

# U.S. Department of Energy

## Advanced Research Projects Agency - Energy

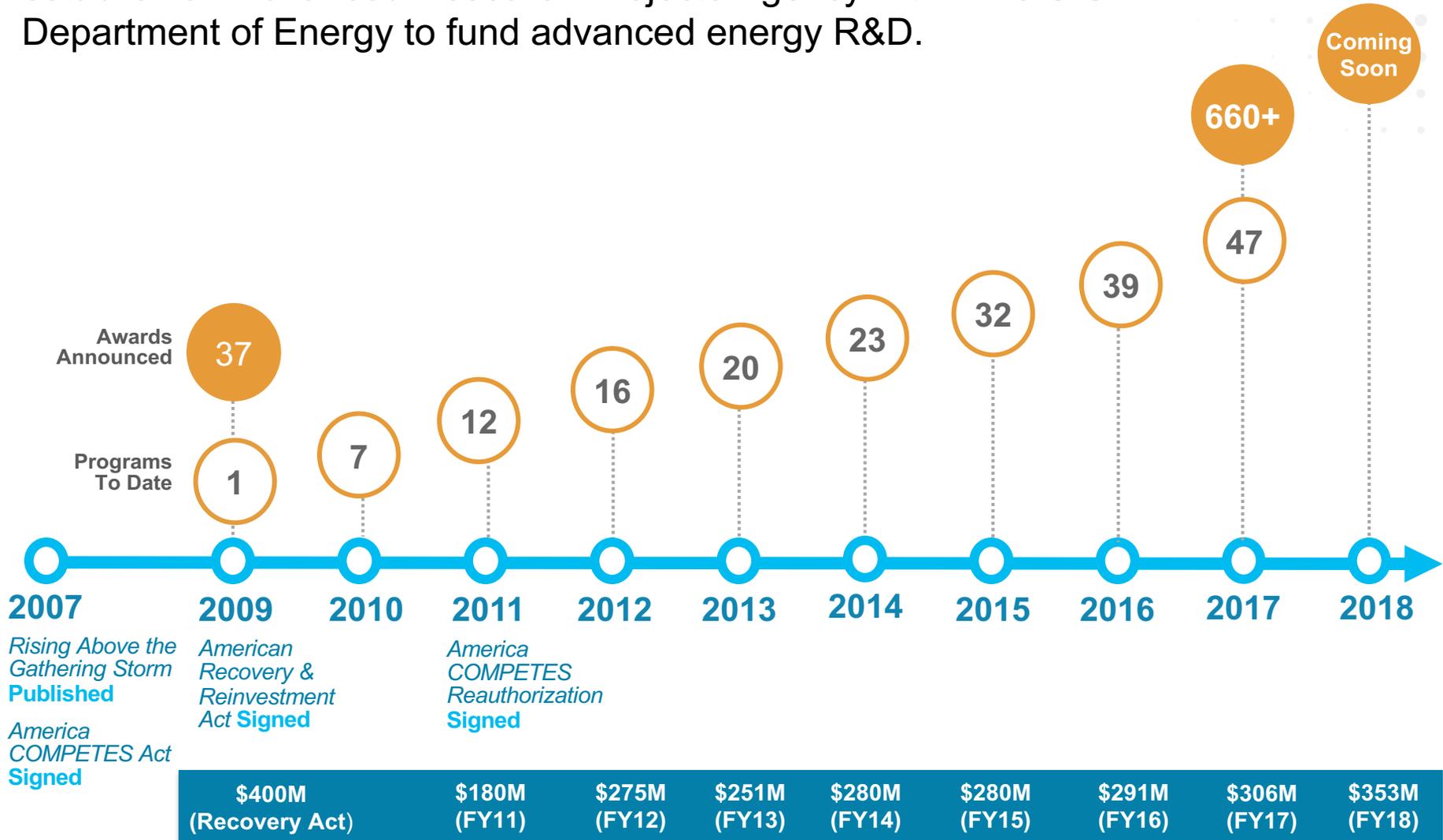
Jennifer Gerbi  
Associate Director of Technology, ARPA-E  
Jun 17, 2019

[www.arpa-e.energy.gov](http://www.arpa-e.energy.gov)



# ARPA-E History – we are young

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.



