



U.S. DEPARTMENT OF **ENERGY**

*An Overview of the DOE's
Small **B**usiness **I**nnovation **R**esearch (SBIR) and
Small **B**usiness **T**echnology **T**Ransfer (STTR)
Programs*



DOE Mission Support

1. Advancing the Nation's Economic and Energy Security
2. Promoting Scientific and Technological Innovation
3. Ensuring the Environmental Clean-Up of the National Nuclear Weapons Complex

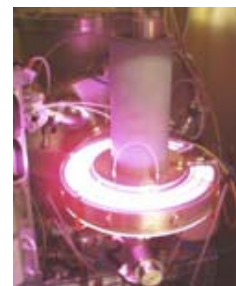


DOE SBIR/STTR Program Features

- *Competitive Grants Driven Program*
- Applications Accepted Only via (www.Grants.gov)
- Two Phased Approach:
 - \$100K Phase I (9 months) – Feasibility
 - \$750K Phase II (24 months) – Development
- Must Be Awarded DOE Phase I to Compete in Phase II
- SBIR: PI must be Employed by the Small Business
- STTR: PI may be Employed by the SBC or Research Partner
- Offer Valuable Technical Assistance & Support



FY 2009 SBIR/STTR Technical Topics vs. Number of Received Proposals



Funding Program

Topics – Proposals

Energy Efficiency & Renewable Energy*	18 – 816
Fossil Energy	8 – 161
High Energy Physics	7 – 144
Biological & Environmental Research	6 – 110
Nuclear Physics	4 – 107
Basic Energy Sciences	6 – 89
Fusion Energy	3 – 67
Advanced Scientific Computing Research	5 – 61
National Security – (Nuclear Nonproliferation)	4 – 43
Electricity Delivery/Reliability	2 – 23
Data Management and Communication (Science)	1 – 23
Nuclear Energy	1 – 10
Environmental Management	<u>1 – 7</u>
Total Topics – Proposals	66 – 1,661

*Includes Co-Funded BES Topics





Department of Energy SBIR/STTR Solicitation Schedule

Annual Solicitations: Phase I (fall) & Phase II (spring)

<i>Annual Solicitation</i>	<i>Phase I</i>	<i>Phase II</i>
Release Date:	September	February
Closing Date:	November	April
Award Selections:	May	June
Grants Begin:	June	July



DOE's 3-Year Annual Average Award Statistics

Proposals Rec'd vs. Awards Made

Phase I:  1,550 ~310 @ ~\$100K

Phase II:  ~240 ~120 @ ~\$750K

Phase I: Applicant has a **20%** Chance of Award

Phase II: Applicant has a **50%** Chance of Award



Some First-Time DOE SBIR Phase I Awardee Stats . . .

FY 2008

- 281 SBIR Awards to 192 Small Businesses. Of these:
 - 55 or 29% were First-time DOE Winners
 - 35 or 64% of the 55 First-time Winners were First-time DOE Applicants
 - Awards Made in 33 States

FY 2009

- 319 SBIR Awards to 181 Small Businesses. Of these:
 - 51 or 27% were First-time DOE Winners
 - 22 or 43% of the 51 First-time Winners were First-time DOE Applicants
 - Awards Made in 32 States



SBIR/STTR Budget/Awards

(in Millions \$)



	SBIR		STTR		Totals
FY 2008 Budget	\$124	+	\$15	=	\$139
Phase I Awards	280	+	38	=	318
Phase II Awards	144	+	20	=	164
FY 2009 Budget	\$138	+	\$17	=	\$155
Phase I Awards	319	+	35	=	354
Phase II Awards	~154	+	~17	=	~171
<i>DOE R&D Set-Aside</i>	<i>2.5%</i>	+	<i>0.3%</i>	=	<i>2.8%</i>

(Approx. \$5.5B in Extramural DOE R&D)



FY 2009 SBIR/STTR Most Popular Topics

Topic 23. Solar Energy (130)

Topic 46. Nuclear Physics Accelerator Technology (46)

Topic 18. Production of Biofuels from Biomass (44)



SBIR/STTR Proposal Evaluation Process

- **Administrative Review**
- **First Step Review**
- **External Peer Review Scoring**
- **Award Ranking and Selection**
- **Grant Negotiations**
- **Formal Awards**
- **Debriefings**





DOE SBIR/STTR

Evaluation Criteria for Phase I and II Proposals

1. Strength of the Scientific/Technical Approach

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

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

- a) 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

- a) Please comment on the significance of the technical and/or economic benefits of the proposed work, if successful
- b) 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.
- c) Please comment on the likelihood that the project will attract further development funding (from private sector sources, Federal, non-SBIR/STTR sources) after the SBIR/STTR project expires.

