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

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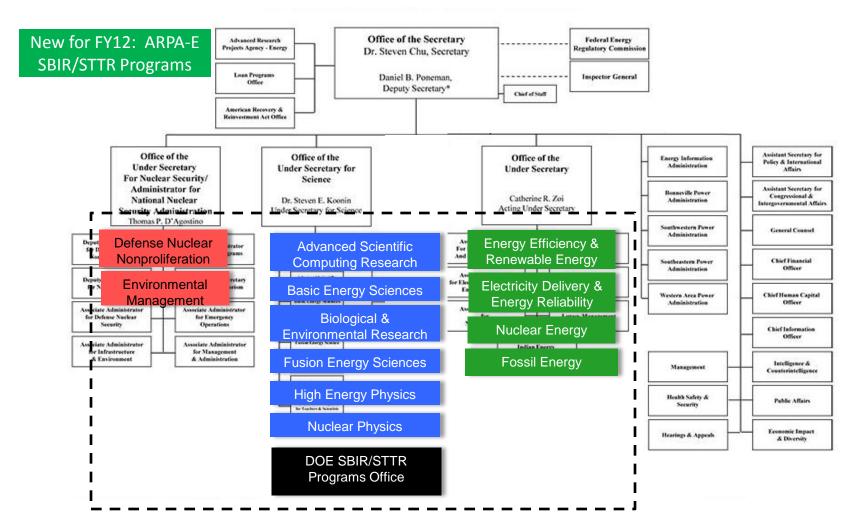
DOE SBIR & STTR Programs: **Technology Areas**

U. S. Department of Energy Mission

- The mission of the Department of Energy is to ensure America's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions.
 - Goal 1: Catalyze the timely, material, and efficient transformation of the nation's energy system and secure U.S. leadership in clean energy technologies.
 - Goal 2: Maintain a vibrant U.S. effort in science and engineering as a cornerstone of our economic prosperity, with clear leadership in strategic areas.
 - Goal 3: Enhance nuclear security through defense, nonproliferation, and environmental efforts.



DOE Program Offices Participating in SBIR/STTR





Operation of the DOE SBIR and STTR Programs

- DOE Program Office
 - Develop Topics
 - Identify Reviewers (Scientific Peer Review)
 - Recommend Awardees
 - Manage Projects

Leverage Technical Expertise Throughout DOE

- DOE Chicago Office
 - Negotiate Grants
 - Issue New and Continuation Awards
 - Grant Closeout

Single Grants Office for Awardees

- DOE SBIR/STTR Programs Office
 - Develop Funding Opportunity Announcements
 - Administer Review and Selection Process
 - Ensure Compliance with SBIR/STTR Legislation
 - Conduct Outreach



Single Administrative Office for Applicants

DOE Program Offices supporting

Goal 1: Clean Energy Technologies

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



R&D Topics

- Clean Coal Technologies
- Advanced Turbine Technology
- Oil and Gas Technologies
- Advanced Materials and

Technologies for Nuclear Energy

- Smart Grid Technologies
- Bio-energy & Biofuels
- Hydrogen & Fuel Cells
- Solar Power
- Water Power
- Wind Energy
- Energy Storage



DOE Program Offices Supporting

Goal 2: Science and Engineering Leadership

- Advanced Scientific Computing Research
- Basic Energy Sciences
- Biological and Environmental Research
- Fusion Energy Sciences
- High Energy Physics
- Nuclear Physics



R&D Topics

- Advanced Detectors
- Accelerator technology
- RF Components and Systems
- Data Acquisition, Processing and Analysis
- Fusion Energy Systems
- High Performance Computing & Networking
- Modeling and Simulation
- Atmospheric Measurement Technology
- Genomic Science and Related Biotechnologies
- Advanced Sources: neutron, x-ray, electron



DOE Program Offices Supporting

Goal 3: Nuclear Security

- Office of Defense Nuclear Nonproliferation
- Office of Environmental Management



R&D Topics

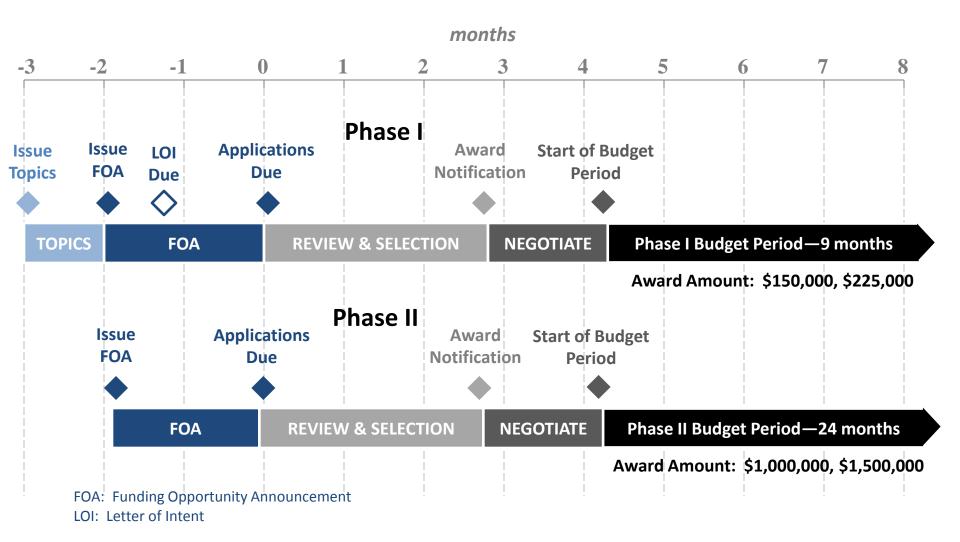
- Novel Radiation Monitoring Concepts
- In Situ Remediation
- Facility Deactivation and

