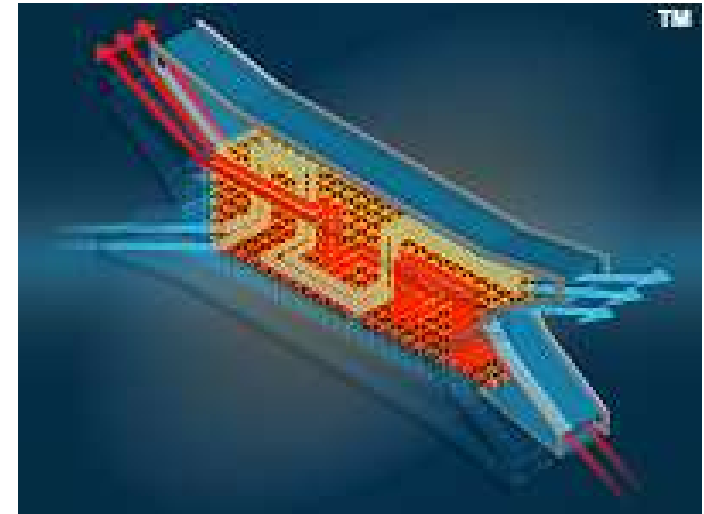


HITEMMP

Annual Technical Review

March 30th, 2022 – Atlanta, GA



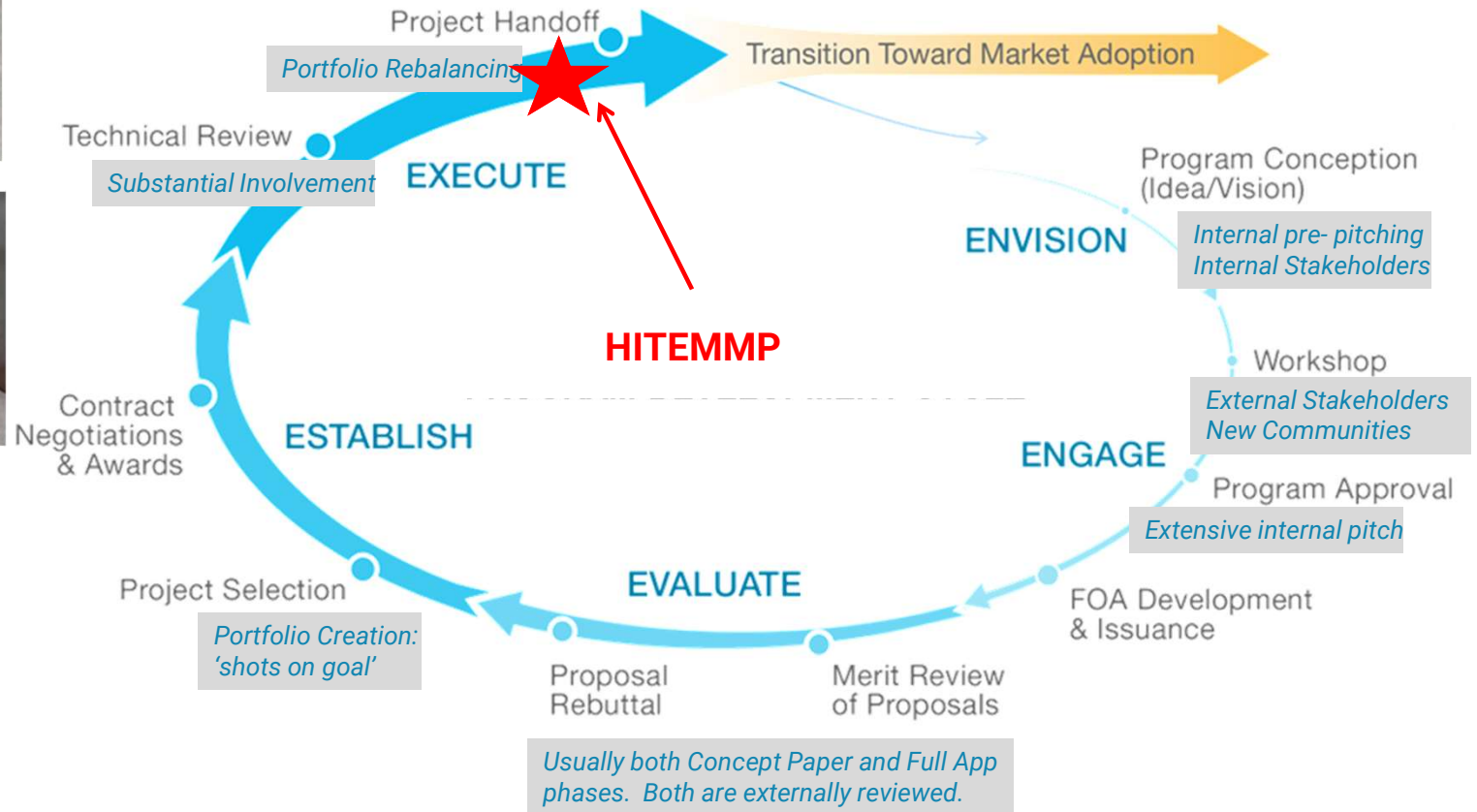
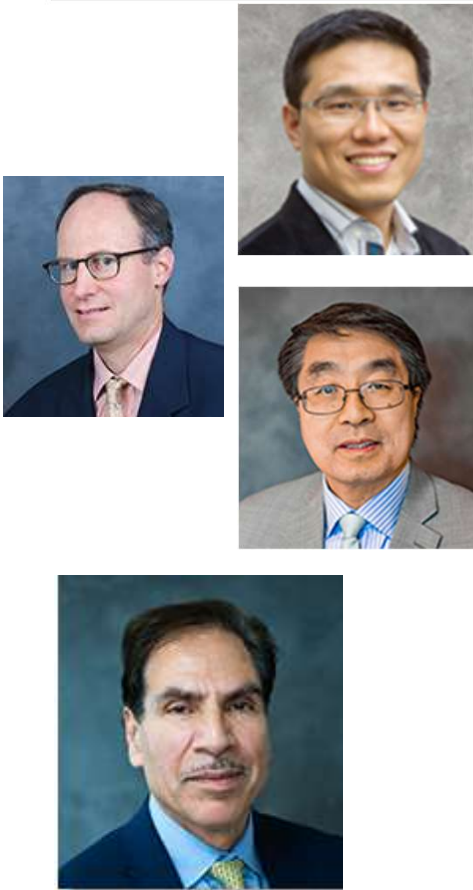
Isik C. Kizilyalli

