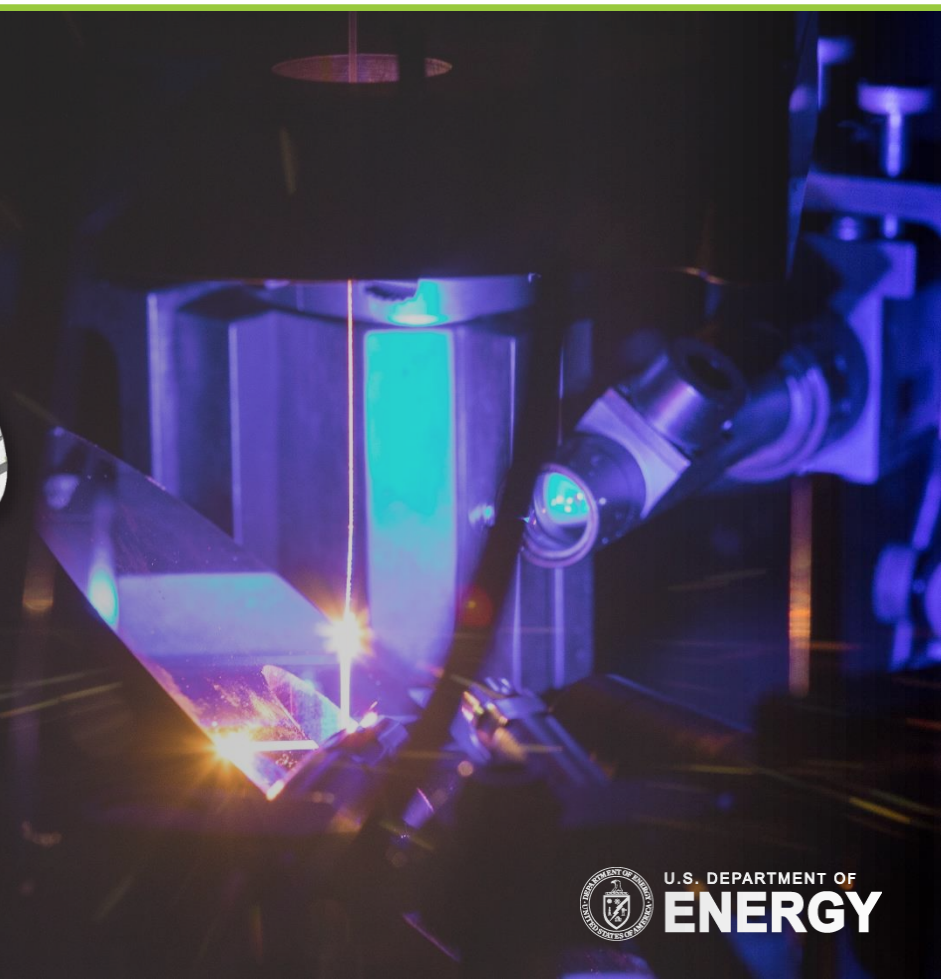
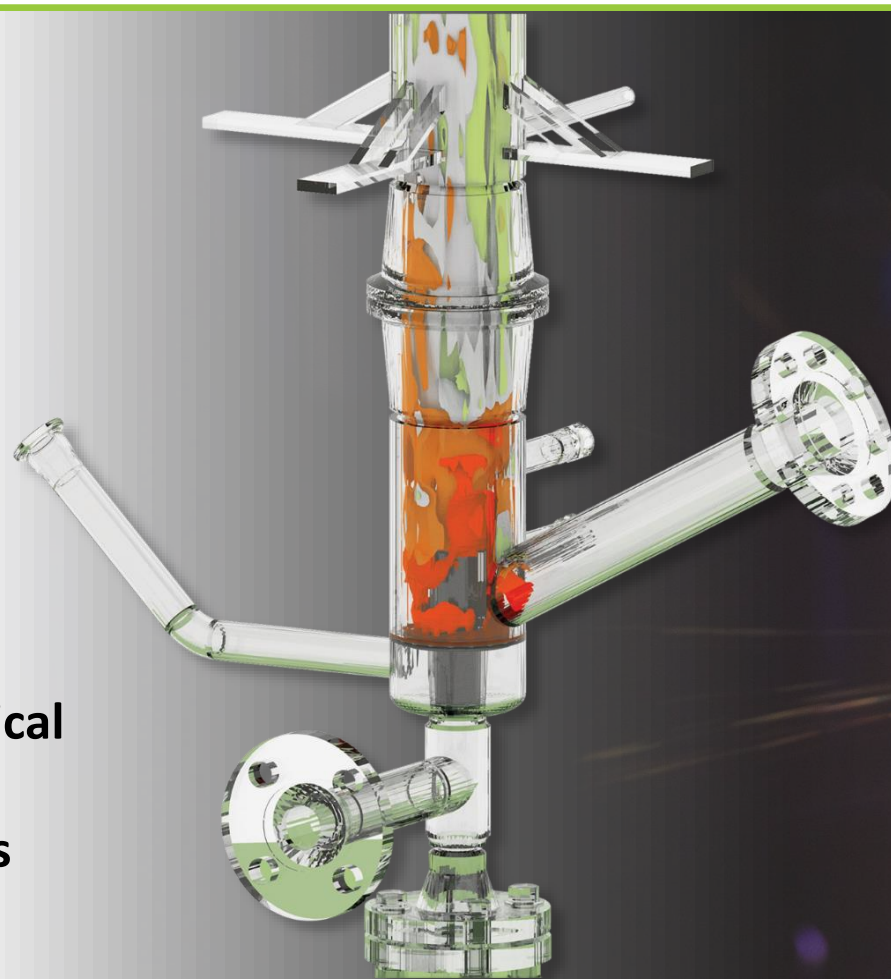
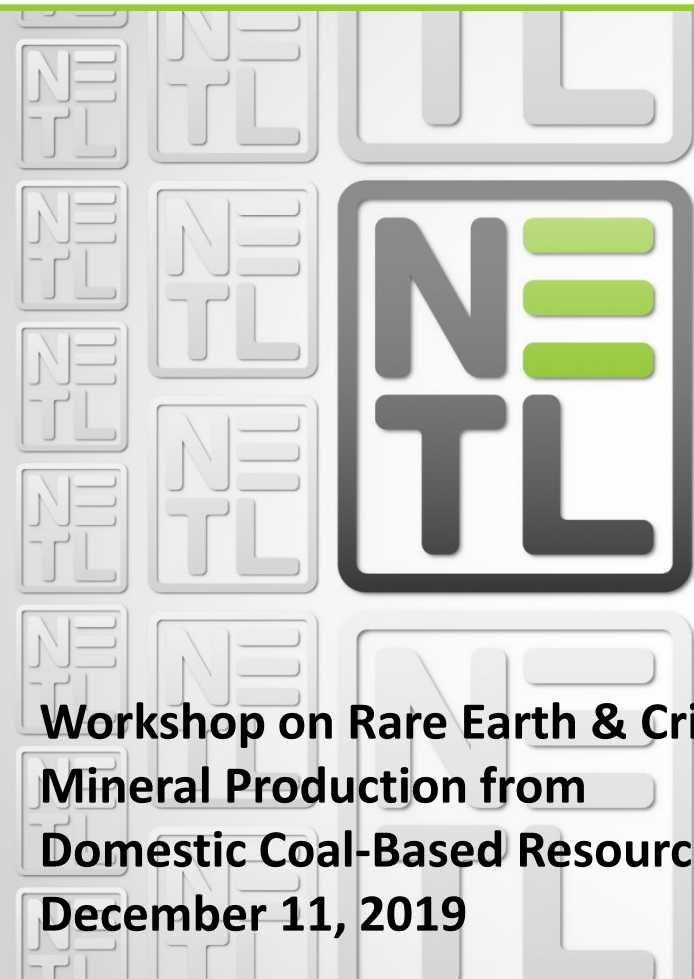