Decommissioning

- Remote Sensing
- Global Nuclear Safeguards R&D
- Nuclear Detonation Detection

DOE SBIR & STTR Programs: **Application & Award Process**

Application & Award Timelines





Two Phase I Funding Opportunity Announcements Planned For FY 2014

Phase I Release 1

- Office of Advanced Scientific Computing Research
- Office of Basic Energy Sciences
- Office of Biological and Environmental Research
- Office of Defense Nuclear Nonproliferation
- Office of Fusion Energy Sciences
- Office of High Energy Physics
- Office of Nuclear Physics

Phase I Release 2

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



FY14 Phase I Schedule

	Release 1	Release 2
Topics Issued	July 15, 2013	October 28, 2013
- Topic Webinar	Week of July 22, 2013	Week of November 4, 2013
Funding Opportunity Announcement (FOA) Issued	August 12, 2013	November 25, 2013
- FOA Webinar	August 16, 2013	December 3, 2013
Letters of Intent Due	September 3, 2013	December 16, 2013
Full Applications Due	October 15, 2013	February 4, 2014
Award Notification	Early January, 2014	Late April, 2014
Grant Start Date	Mid February, 2014	Early June, 2014

- Join our mailing list to ensure that you are notified!
 - Link to our mailing list can be found on our website:
 www.science.energy.gov/sbir



FY14 Phase II Schedule

	Release 1	Release 2
FOA Issued	October 21, 2013	February 10, 2014
Applications Due	December 10, 2013	April 17, 2014
Award Notification	Late February, 2014	Late June, 2014
Grant Start Date	Early April, 2014	Late July, 2014

- Only Phase I awardees are eligible for Phase II
- Switching programs at Phase II
 - Phase I awardees can choose to apply to SBIR or STTR with their Phase II application



Topics

- **Topics Document**
 - DOE primarily uses focused topics
 - Issued 4 weeks prior to the Funding Opportunity Announcement
- Communication with DOE program managers
 - Open communication permitted before **Funding Opportunity Announcement is** issued
- **Topic Webinar**
 - DOE program managers discuss their topics
 - Applicants submit questions in advance or during the webinar
- Tech Transfer Opportunity (TTO) Topics



U.S. Department of Energy

Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

Topics

FY 2013 Phase I (Release 1)

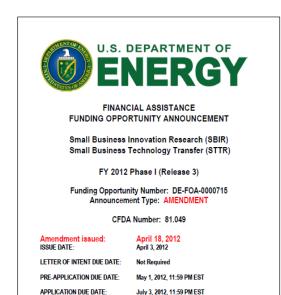
Participating DOE Research Programs

- Office of Advanced Scientific Computing Research

 Office of Fusion Energy Sciences
- Office of Basic Energy Sciences Office of High Energy Physics
- Office of Biological and Environmental Research
- Office of Nuclear Physics
- Office of Defense Nuclear Nonproliferation

Funding Opportunity Announcement (FOA)

- DOE issues grants for its SBIR & STTR awards
- FOA
 - Anticipated number of awards and funding available
 - Eligibility
 - Application Requirements
 - Review Criteria
 - Award Administration
- FOA Webinar
 - Provides overview and highlights important changes



Amendment to Topics Document: Topic 8b: Removal of reference to webinar.



Letters of Intent (LOI)

- LOI Required
 - You must submit an LOI by the due date to be eligible to submit an application
- Primary purpose
 - begin reviewer assignment to reduce award cycle time
 - due 3 weeks after FOA is issued
- Secondary purpose
 - provide notification to applicants who appear to non-responsive; you may submit a formal application if you receive this notification
- Limits
 - Small businesses may submit only 10 letters of intent (and 10 applications) per solicitation

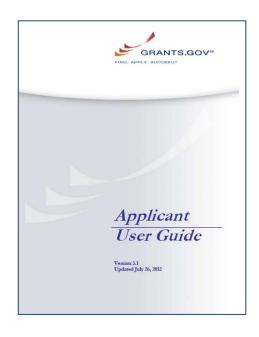
Content:

- Title
- Topic and subtopic
- Abstract (<500 words)
 - Provide sufficient technical detail to enable reviewer assignment
 - Non-proprietary
- List of collaborators
- Small business information
 - Name, address
 - Business official and contact information
 - Principal investigator
- Phase I or Fast-Track



Application Process: Registration

- Applications must be submitted through <u>Grants.gov</u>
- Registration at Grants.gov is a 3 step process
 - Obtain a DUNS number
 - 2. Complete a SAM (formerly CCR) registration
 - must be updated annually
 - 3. Complete Grants.gov registration
- Start this process as early as possible!