# ARPA-E Mission

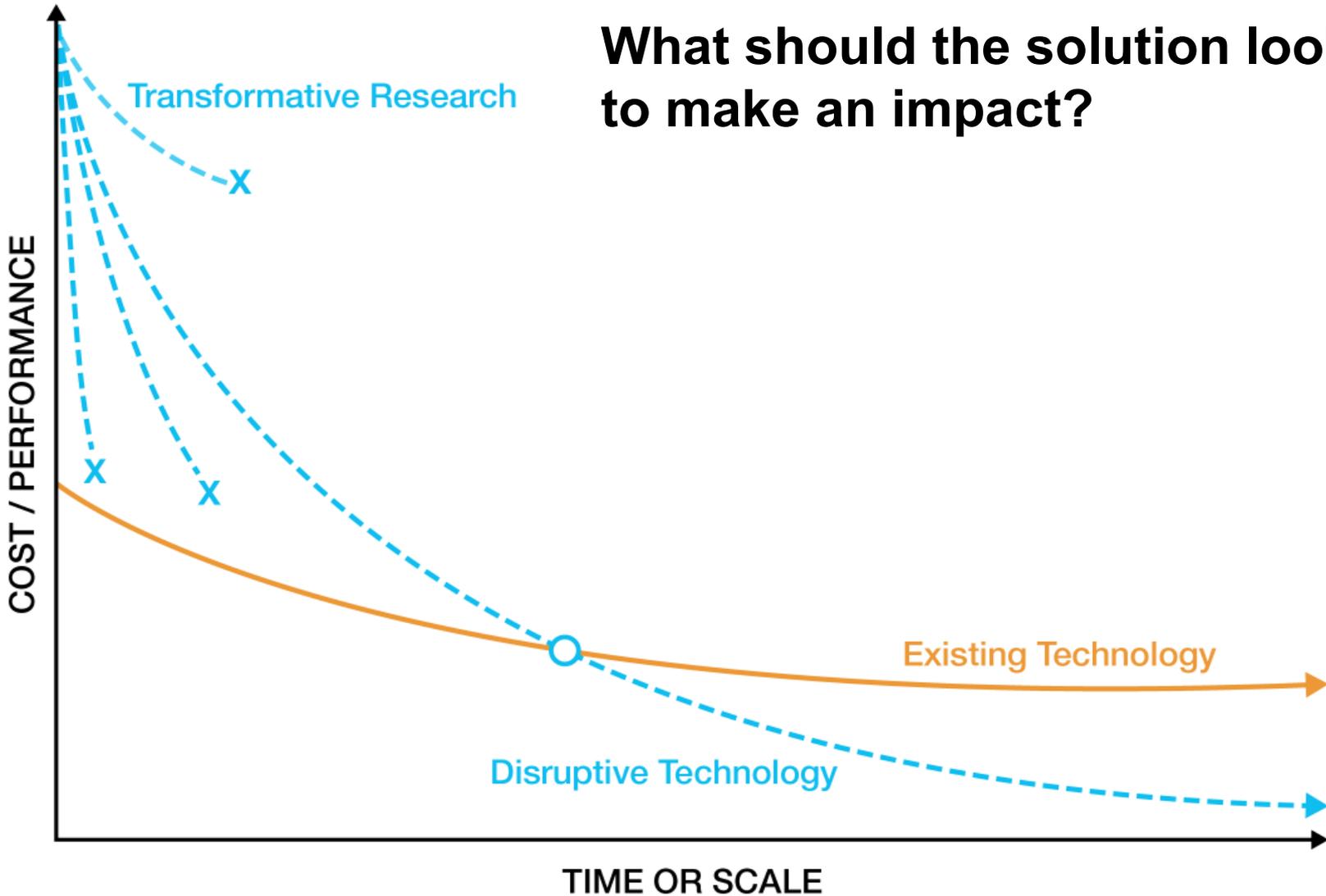
Overcome long-term and high-risk technological barriers  
in the development of energy technologies

←  **Ensure U.S. Technological Lead & U.S. Economic and Energy Security** →



What problem should be solved?

What should the solution look like to make an impact?