How to Partner With NETL



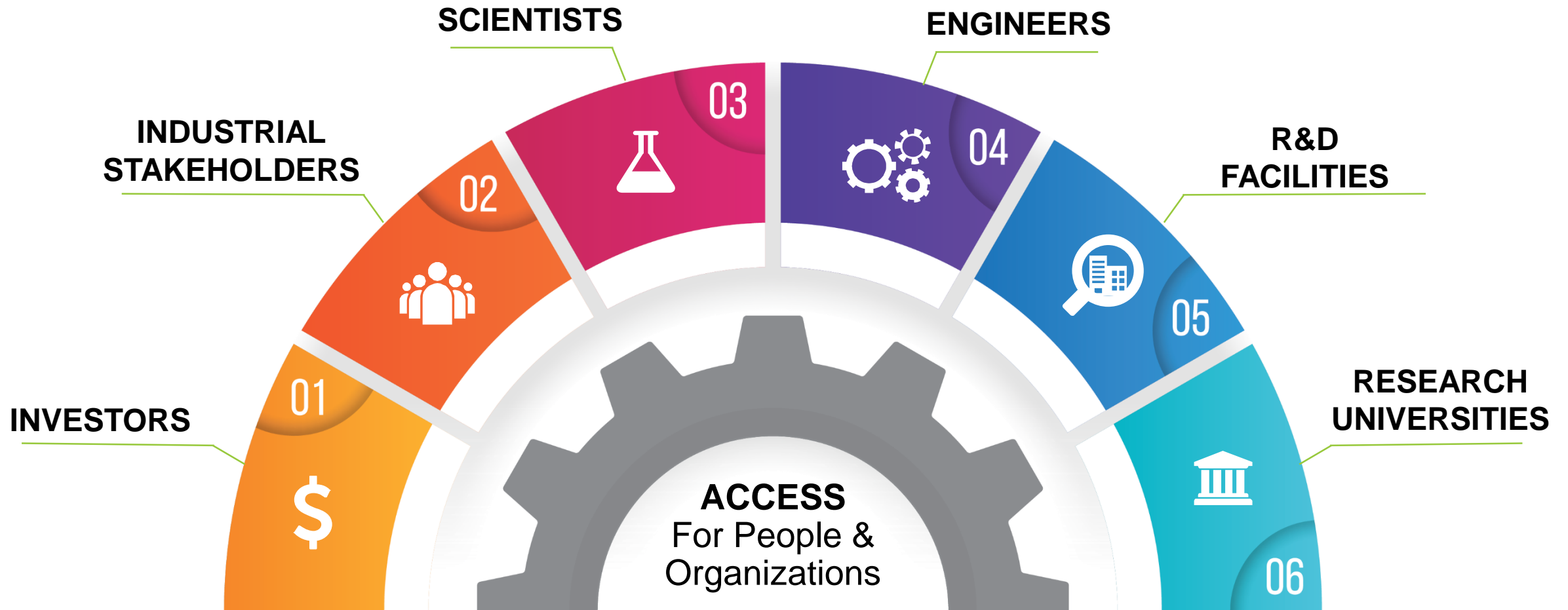
Solutions for Today | Options for Tomorrow

Tom Sarkus
Industrial Partnerships Manager



Workshop on Rare Earth & Critical
Mineral Production from
Domestic Coal-Based Resources
December 11, 2019

It's all about Access

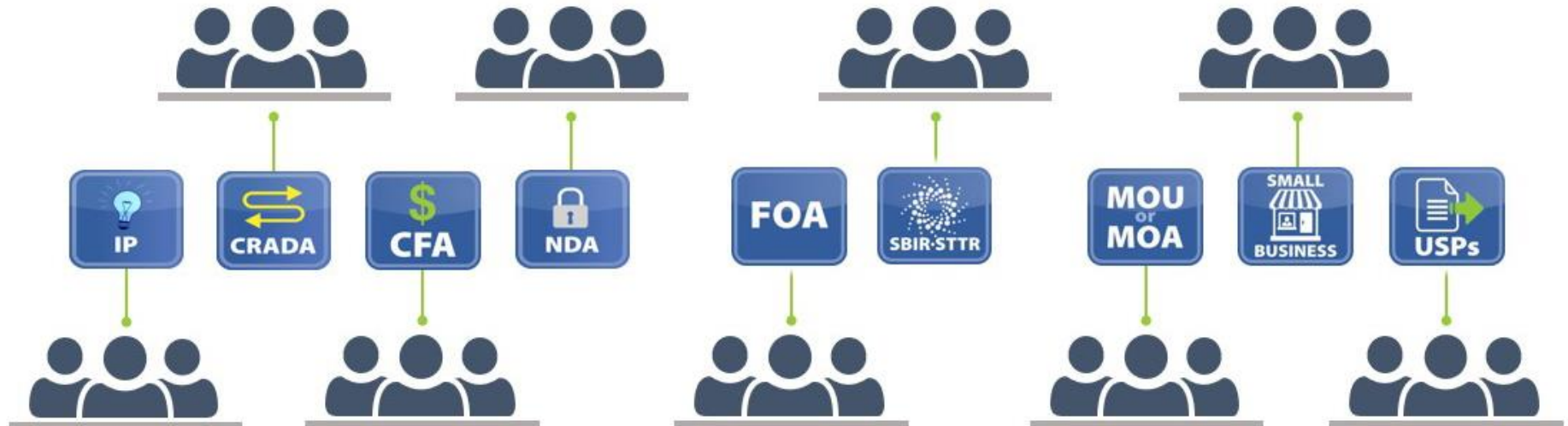


Partnering with NETL

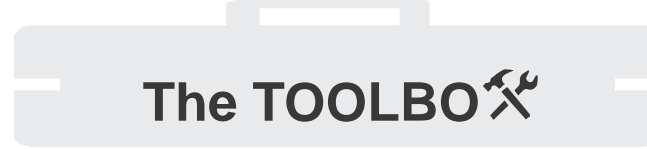
People, Facilities, & Technologies

Mechanisms NETL uses to enable collaboration include:

