

# **Welcome to the Workshop!**

## **A bit about ARPA-E...**

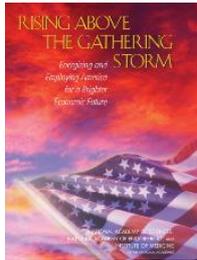
Jennifer Gerbi

Deputy Director for Technology

November 20, 2020

# ARPA-E History

In 2007, The National Academies recommended Congress establish an Advanced Research Projects Agency within the U.S. Department of Energy to fund advanced energy R&D.



*American Recovery & Reinvestment Act Signed* – Providing ARPA-E its first appropriations of \$400 million, which funded ARPA-E's first projects



2007

2009

2020

*Rising Above the Gathering Storm Published* - warning policymakers that U.S. advantages in science and technology had begun to erode

*America COMPETES Act Signed* – authorizing the creation of ARPA-E



850+ Awards  
54 Programs

Current Funding:  
**\$425M**  
(FY20)

# ARPA-E Mission

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**Goal 1:** Overcome long-term and high-risk technological barriers in the development of energy technologies that...



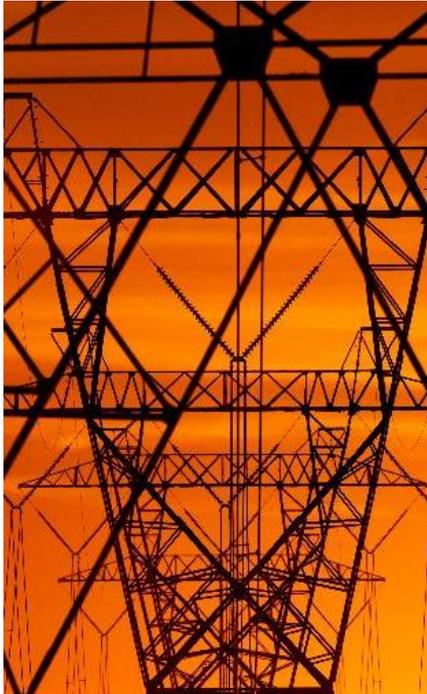
**Goal 2:** Technological lead in developing and deploying advanced energy tech.

## Means:

- ▶ Identify and promote revolutionary advances in fundamental and applied sciences;
- ▶ Translate scientific discoveries and cutting-edge inventions into technological innovations; and
- ▶ Accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.

# What Problem Should We Solve?

Program Director driven, not top-down driven. No Roadmaps.



