



U.S. DEPARTMENT OF **ENERGY**

An Overview of the DOE's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

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DOE SBIR/STTR Programs Office

BUSINESS OPPORTUNITY SESSION (BOS)

Office Of Small and Disadvantaged Business Utilization (OSDBU)

Office of Economic Impact and Diversity

March 3, 2011

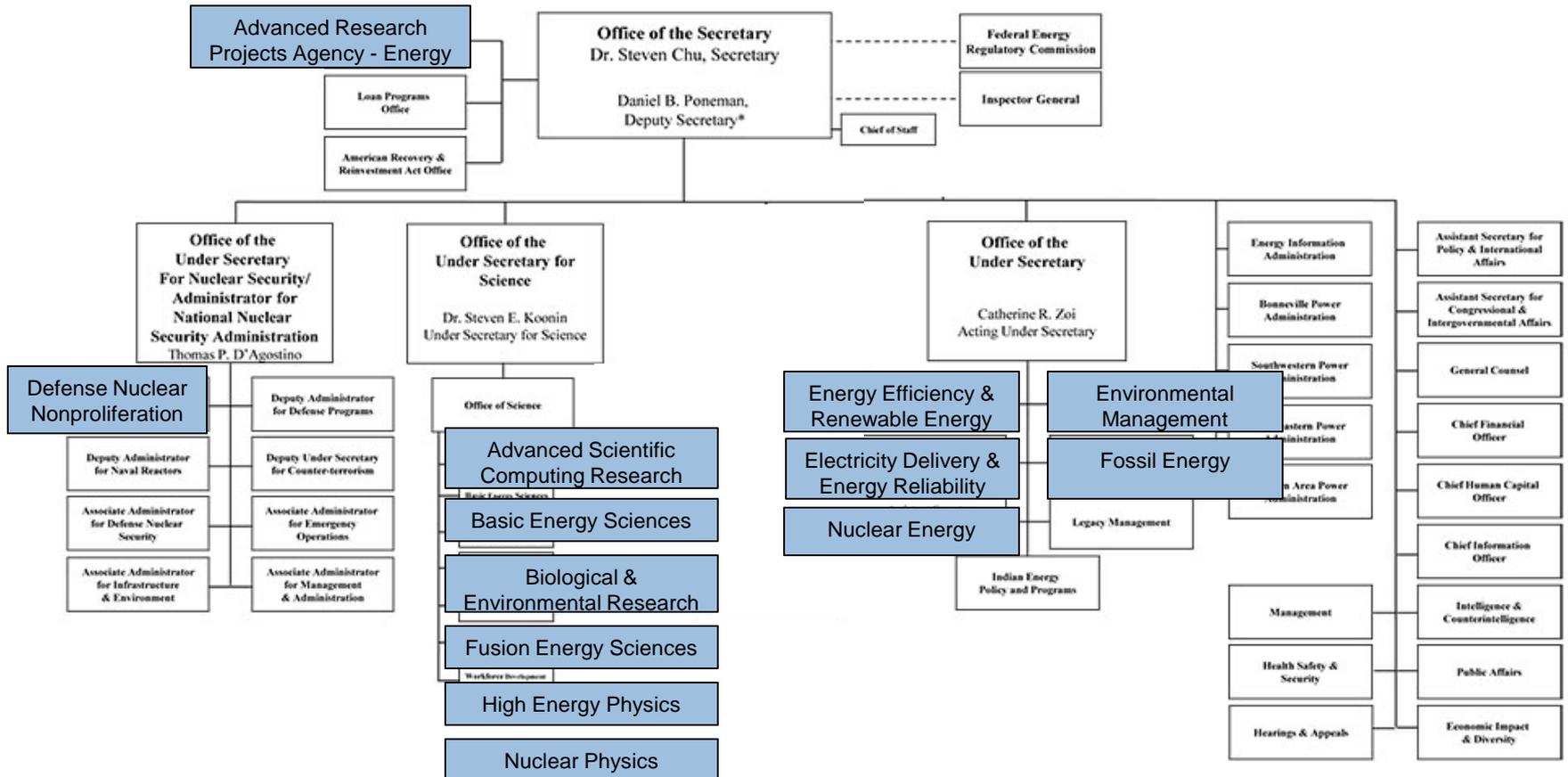


U. S. Department of Energy Mission

- **Scientific Discovery and Innovation:** Strengthening U.S. scientific discovery, economic competitiveness, and improving quality of life through innovations in science and technology
- **Energy Security:** Promoting America's energy security through reliable, clean, and affordable energy
- **Nuclear Security:** Ensuring America's nuclear security
- **Environmental Responsibility:** Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production