- Non-Disclosure Agreements (NDAs)
- Cooperative Research and Development Agreements (CRADAs)
- Memorandum of Understanding/Agreement (MOU/MOA)
- Contributed Funds-in Agreement (CFA)
- Funding Opportunity Announcements (FOA) and Small Business Technology Transfer (SBIR/STTR)
- Licenses



Partnering with NETL



- Cooperative Research and Development Agreement (CRADA)
- Contributed Funds-In Agreement (CFA)
- Memorandums of Understanding (MOU)/
Memorandums of Agreement (MOA)

- Small Business Innovation Research (SBIR) & Small Business Technology Transfer (STTR) Programs
- Unsolicited Proposals (USP)
- Non-disclosure Agreement (NDA)
- Funding Opportunity Announcement (FOA)

Available Technologies

- NETL's technology portfolio contains a broad range of innovations that have resulted from research
- Technologies and intellectual property available for licensing on NETL's website.

Available Technologies: <https://www.netl.doe.gov/business/tech-transfer/available-technologies>

Funding Opportunity Announcement (FOA)

- NETL uses FedConnect.net, Grants.gov and FedBizOpps.gov to post FOAs
- Proposals and applications are only accepted electronically through FedConnect.net or Grants.gov

Funding Opportunities: <https://www.netl.doe.gov/business/solicitations>

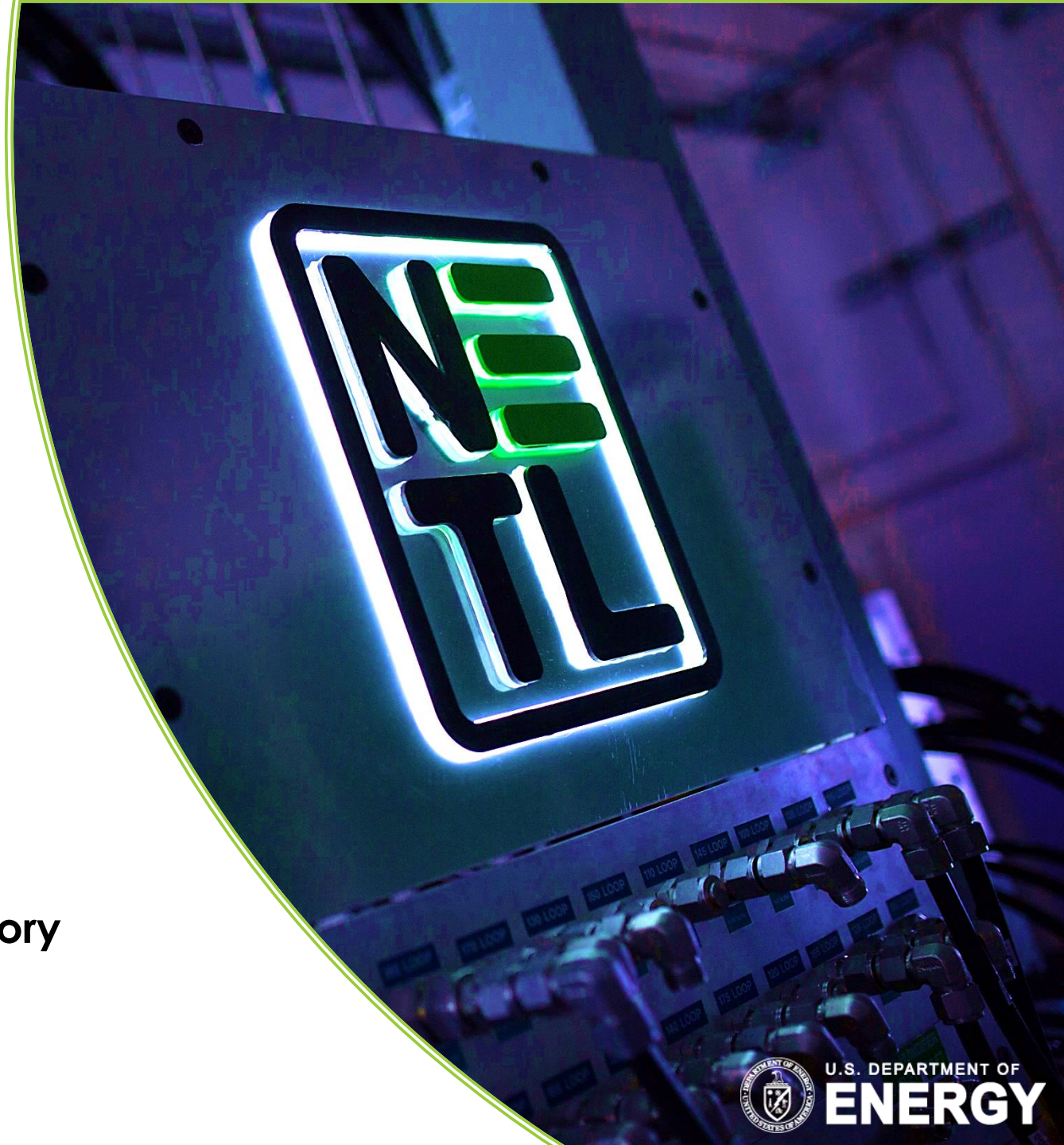
THANK YOU FOR YOUR KIND ATTENTION!

VISIT US AT: www.NETL.DOE.gov

 @NETL_DOE

 @NETL_DOE

 @NationalEnergyTechnologyLaboratory



U.S. DEPARTMENT OF
ENERGY

Contact Information



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www.netl.doe.gov



Back-up Slides



Toolbox



Working with NETL

How to Work With NETL

Cooperative Research and Development Agreements (CRADA)

CRADAs allow for joint R&D performed by NETL and participant researchers. Background intellectual property (IP) protection is included for both parties and CRADA developed IP is addressed. CRADAs offer participants the right of first refusal to an exclusive license for jointly developed IP. Cost sharing between NETL and CRADA participant is essential. Small businesses are given preferential consideration.

www.netl.doe.gov/business/licensing

Contributed Funds-In Agreements (CFA)

Like CRADAs, CFAs are agreements between the federal government and private sector participants to work together on a mutually beneficial project. However, in a CFA, the private sector participant provides funds to NETL for a specific scope of work to be completed. At the end of the project, NETL reports research findings back to the participant.

www.netl.doe.gov/business/licensing

Memoranda of Understandings (MOU) or Memoranda of Agreements (MOA)

MOUs and MOAs are written agreements between NETL and other entities that state the scope of work for a specific project or state the terms of a partnering relationship. Parties to these agreements may include other federal agencies, local, state, international, or other government entities; the private sector; and educational institutions. Actual implementation of the understandings established by the MOU or MOA must be accomplished through a legally binding instrument such as an interagency agreement, contract or other appropriate agreement between the parties (as applicable).

www.netl.doe.gov/business/licensing

Non-Disclosure Agreements (NDA) & Non-Analysis Agreements (NAA)

NDAs are used when NETL and/or another party wish to exchange information that is either considered potentially patentable by NETL or proprietary by the other party. NETL is bound to information confidential by the Trade Secrets Acts (18 USC Sec. 1905). However, NETL will enter into an NDA that reiterates this protection. NDA may be unilateral or bi-lateral. NETL only executes its own NDAs.