Associate Director of Technology and Program Director
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Life of an ARPA-E Program



ARPA-E Mission

Goal 1: To enhance the economic and energy security of the United States through the development of energy technologies that—



Goal 2: To ensure that the United States maintains a technological lead in developing and deploying advanced energy technologies.



The 2022 ARPA-E Energy Innovation Summit has been **RESCHEDULED to May 23-25, 2022** remaining at Gaylord Rockies Resort and Convention Center in Denver, Colorado. The 2022 ARPA-E Energy Innovation Summit is planned to be an in-person event. Click [here](#) for the COVID-19 Policy Requirements. For information about your current Summit registration, please email ARPAE-Registration@eventPower.com.



OPEN Funding Opportunity Announcements (FOAS) support the development of potentially disruptive new technologies across the full spectrum of energy applications

OPEN 2009

41 projects

\$176 million investment

10 technical areas

OPEN 2012

66 projects

\$130 million investment

11 technical areas

OPEN 2015

41 projects

\$125 million investment

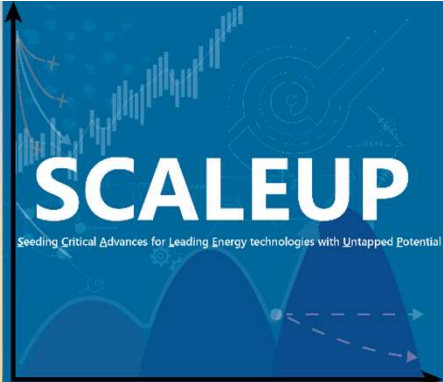
10 technical areas

OPEN 2018

77 projects

\$199 million investment

13 technical areas



First-of-its-kind initiative at ARPA-E to translate previously funded ARPA-E technologies to commercial viability

10 Awardees

*

\$70+ million

*

Takes the tech de-risked in the lab to the next step

*

SCALEUP selectees must partner with potential customers, end-users, suppliers, etc.