DOE Organizations Participating in SBIR/STTR



* The Deputy Secretary also serves as the Chief Operating Officer



Scientific Innovation and Discovery

■ Office of Science

- [Advanced Scientific Computing Research](#)
- [Basic Energy Sciences](#)
- [Biological and Environmental Research](#)
- [Fusion Energy Sciences](#)
- [High Energy Physics](#)
- [Nuclear Physics](#)

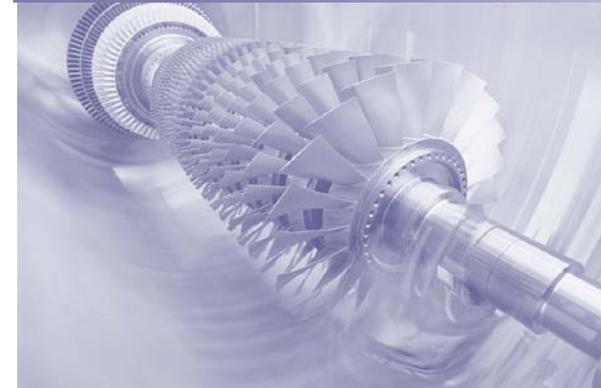
■ [ARPA-E](#) (Advanced Research Projects Agency-Energy)





Energy Security

- Office of Electricity Delivery and Energy Reliability
- Office of Energy Efficiency and Renewable Energy
- Office of Fossil Energy
- Office of Nuclear Energy





Nuclear Security

- Defense Nuclear Nonproliferation (within NNSA)





Environmental Responsibility

- Office of Environmental Management





DOE SBIR/STTR Program Features

- Competitive, Two Phased Approach
 - \$150K (SBIR) and \$100K (STTR) Phase I (9 months) – Feasibility
 - \$1M (SBIR) and \$750K (STTR) Phase II (24 months) – Development
- Must Be Awarded DOE Phase I to Compete in Phase II
- DOE Awards Grants (not contracts)
- SBIR: PI must be Employed by the Small Business
- STTR: PI may be Employed by SBC or Research Partner
- Commercialization Assistance Program

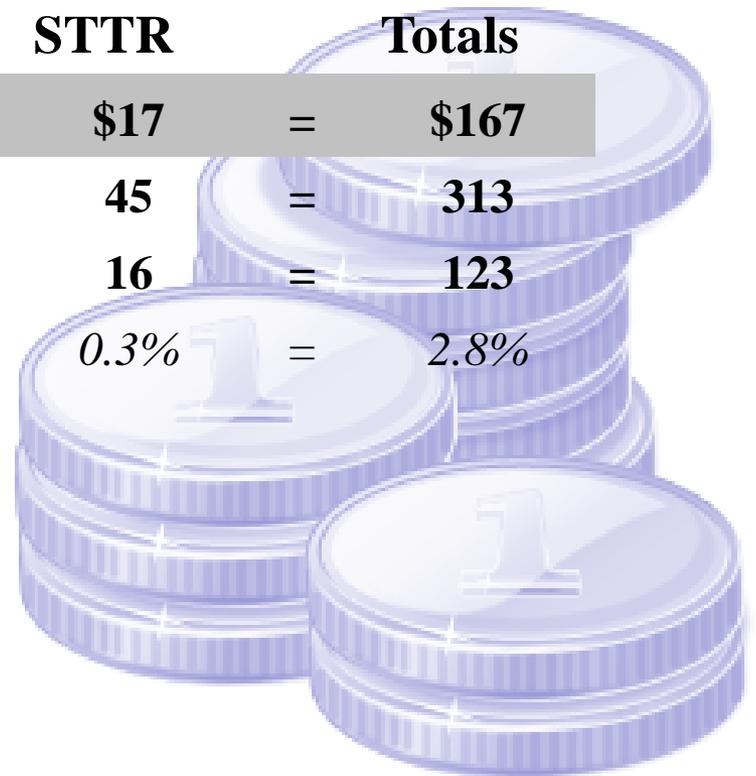


DOE's SBIR/STTR Budget vs. Awards

(in Millions \$)