NAA's protect NETL patented technology that is shared with another party for a pre-negotiated purpose, such as testing or further research. The other party agrees not to analyze the technology to determine composition, use the technology for commercial purposes, or transfer the technology to another party.

www.netl.doe.gov/business/licensing



Licenses

Licenses transfer NETL-owned intellectual property (IP) from the government to the private sector. NETL looks for licensing partners with a plan for technology development and marketing, with a high probability for technology commercialization and sharing IP benefits with the public.

www.netl.doe.gov/business/licensing



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

SBIR and STTR are U.S. government programs in which federal agencies with funding for small businesses only. Small businesses that win awards in these programs keep the rights to any technology developed and are encouraged to commercialize the technology.

The SBIR and STTR programs have three distinct phases. Phase I explores the feasibility of innovative concepts with awards up to \$150,000 for about 9 months. Only Phase I award winners may compete for Phase II, the principal R&D effort, with awards up to \$1,000,000 over a two-year period. There is also a Phase III, in which non-federal capital is used by the small business to pursue commercial applications of the R&D. Federal agencies may award non-SBIR/STTR-funded, follow-on grants or contracts.

www.netl.doe.gov/node/3493



Funding Opportunity Announcements (FOA) & Financial Assistance Awards (FA)

A FOA is a notice of a federal grant funding opportunity. NETL uses FedConnect and/or Grants.gov and FedBizOpps to post solicitations FOAs and amendments related to the energy sector receive proposals and applications, and disseminate award information. Proposals accepted only as indicated in the solicitation document.

www.netl.doe.gov/business/solicitations

FAs support specific research activities conducted outside of NETL, resulting in cooperative agreements or grants. FAs may be unsolicited or the result of the competitive FOA process.

<https://www.netl.doe.gov/node/5719>



Unsolicited Proposals (USP)

A USP is an application for support of an idea, method, or approach is submitted by an individual, business, or organization, based solely on the proposer's initiative rather than in response to a DOE solicitation. Funding of unsolicited proposals is considered a noncompetitive action.

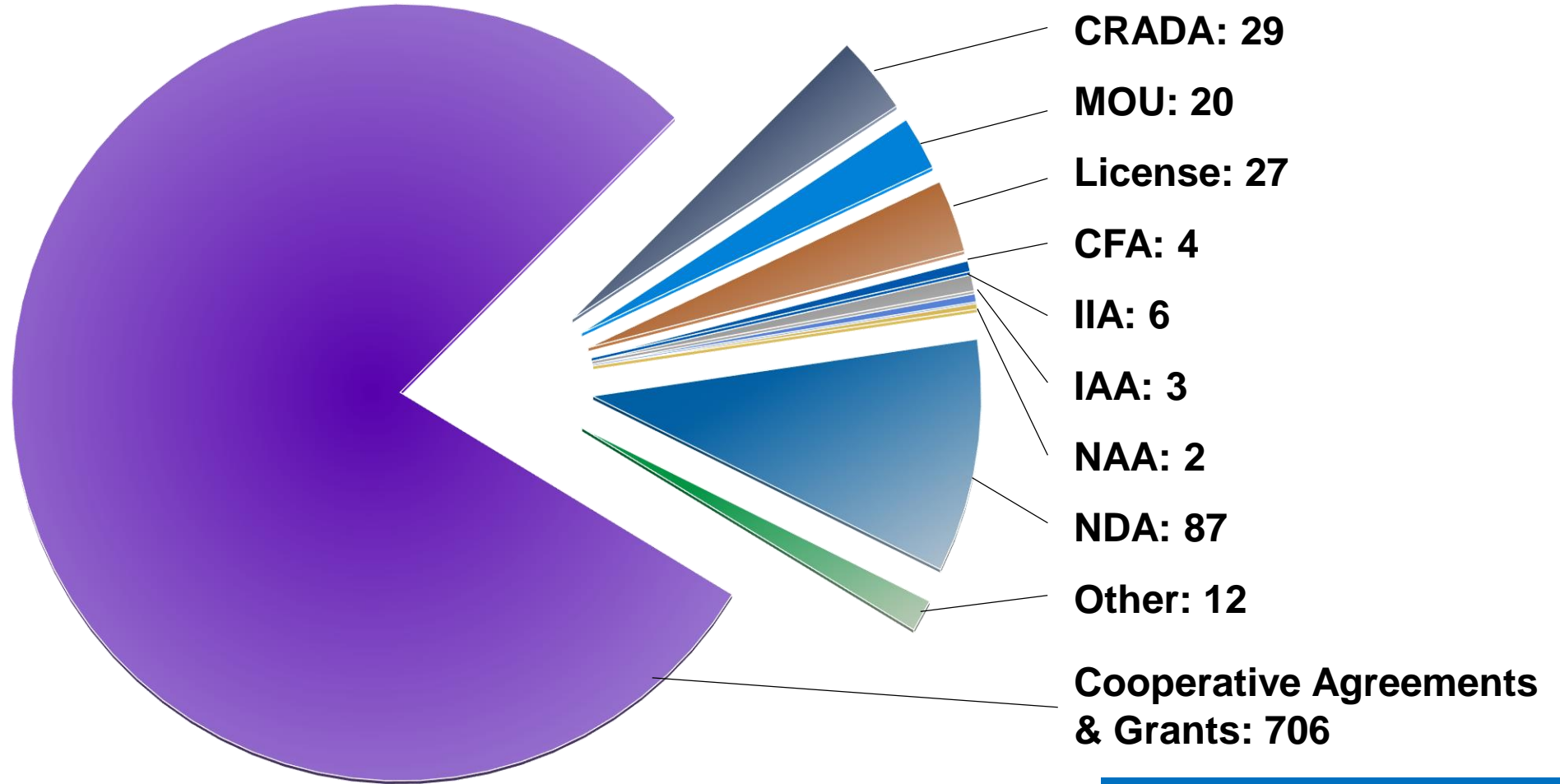
www.netl.doe.gov/business/unsolicited-proposals

Michael Knaggs

Associate Director of Strategic Partnerships
Michael.Knaggs@netl.doe.gov

Example: NETL Partnerships Snapshot

896
Total Active,
External
Agreements



As of April 2019

Funding Opportunity Announcements



- **Funding Opportunity Announcements** (FOAs) are NETL notice of a competitive federal financial assistance funding opportunity.
- NETL uses **FedConnect.net**, **Grants.gov** and **FedBizOpps.gov** to post FOAs and amendments, to receive proposals and applications, and to disseminate award information.
- Proposals and applications are **only accepted electronically through FedConnect.net or Grants.gov** as indicated in the FOA document.