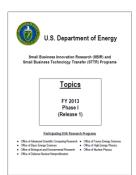




Completing an Application

- Download and complete the application package
 - Available at Grants.gov
 - Can be completed offline
- Important documents to assist you with completing the application package
 - Topics Document, Funding
 Opportunity Announcement, &
 Instructions are available at the
 DOE SBIR website











SBIR vs. STTR

- DOE uses the same topics for SBIR & STTR
- Applicants can apply to either or both programs with a single application. If you apply to both programs, you must meet the requirements for both.

- SBIR: Small business is required to perform the majority of the R&D
 - Phase I: >67%
 - Phase II: >50%

- STTR: Small business collaborates with a nonprofit research institution
- For both Phase I & II
 - Small business: >40%
 - Research Institution: >30%



Fast-Track Application

 Primary Benefit: Awardees of Fast-Track applications will not have a gap in their funding between Phase I and Phase II.



- Applicants must have a compelling Phase I/Phase II application.
 - May not be suitable for risky Phase I research with many different paths for Phase II
 - May not be suitable for those with limited commercialization experience.



Review and Selection

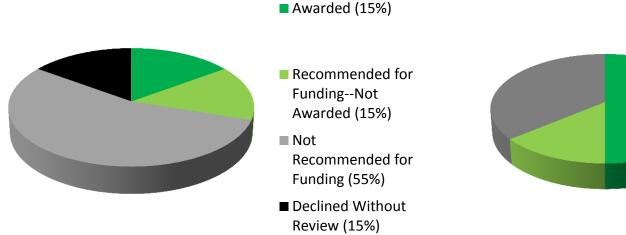
- DOE uses primarily external peer review to evaluate your applications
 - Typically at least 3 technical reviewers
 - 1 reviewer for the Phase II commercialization plan
- Review Criteria (equally weighted)
 - Strength of the Scientific/Technical Approach
 - Ability to Carry Out the Project in a Cost Effective Manner
 - Impact
- Reviewer comments will be made available to you after notification of your award

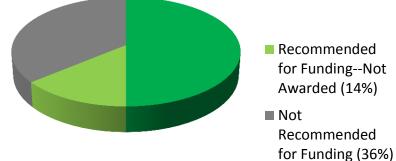


Application Statistics for FY12

- Phase I
 - 1733 applications
 - 253 awards

- Phase II
 - 208 applications
 - 104 awards

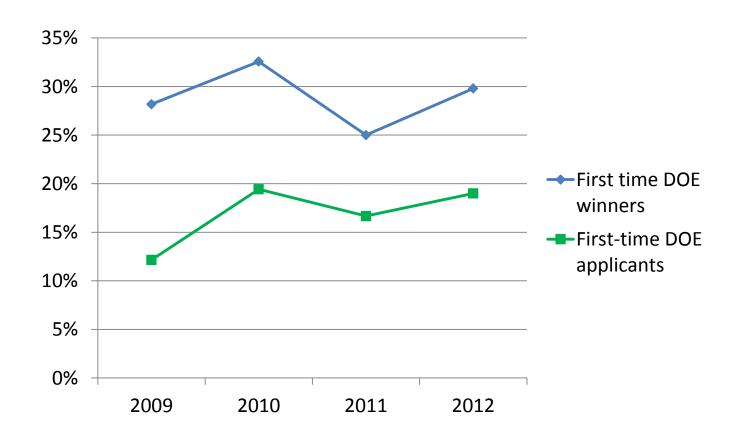




Awarded (50%)

Phase I Awardees: First Time Winners & Applicants in FY12

% of Phase I Awardees





Commercialization Assistance

- DOE Commercialization Assistance will be provided by Dawnbreaker
 - Phase I assistance
 - Commercialization readiness assessment
 - Focused assistance with development of Phase II commercialization plans
 - Phase II assistance
 - Flexible offerings to meet a variety of commercialization needs
 - http://science.energy.gov/sbir/commercialization-assistance/
- Company selected commercialization assistance vendor
 - Reauthorization permits companies to select their own vendors to provide commercialization assistance
 - Company must include this vendor as a subcontractor or consultant in their Phase I or II application



Questions?

Contact us:

• Phone: 301-903-5707

Email: <u>sbir-sttr@science.doe.gov</u>
DOE SBIR/STTR website: <u>www.science.energy.gov/sbir</u>