Reporting Requirements

- ▶ U.S. Manufacturing Plan – Submitted with the application
- ▶ IP and Data Management Plans – Submitted within 6 weeks of award
- ▶ Subject Invention and Utilization Requirements – Continuing obligation to submit any changes or updates

Subject Inventions

How and when are subject inventions reported?

At DOE, contractors report most subject inventions via iEdison (iEdison.gov), an interagency web-based repository for invention and patent data. Some awardees may need assistance in obtaining an account and learning how to upload the correct data. DOE IP Counsel can help.

Subject invention reporting timeframes are found in each contract. Those timeframes differ depending on whether contractor is a large business or a small business.

How to recognize a subject invention

Potential subject inventions may be discussed in presentations, Quarterly Reports, Final Technical Reports, and other publications. Phrases that should trigger the question "Is this a subject invention?"

- "We filed a patent application..."
- "We solved [the problem] by..."
- "We proved the concept..."
- "We built a prototype."
- "We developed a new process..."
- "We achieved an improvement of X by doing Y."
- "We're publishing in..."

May 16, 2022

DOE IP Counsel

The Office of the Assistant General Counsel for Technology Transfer and Intellectual Property (GC-62) is responsible for providing legal counsel to Departmental elements on all matters relating to intellectual property.

DOE IP Counsel, both GC-62 and Field Patent Counsel, assists in ensuring compliance with subject invention reporting – ensuring that the Government's rights in subject inventions are preserved while providing contractors with clean title to commercialize the invention.

Proper subject invention reporting not only gives DOE and its programs rights in the inventions, it allows us to easily gather ROI data.

Read inside to find out more about subject inventions.

This pamphlet provides general information and should not be relied upon as legal advice. DOE IP Counsel only represents DOE. All others, including contractors, should consult their own attorneys.

DOE IP Counsel



Subject Inventions

Join the Team that is Transforming the Energy of Tomorrow

PROGRAM DIRECTOR



- ✓ Program development
- ✓ Active project management
- ✓ Thought leadership
- ✓ Explore new technical areas

TECHNOLOGY-TO-MARKET ADVISOR



- ✓ Business development
- ✓ Technical marketing
- ✓ Techno-economic analyses
- ✓ Stakeholder outreach

FELLOW



- ✓ Independent energy technology development
- ✓ Program Director support
- ✓ Organizational support

Learn more and apply: www.arpa-e.energy.gov/jobs or arpa-e-jobs@hq.doe.gov.



If it works...

will it matter?

Dr. Isik C. Kizilyalli

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U.S. DEPARTMENT OF
ENERGY

www.arpa-e.energy.gov

ARPA-E Programs: Active Management

“Substantial Involvement” + Active Portfolio Management

- Negotiate both technical/market milestones and timing up front
- PDs + their team (T2M Advisor, Tech SETAs) are very active advisors in projects
- Quarterly reviews: evaluate technical, cost, and schedule milestones
- Assist project teams on both tech and market needs

High Risk = Many Shots at Goal, Many will Fail!

- Flexibility to work with project teams to pivot technical approaches
- Flexibility to cancel projects
- Flexibility to plus-up other projects

It's all about meeting the goals of the Program.

Funding Models

- 1: “Focused” programs – PD Driven
- 2: OPEN FOA – every three years
- 3: est. 2019: Rolling FOA – an ongoing flexible ‘mini-FOA’, for whitespace exploration, seedlings, resource teams for focused programs, etc.
- 4: est. 2020: SCALEUP FOA –Addresses the ‘second’ valley of death. Open to current/past performers with patents – big focus on US Manufacturing.

Typical ‘program’ ~3 years ~\$35 M. Typical ‘project’ \$1-4 M.
Many programs are not typical.

ARPA-E may not release FOAs in advance of Appropriations.

Given length of time needed for project solicitation, selection, and negotiation, ARPA-E’s goal is to obligate all funds in the year following appropriation.