Future Opportunities:

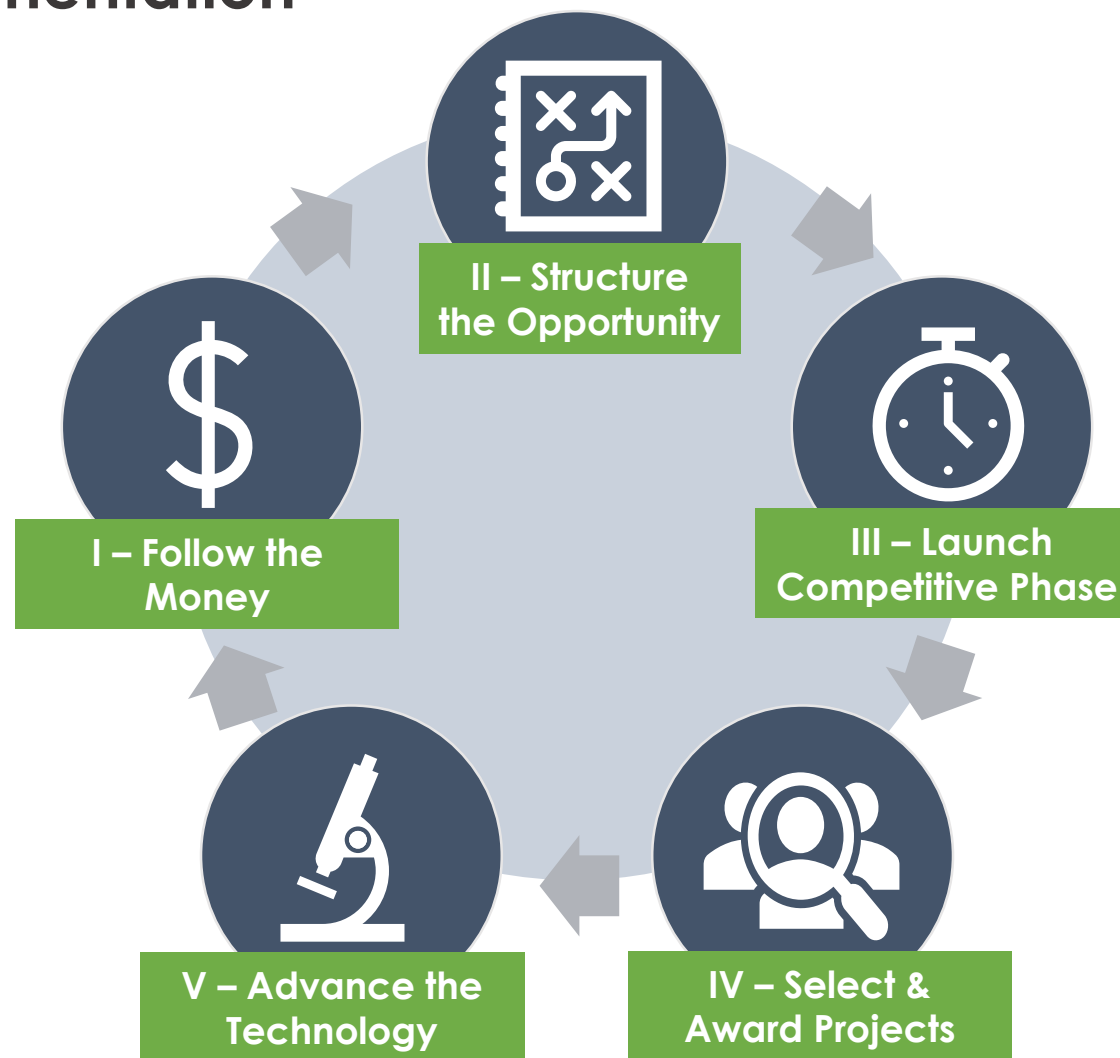
For a list of **NETL's open funding opportunities** please visit:

<http://www.netl.doe.gov/business/solicitations/index.html>

Interested parties may **register through this NETL Business page** to receive routine notification of new FOA opportunities.