Evidence of Commercial Potential (Phase II Only)



Serving Small Business . . . Technical and Commercialization Assistance

- **Web-Based, Technical Assistance:** Pre-Phase I, Phase 1 and Phase II Self-Help/Self-Paced Tools and Assistance
- **Commercialization Assessments:** Phase I and Phase II



DOE SBIR/STTR Program Contact Information

- Web: www.science.doe.gov/sbir
- Email: sbir-sttr@science.doe.gov
- Phone: 301-903-1414
- Technical Assistance Web Site:
<http://doecapreg.foresightst.com>
- SBIR/STTR Presentation May Be Found at:
[http:// doecapreg.foresightst.com](http://doecapreg.foresightst.com)





Follow-On Slides



REQUIREMENTS FOR GRANTS.GOV

A. ~~Who~~ to Submit

- Applications must be submitted through the [Grants.gov](http://www.grants.gov) portal to be considered for award. You cannot submit an application through [Grants.gov](http://www.grants.gov) unless you are registered. Please read the registration requirements carefully and start the process immediately. Please note that you have to update your Central Contract Registry (CCR) registration annually. If you have any questions about your registration, you should contact the [Grants.gov](http://www.grants.gov) Helpdesk at 1-800-518-4726 to verify that you are still registered in the [Grants.gov](http://www.grants.gov) system.

B. Registration Requirements

- There are several one-time actions you must complete in order to submit an application through [Grants.gov](http://www.grants.gov), e.g., obtain a Dunn and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with [Grants.gov](http://www.grants.gov).

1. See http://www.grants.gov/applicants/get_registered.jsp; and
2. Use the [Grants.gov](http://www.grants.gov/assets/OrganizationRegCheck.doc) Organization Registration Checklist at <http://www.grants.gov/assets/OrganizationRegCheck.doc> to guide you through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in the CCR registration process. Applicants, who are not registered with CCR and [Grants.gov](http://www.grants.gov), should allow at least 21 days to complete these requirements.

- **IMPORTANT NOTICE TO POTENTIAL APPLICANTS:** When you have completed the process, we recommend that you call the [Grants.gov](http://www.grants.gov) Helpdesk at 1-800-518-4726 to verify that you have completed the final step, i.e., completed as per the [Grants.gov](http://www.grants.gov) registration instructions.



Serving Small Business . . . Technical and Commercialization Assistance

Web-Based, Technical Assistance Tools: Pre-Phase I, Self-Help/-Paced Technology Assistance

■ **Go/NoGo™ Assessment**

- Leads You Through Data That Answers Both Questions of Uniqueness & Usefulness of Your Technology

■ **Tutorials** - To Improve Your Phase II SBIR Proposal

- How to Use & Build Upon Your Go/NoGo™ to Write A Better Phase I Proposal

■ **Marketing Fact Sheet**

- Marketing Material Template For Potential Phase III Commercialization Partners, Experts, End-users, and Other Stakeholders
- It Can Be Attached To Emails, Mailed Separately, or Handed-Out at Trade Fairs or Other Marketing Venues



Serving Small Business . . . Technical and Commercialization Assistance

Tech Assist, Web-Based Tools – Continued (Pre-Phase I & Phase I)

■ **Comm101™**

- E-training Course - Commercializing New Technologies

■ **A Basic Primer on SBIR R&D Commercialization**

- *“What Every Researcher Needs to Know About Commercialization”*
 - how to improve your technology’s commercialization prospect; and how deals are really done

■ **SBA's Phase I Proposal Preparation Handbook**

- Well Written Primer on SBIR Proposal Preparation Authored by FS&T While Under Contract to SBA



Serving Small Business . . . Technical and Commercialization Assistance

Centralized Web Repository: R&D-Specific Industry Data

- Market Overviews
 - Market Information Summaries For a Number of Industries
- Technology Roadmaps
 - Documents Developed By Governments, Industry Associations, and Other Authoritative Groups
 - Provide Consensus Technology Objectives Needed to Sustain Short-, Mid-, and Long-term Progress for Specific Applications
 - Addresses Wide Range of Industrial Sectors and Applications, including Company Names, Government Agencies, and Experts Who Participated In Their Preparation
- Regulations and Standards Applicable to SBIR
 - Searchable List of Standards - By Promulgators Or Topics Across A Wide Range of Industries And Technologies



Serving Small Business . . . Technical and Commercialization Assistance

- **Trailblazer™ Assessment** (Initiated early in Phase I Award)
 - Identifies Major Market Niches for Commercialization
 - Develops a Value for the Technology (“Quick & Low Cost”)
 - Identifies Commercialization Vehicles & Maps-Out Market Path
- **TNA™ Assessment** (Initiated mid-Phase II)
 - Assesses Potential Applications for an Innovation or Technology
 - Individualized Market Entry Strategy & Launch Tactics
- **Deal Advisories™**
- **Venture Capital Contacts**
 - Venture Contacts Searchable By State And Fields In Which they Invest
- **Pipeline Partners**
 - Catalogue of Companies & Key Individuals Interested in Licensing New Technology
- **K2™: Know-How Knowledge Basecamp**
 - Collaborative Wiki-Format, Knowledge-Sharing Site
 - “Tricks of The Trade . . . If We Do Not Capture It, It Gets Lost”