of all SBIR Phase I Topics.

The following list defines the NSF Topic codes identified in the above crosswalk. Visit the NSF SBIR website complete descriptions of all of the NSF SBIR Phase I topics.

- Topic **BT1** -- Agricultural Biotechnology including pathogen and toxin diagnostics.
- Topic **BT3** -- Environmental Biotechnology and Environmental Technologies including methods to reduce human ecological and environmental impacts, microbial contamination sensing&control, removal of toxic compounds, bioremediation, water and wastewater treatment, pollutant monitoring and improvement of the environment and decreasing environmental impacts of humans on the planet.
- Topic **BT5** -- Biosensors including real-time sensors, nanobiotechnology-based sensors, and tracking of microbial contamination in wastewater treatment.
- Topic **BT6** -- Bioenergy Technologies including biomass conversion, biodiesel products and improvements, processing of biofuels waste streams.
- Topic **BT7** -- BioBased Materials including chemicals/polymers from biobased feedstock.
- Topic **CT1** -- Energy Supply and Use including reduction of engine emissions, reduction of Greenhouse Gases.
- Topic **CT3** -- Energy Transportation and Fuels including SO_x/NO_x reduction.
- Topic **CT4** -- Technologies for Sustainability including including better recycling methods, novel products from recycled materials and Green Building technologies.
- Topic **CT5** -- Separation Technologies - environmentally benign liquid and gas separation.
- Topic **IC4** -- Components – Smart transportation and infrastructure sensors.
- Topic **N1** -- Nanoelectronics – Use of devices with nanotubes, nanowires, quantum dots.
- Topic **N2** -- Nanomanufacturing – Transfer of nanotechnology to industrial applications.
- Topic **AM4** -- Materials for Infrastructure and Sustainability – Corrosion-resistant materials, coatings, improvements to life-cycle performance of infrastructure materials, new materials for purifying air & water, systems using recycled materials.
- Topic **M2** -- Manufacturing Processes – Emphasis on environmentally benign techniques.

*The information originally provided in this document referenced “stimulus package”, i.e., **American Recovery and Reinvestment Act of 2009** funds that are available to small businesses. These funds are available through the NSF SBIR program, not the EPA SBIR Program.*