NETL's Annual FOA Process Flow

Planning and Implementation

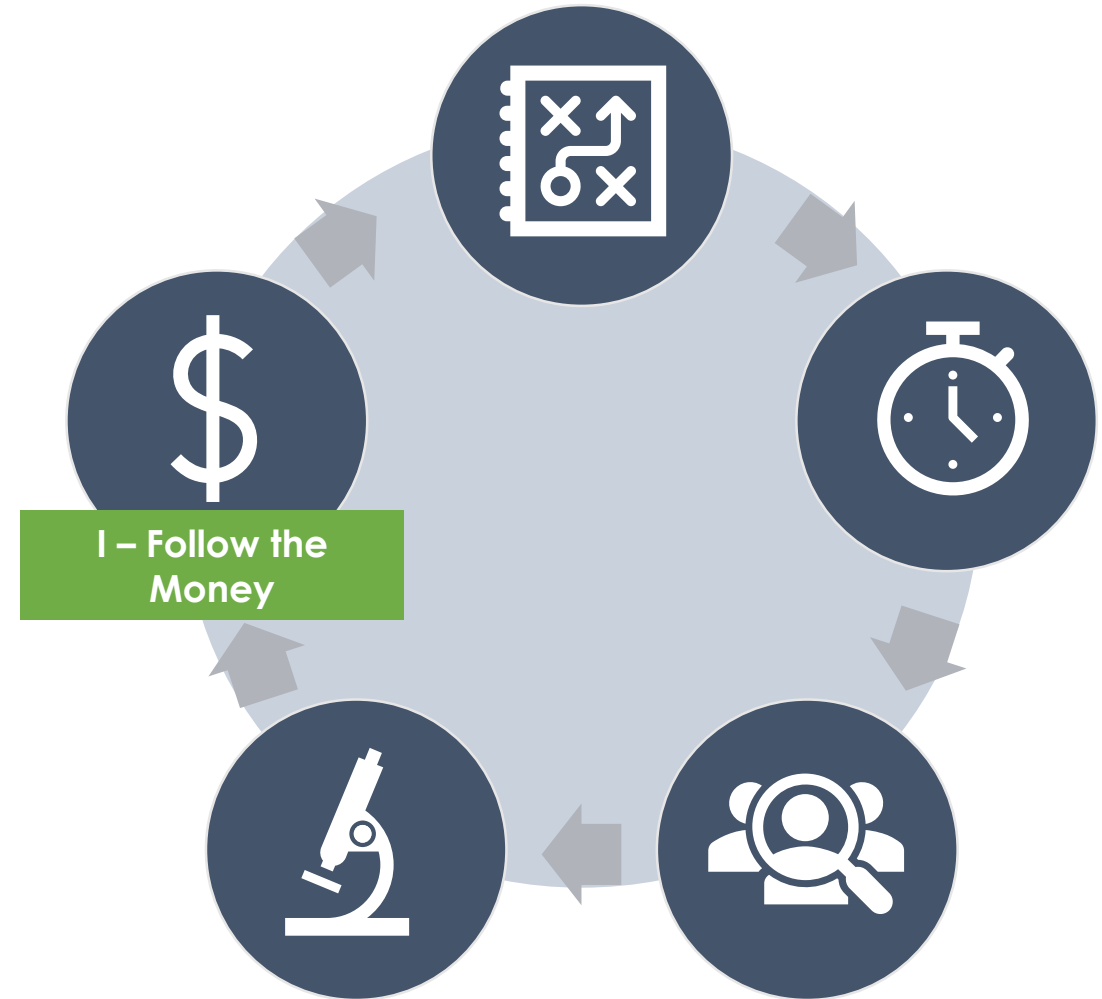


NETL's Annual FOA Process Flow

Planning and Implementation

Phase I

- President's Congressional Request Budget
- House Committee Mark
- Senate Committee Mark
- Annual FY Appropriation



NETL's Annual FOA Process Flow

Planning and Implementation

Phase II

- **Generate Annual Spend Plan for all Technology Areas**
- **Complete Acquisition Planning Process**
- **Identify Portfolio of FOAs to be Initiated**
- **Schedule FOA Critical Path Milestones**

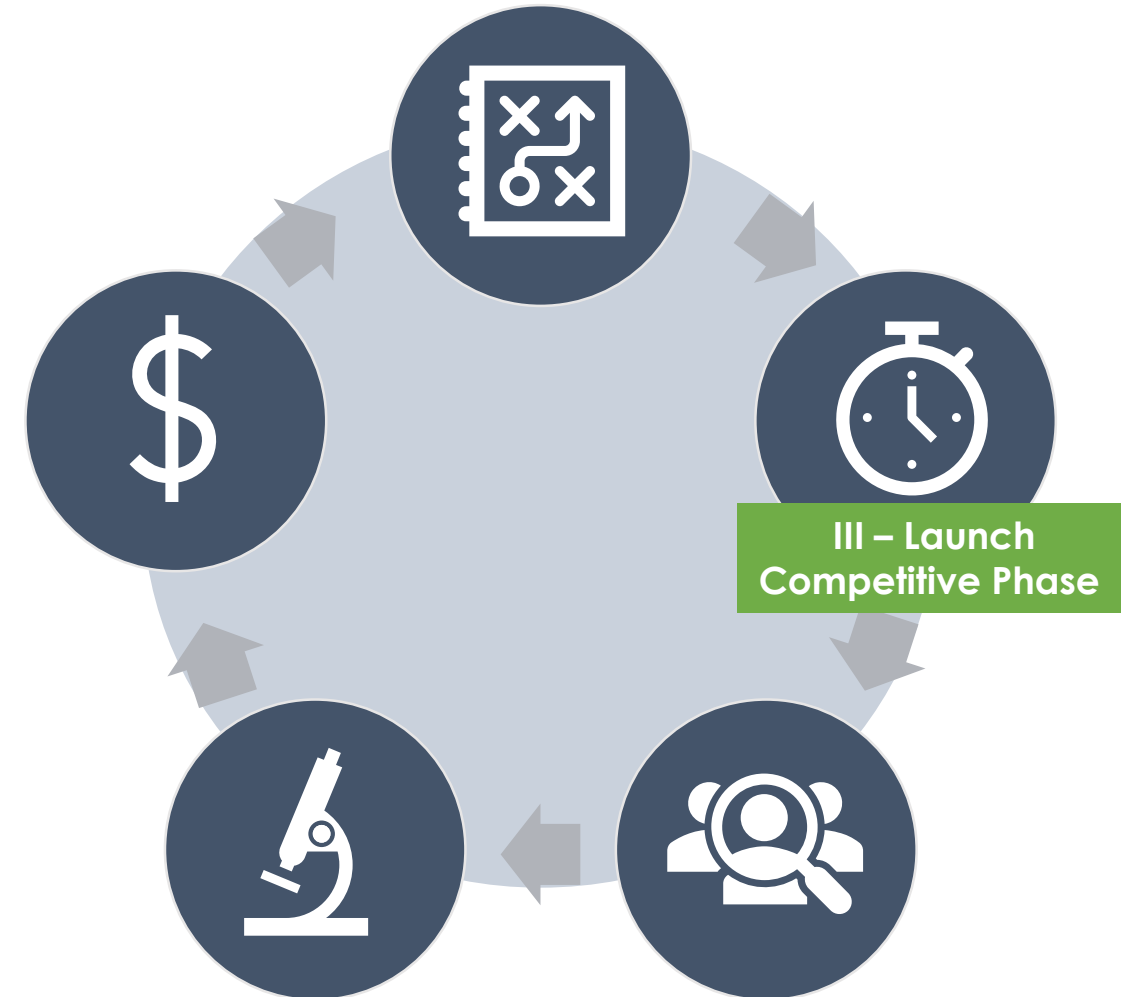


NETL's Annual FOA Process Flow

Planning and Implementation

Phase III

- Develop Requirements Document
- Generate Procurement Strategy
- Craft Evaluation Criteria, Scoring Plan, Program Policy Factors, and Selection Criteria
- Select Merit Review Chair and Source Selection Official
- Staff Scoring Panels with Subject Matter Experts
- Publish & Issue FOA (and amendments if needed)