	SBIR		STTR		Totals
FY 2010 Budget	\$150	+	\$17	=	\$167
Phase I Awards	268	+	45	=	313
Phase II Awards	107	+	16	=	123
<i>DOE R&D Set-Aside</i>	<i>2.5%</i>	+	<i>0.3%</i>	=	<i>2.8%</i>

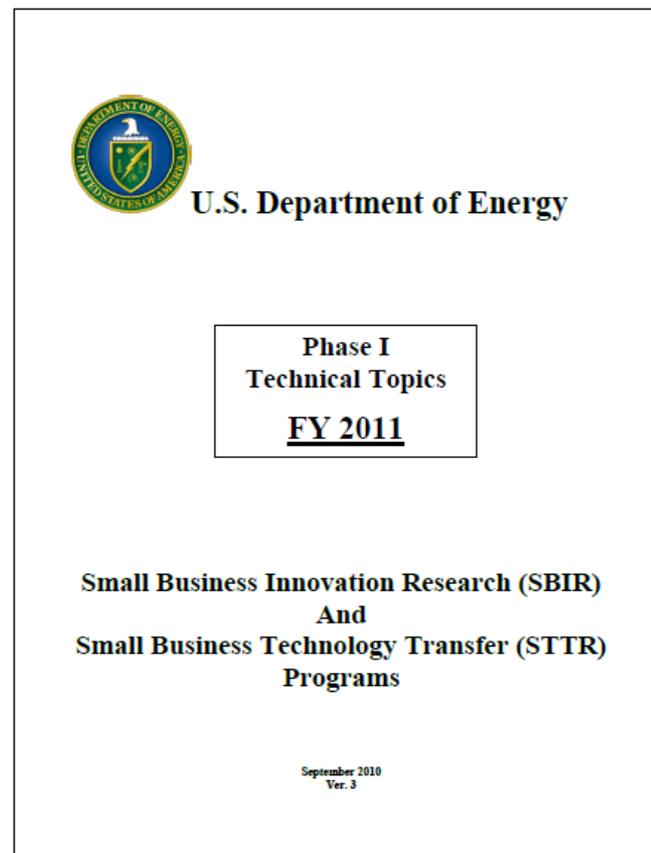
(Approx. \$5.9B in Extramural DOE R&D)





Detailed Information on Topics

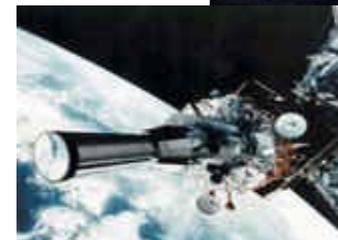
- FY 2011 Phase I Technical Topics
 - 282 pages, searchable PDF document
 - Solicitation closed 11/2010