Resilient energy infrastructure for the 21<sup>st</sup> century



Affordable, sustainable energy for all

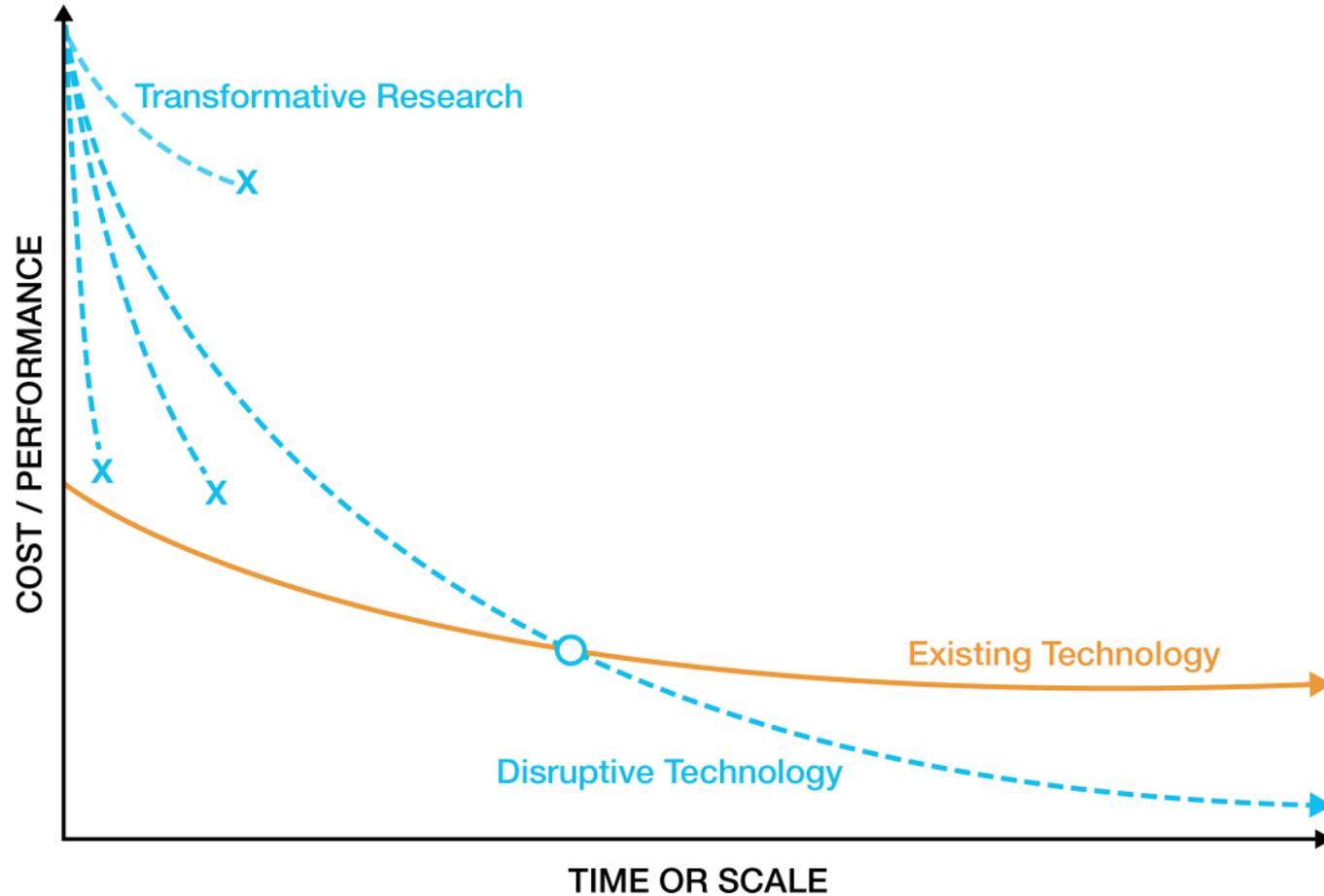


U.S. economic development



American leadership in science and technology

# High Risk. High Reward.



***If it works...***

***will it matter?***

# ARPA-E Program Portfolio

Active

## ELECTRICITY GENERATION & DELIVERY



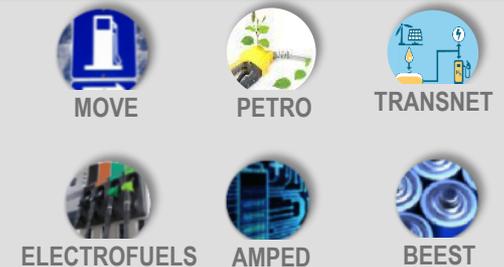
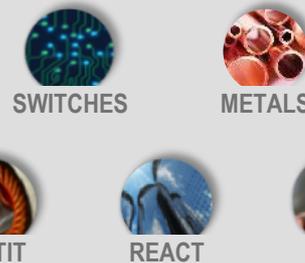
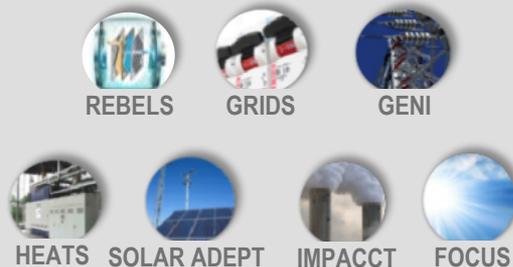
## EFFICIENCY