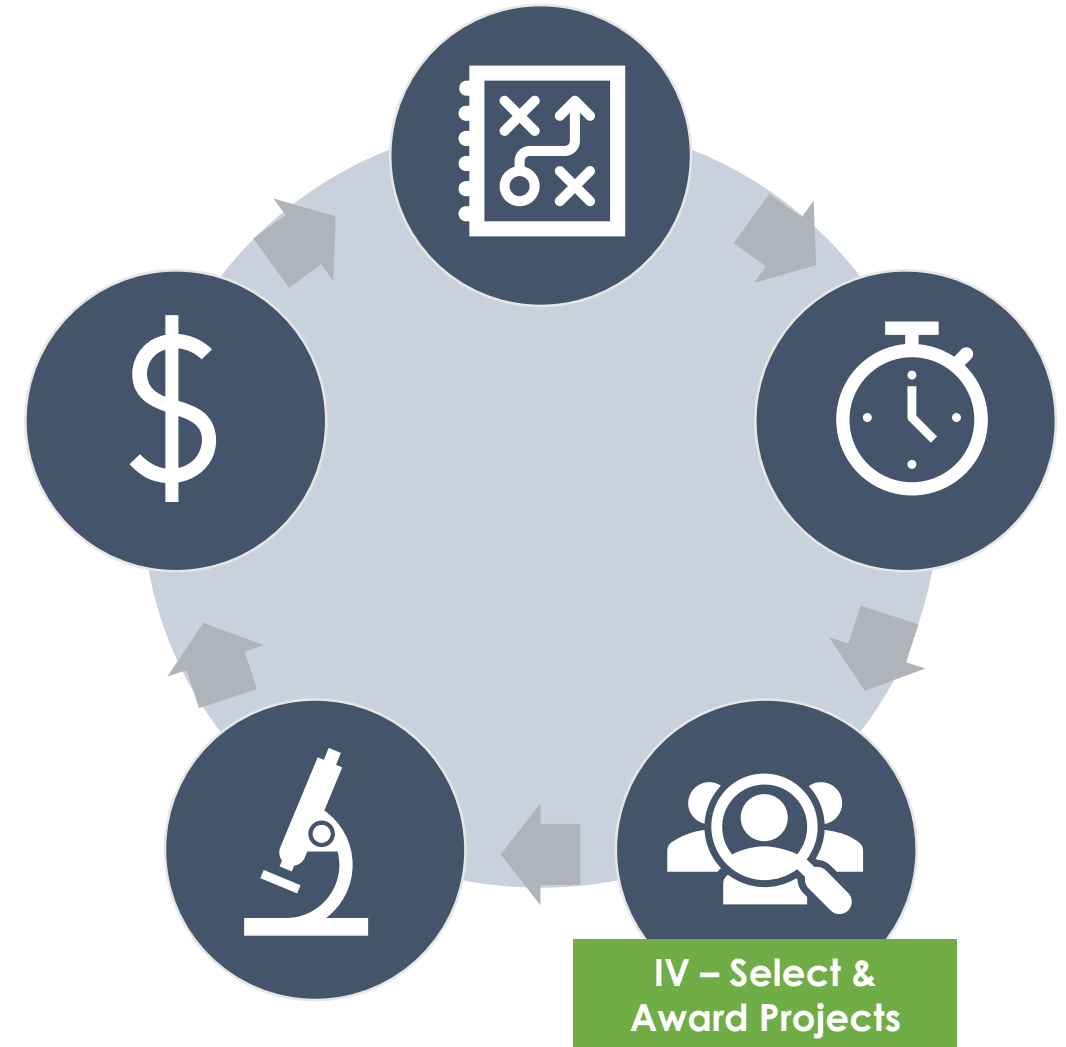


NETL's Annual FOA Process Flow

Planning and Implementation

Phase IV

- Complete Initial Screening, Qualify Applications
- Develop Consensus Strengths and Weaknesses, Score Applications
- Prepare Senior Technical Briefing
- Select and Announce Winners
- Initiate Negotiations and Make Award

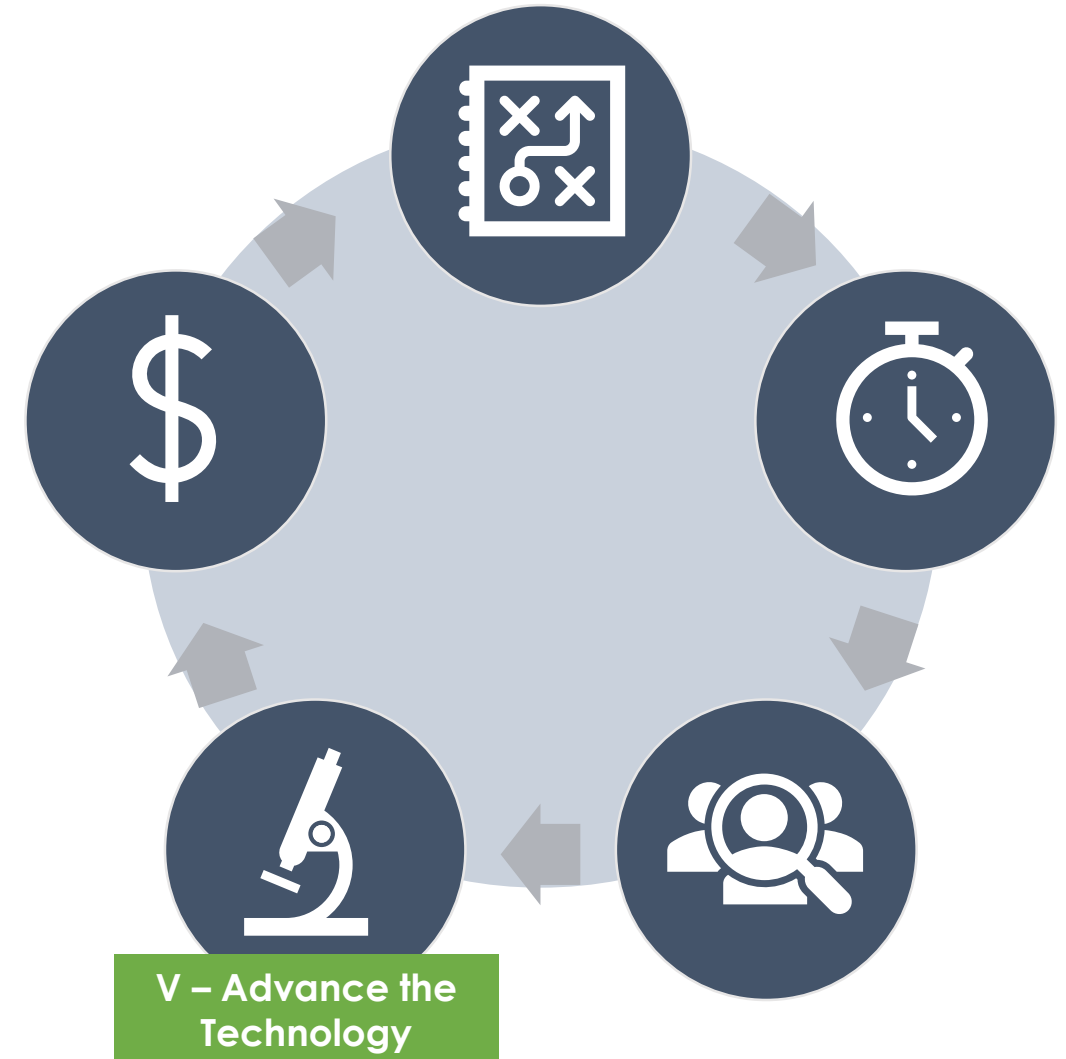


NETL's Annual FOA Process Flow

Planning and Implementation

Phase V

- **Evaluate Performance and Measure Progress**
 - Technology Maturation Planning
 - Technology Readiness Assessments
 - Independent Program/Project Peer Reviews
- **Inform Future R&D Needs**



Non-Disclosure Agreements (NDAs)



- **Non-Disclosure Agreements (NDAs)** are sometimes referred to as confidentiality agreements, and are used when NETL and/or another party wish to exchange information that is either considered potentially patentable by NETL, or proprietary by the other party.
- NETL is bound to maintain information received in the course of business confidential by the **Trade Secrets Act** (18 USC Section 1905). **Therefore, an NDA is not required for Federal employees to receive proprietary information from other organizations.**
- **However, NETL will enter into an NDA that encompasses the Trade Secrets Act.**
- NDAs may be unilateral or bilateral, depending on the circumstances. NETL only executes its own NDAs.

