



AGENCY MISSION

- Advance the Nation's Economic and Energy Security
- Promote Scientific and Technological Innovation
- Ensure the environmental clean-up of the National Nuclear Weapons Complex



PROGRAM FEATURES

- GRANTS
- Annual Solicitation (Fall)
- \$100K Phase I (9 months)
- \$750K Phase II (24 months)
- Electronic applications only (Grants.gov)
- Must be awarded Phase I from DOE to compete in Phase II
- SBIR: PI must be employed by small business
- STTR: PI may be employed by either small business or research partner
- Commercialization assistance programs



SOLICITATION SCHEDULE RELEASE AND CLOSING DATES

SBIR

STTR

FY 2009 Solicitation

Release Date

September 15, 2008

Closing Date

November 20, 2008

Phase I Award Selection

Mid April 2009

Phase I Grants Begin

Late June 2009



SBIR/STTR BUDGET/AWARDS

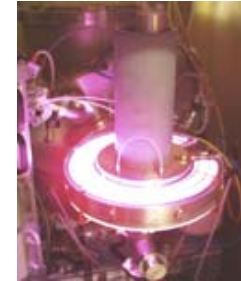
FY 2009 Budget (CR)



	<u>SBIR</u>	<u>STTR</u>
FY 2008 Budget	\$125M	\$15M
FY 2009 Budget (CR)	\$125 M	\$15 M
	(2.5%)	(0.30%)
Award Selections		
Phase I	~ 315 (\$ 100K)	~35 (\$ 100K)
Phase II	~125 (\$ 750K)	~15 (\$ 750K)



FY 2009 SBIR/STTR TECHNICAL TOPIC CATEGORIES



Advanced Scientific Computing Research	4
Energy Efficiency & Renewable Energy	17
Basic Energy Sciences	4
Fossil Energy	9
Fusion Energy	3
Biological Research	2
Environmental Research	7
Nuclear Energy	2
Data Management and Communication	4
High Energy and Nuclear Physics	10
Electricity Delivery/Reliability	2
National Security	<u>4</u>
 Total Topics	 68





Most Popular Topics SBIR/STTR FY 2008

- **Materials for Advanced Cooling Applications (47)**
 - A. Buildings Refrigeration and Air Conditioning
 - B. Vehicular Air Conditioning
 - C. Industrial Process Refrigeration
 - D. Utility and Industrial Heat Exchangers
- **Nanotechnology (99)**
 - A. Nanomaterials for Industrial and Building Applications
 - B. Nanotechnology Applications in Electronics, Sensors, and Controls
 - C. Nanotechnology Applications in Renewable Energy Conversion
 - D. Nanomaterials for Lithium-Ion Batteries Used in Energy Storage



Most Popular Topics SBIR/STTR FY 2008

- **Wind Energy Technology Development (50)**
 - A. Small Vertical Axis Wind Turbines
 - B. Remote Sensing Systems for Resource Assessment
 - C. Manufacturing and Assembly
- **Solar Energy (58)**
 - A. Module and System Reliability, and Performance Testing
 - B. Chemical Processing Equipment for Cells and Wafers
 - C. Material Solutions for Cells and Modules
 - D. PV Integrated Products



Most Popular Topics SBIR/STTR FY 2008

- **Vehicle Technologies (52)**
 - A. Lightweight Automotive Materials
 - B. Materials for High Efficiency Transportation Systems
 - C. Improved Electrically Insulating Substrate Materials
 - D. High-Power-Density;, Non-Permanent-Magnet, Electric Motor Development

- **Production of Biofuels from Biomass (65)**
 - A. Handling and Preprocessing of Biomass
 - B. Biomass Gasification/Small-Scale Fuels Synthesis
 - C. Biomass Separation Process Technologies
 - D. Algae for Biodiesel

PHASE I EVALUATION PROCESS


- ADMINISTRATIVE REVIEW
- FIRST STEP REVIEW
- EXTERNAL PEER REVIEW
- SCORING/RANKING
- AWARD SELECTION
- NEGOTIATIONS
- FORMAL AWARDS
- DEBRIEFINGS





REASONS FOR FIRST STEP DECLINATIONS

- Is the application responsive to the technical topic and subtopic?
- Is it for research or research and development?
- Does the application duplicate work that has already been funded?
- Does the application provide enough information to conduct further review?
- Is there a conflict of interest with respect to topic preparation?
- Does this application stand a reasonable chance of being funded compared to other applications received in the same topic/subtopic?



DOE SBIR/STTR EVALUATION CRITERIA Phases I and II

1. **Strength of the Scientific/Technical Approach**

To what extent does the proposed work build upon or move beyond the current state-of-the-art? How new or unique is the idea? How significant is the scientific and/or technical challenge? Is a breakthrough possible? Has the applicant demonstrated knowledge of the subject? How thoroughly have the concepts been presented?

2. **Ability to Carry out the Project in a Cost Effective Manner**

Please comment on the qualifications of the Principal Investigator (PI), other key staff, and consultants, if any, and on the level of adequacy of equipment and facilities

3. **Impact**

Please comment on the significance of the technical and/or economic benefits of the proposed work, if successful. Please comment on the likelihood that the proposed work could lead to a marketable product or process, and on the size of the potential market. Please comment on the likelihood that the project will attract further development funding (from private sector sources or from Federal, non-SBIR/STTR sources) after the SBIR/STTR project expires.

Evidence of Commercial Potential (Phase II Only)



FY 2008 RESULTS

Phase I

- **1494** **Phase I Applications Received**
- **1246** **Applications Sent Out for Review**
- **318** **Selected for Award (281 SBIR, 37 STTR)**

Phase II

- **279** **Phase II Applications Received**
- **172** **Phase II Applications in Funding Range**
- **162** **Selected for Award (142 SBIR, 20 STTR)**



AWARDEE CHARACTERISTICS

FY 2008 SBIR Phase I

- **281 awards to 192 companies. Of those, 55 were first time winners with DOE.**
- **35 of the 55 first time winners were first time applicants to DOE.**
- **52 of the 281 winning proposals had a PI that did not have a Ph.D.**
- **Awards made in 33 states.**



OVERALL SUCCESS RATES

	<u>SBIR</u>	<u>STTR</u>
Phase I	1 out of 6	1 out of 10
Phase II	1 out of 2	1 out of 2



COMMERCIALIZATION ASSISTANCE PROGRAMS

- Business Plan Assistance & Opportunity Forum (PII)
- Trail Blazer (Phase I)
- Technology Niche Analysis (mid-Phase II)
- Virtual Deal Simulator (pilot – Phase II)



DOE SBIR/STTR PROGRAM CONTACT INFORMATION

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