FY 2010 SBIR/STTR

Technical Topics vs. Proposals Reviewed

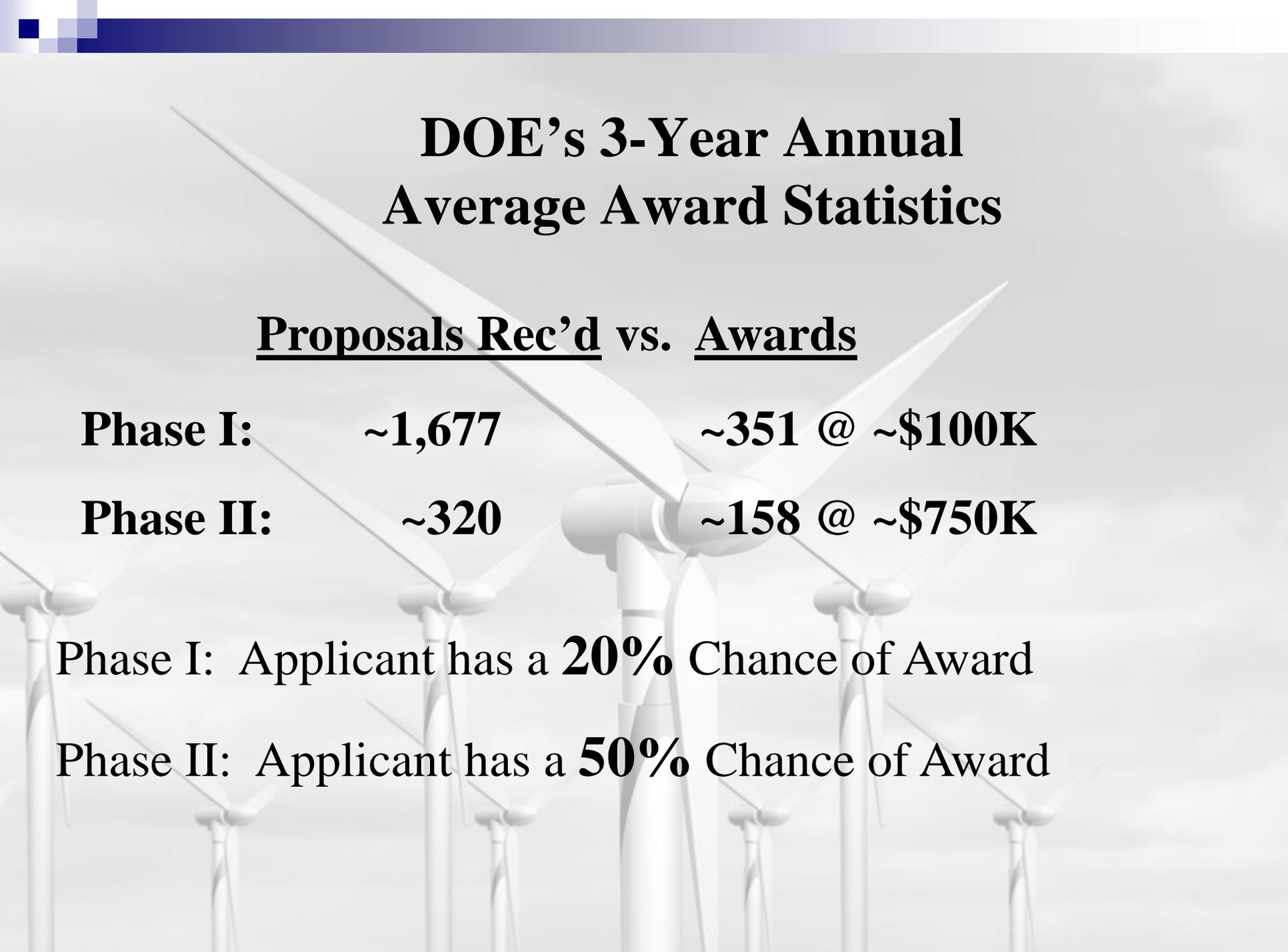


Funding Program

Topics – Proposals

Energy Efficiency & Renewable Energy*	12 – 508
Fossil Energy*	8 – 173
Advanced Scientific Computing Research	7 – 151
High Energy Physics	7 – 129
Basic Energy Sciences	7 – 88
Defense Nuclear Nonproliferation	6 – 86
Biological & Environmental Research	6 – 73
Nuclear Physics	5 – 88
Electricity Delivery & Energy Reliability*	3 – 60
Fusion Energy Sciences	3 – 71
Nuclear Energy*	2 – 23
Data Management and Communication (Science)	1 – 19
Environmental Management	1 – 11
Total Topics – Proposals TTM and/or Peer Reviewed	68 – 1,488

*Includes BES Co-Funded Topics



DOE's 3-Year Annual Average Award Statistics

Proposals Rec'd vs. Awards

Phase I: ~1,677 ~351 @ ~\$100K

Phase II: ~320 ~158 @ ~\$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 2009

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

FY 2010

- 266 SBIR Awards to 175 Small Businesses. Of these:
 - 57 (33%) were First-time DOE Winners
 - 34 (60%) of the 57 First-time Winners were First-time DOE Applicants
 - Awards Made in 30 States



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)



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



Serving Small Business . . .

Technical and Commercialization Assistance

■ **Web-Based, Technical Assistance Portal**

- Pre-Phase I, Phase I & Phase II
- Self-Help/Self-Paced Tools and Assistance

■ **Commercialization Assessments**

- Phase I & Phase II
- Trailblazer™, TNA™, and Deal Advisory™



DOE SBIR/STTR Program Contact Information

- SBIR/STTR Web: www.science.doe.gov/sbir
- Email: sbir-sttr@science.doe.gov
- Phone: 301-903-5707
- Technical Assistance Web Site:
<http://doecapreg.foresightst.com>