SBIR-STTR Program

Stimulate High-Tech Entrepreneurial Innovation



SBIR – Small Business Innovation Research STTR – Small Business Technology Transfer

Program Characteristics:

- Limited Competition
- Intellectual Property (IP) and data rights specific to SBIR-STTR
- Potential for progressive funding through phases

Contacts:

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Douglas Archer
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douglas.archer@hq.doe.gov

One Idea – Three Phases:

- **Phase I:** Proof of Concept / Feasibility
- **Phase II:** Prototype of Innovative Concept
 - Phase IIA: Continue R&D within scope
 - Phase IIB: Continue R&D beyond scope towards commercialization
- **Phase III:** Pursuit of commercial application (non-SBIR-STTR funding is used, i.e. private or other governmental funding)

More Information:

- Mailing list go to <http://science.energy.gov/sbir/> notifications release of topics, FOAs, webinars, other updates
- Announcement of Topic and FOA Release at <http://science.energy.gov/sbir/funding-opportunities/>

NETL Available Technologies for R&D and Licensing



- NETL has a number of technologies and inventions available for further research & development and/or licensing
- To search the NETL inventions database, please visit:
netl.doe.gov/business/tech-transfer/available-technologies
- For more information, and for inquiries, please e-mail:
techtransfer@netl.doe.gov

What Can I Do Next?

Partnering with NETL



What You Can Do Next:

- Request an **introductory meeting and a lab tour**
 - **NETL will organize a meeting with management and researchers, and will provide a customized lab tour aligned to your technical interests.**

Partnering with NETL



What You Can Do Next:

- Attend **peer reviews, workshops, conferences, technical forums, etc.**
 - NETL holds periodic technical events which open to the public or by invitation.

What You Can Do Next:

- Apply for **competitive, cost-shared funding opportunities**

Future Opportunities:

For a list of NETL's open funding opportunities please visit:

<http://www.netl.doe.gov/business/solicitations/index.html>

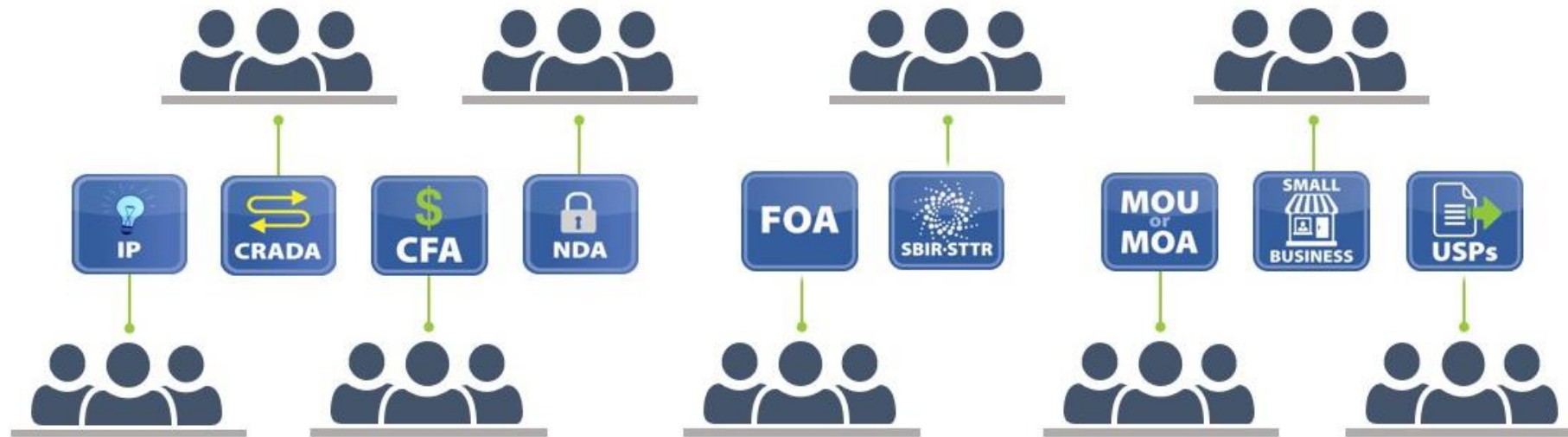
Interested parties may register through this NETL Business page to receive routine notification of new FOA opportunities.

Partnering with NETL

Summary

NETL actively seeks partners to:

- Collaborate on **research & development, and technology innovation through agreements (CRADAs, CFAs, etc.)**



Cooperative Research and Development Agreements

(CRADAs)



In May 2019, NETL formally launched a 10-year, \$100 million CRADA with ExxonMobil and the National Renewable Energy Laboratory (NREL) to explore cooperative research and development endeavors to advance groundbreaking low-emissions energy technologies toward commercial scale.

Cooperative Research and Development Agreements (CRADAs) allow for joint research and development performed by NETL and other participants. Background intellectual property (IP) protection is included for the parties and CRADA-developed IP is addressed. A CRADA offers participants the option for an exclusive license in a particular field of use for IP developed by NETL.

Cost sharing between NETL and the CRADA participant is essential.

Memorandums of Understanding

- **Memorandums of Understanding (MOUs) OR Memorandums of Agreement (MOAs)** are written agreements between NETL and other entities that outline collaboration between the parties.
- **An MOU or MOA is not considered a binding contract.** It cannot be used to obligate or commit funds or be used as the basis for the transfer of funds between the parties.
- Actual implementation of the understandings established by the MOU or MOA must be accomplished through a legally binding agreement, such as an Interagency Agreement, CRADA, or other appropriate agreement between the parties.

Recent MOUs with NETL:

City of Pittsburgh MOU & ORNL



NETL's Unsolicited Proposal Process



NETL receives Unsolicited Proposals for all of DOE:

- Application for support of an idea, method, or approach
- Submitted by an individual, business, or organization
- Based solely on the proposer's initiative rather than in response to a DOE solicitation
- Considered a non-competitive action

DOE may accept an Unsolicited Proposal if it:

- Demonstrates a unique and innovative concept or a unique capability
- Offers a concept or service not otherwise available to the Federal government
- Does not resemble a recent or current competitive solicitation

DOE Unsolicited Proposal Process: www.netl.doe.gov/business/unsolicited-proposals

Connect with NETL



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Small Business Proposals

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