## TRANSPORTATION

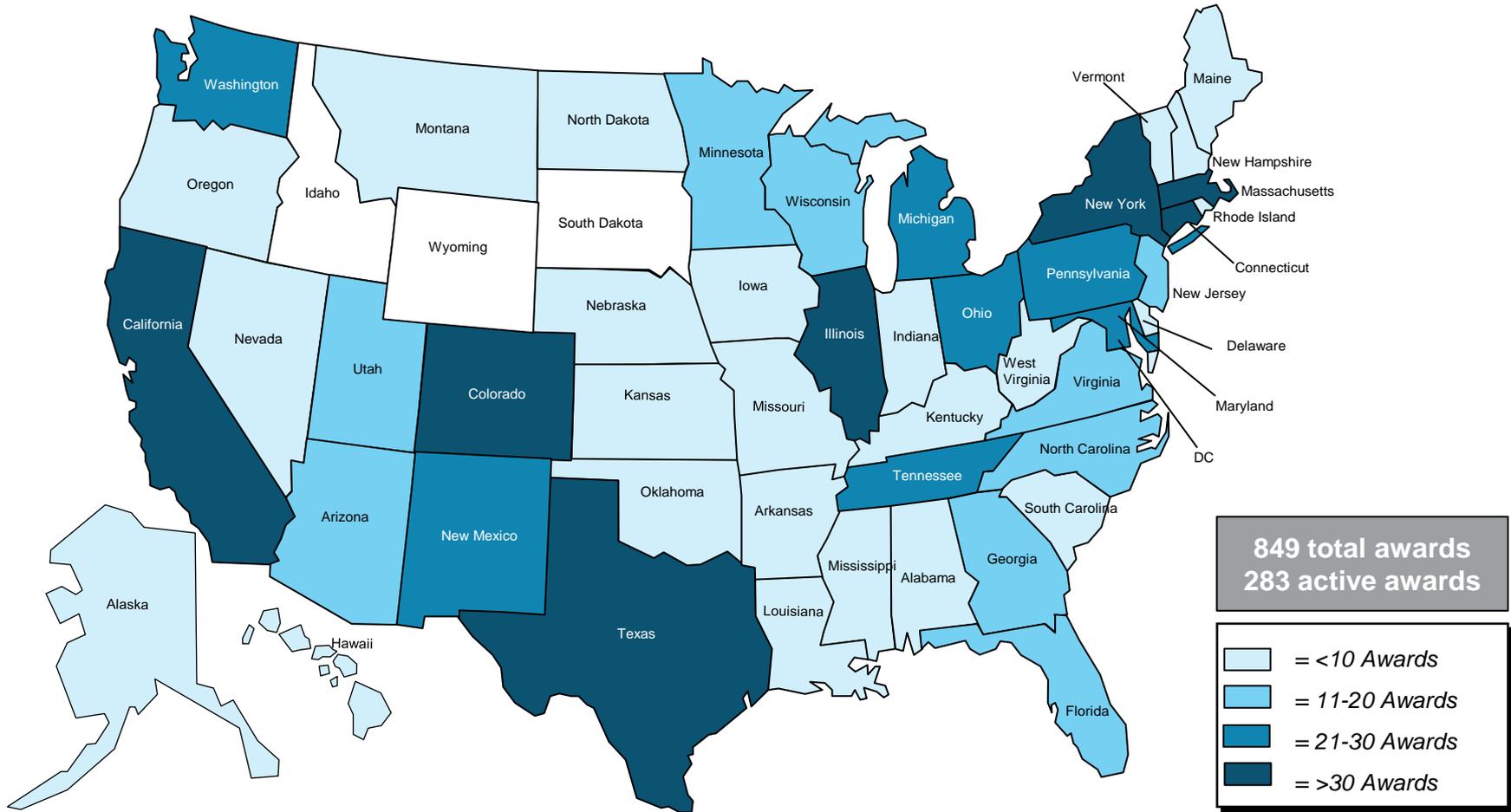


Alumni



**OPEN 2009, 2012, 2015 & 2018 Solicitations  
Complement Focused Programs**

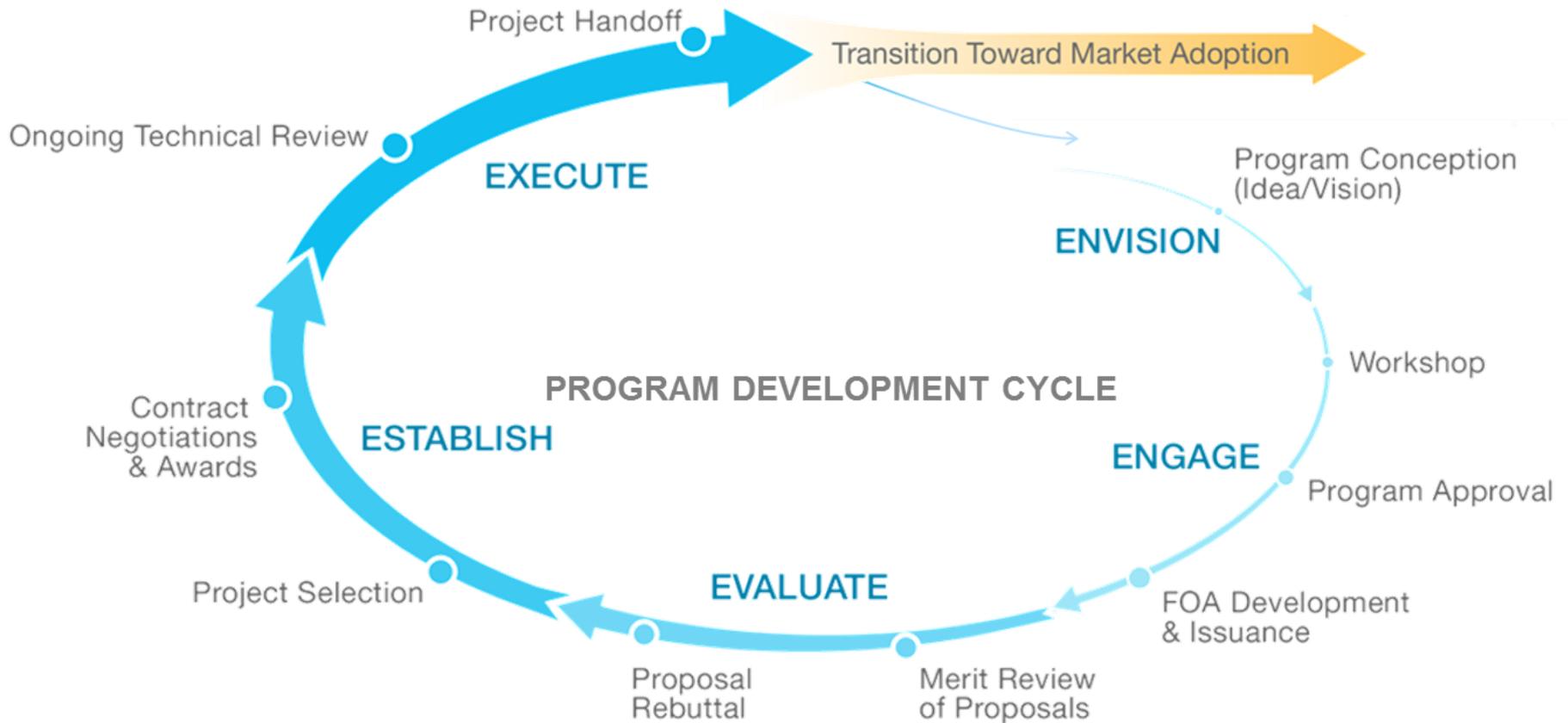
# ARPA-E Awards by State



# Built on DARPA foundation



# Technology Acceleration Model



# ARPA-E Impact Indicators 2020

Since 2009  
ARPA-E has  
provided

**\$2.4 billion**

in R&D funding to  
more than **950 projects**



**166 Projects** have  
attracted more than

**\$3.3 billion**

in private-sector follow-on funding



**86 companies**

formed by  
**ARPA-E  
projects**



**229 projects**

have **partnered**  
**with other**  
**government**  
**agencies**  
for further  
development



**4,021**

peer-reviewed  
**journal articles**  
from ARPA-E  
projects



**609 patents**

issued by U.S.  
Patent and  
Trademark Office



As of September 2020

# Work on a Mission that Matters

Learn more and apply: [www.arpa-e.energy.gov/jobs](http://www.arpa-e.energy.gov/jobs) or [arpa-e-jobs@hq.doe.gov](mailto:arpa-e-jobs@hq.doe.gov).

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Ensure U.S. Energy and Economic Security



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