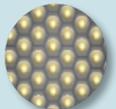
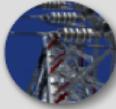


# ARPA-E – we'll do anything *(almost)*

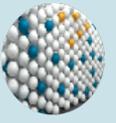
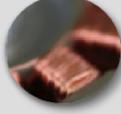
Active

Alumni

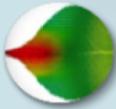
## ELECTRICITY GENERATION & DELIVERY

 INTEGRATE	 GRID DATA	 IONICS
 GENSETS	 NODES	 MOSAIC
 ALPHA	 FOCUS	 CHARGES
 REBELS	 GRIDS	 GENI
 HEATS	 SOLAR ADEPT	 IMPACCT

## EFFICIENCY

 SENSOR	 CIRCUITS	 PNDIODES
 ENLITENED	 SHIELD	 ROOTS
 MONITOR	 ARID	 DELTA
 SWITCHES	 METALS	
 BEETIT	 REACT	 ADEPT

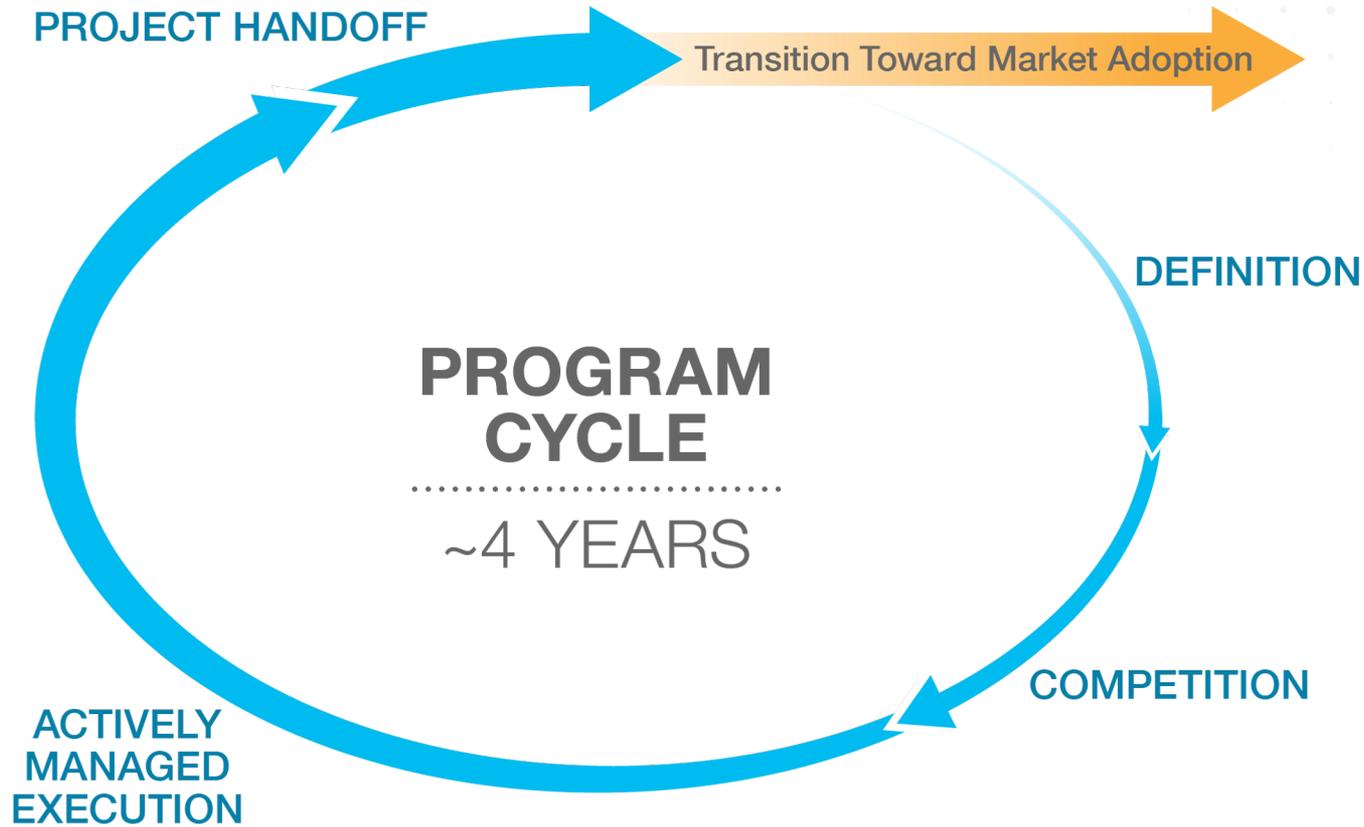
## TRANSPORTATION

 MARINER	 REFUEL	
 NEXTCAR	 TRANSNET	
 TERRA	 RANGE	 REMOTE
 MOVE	 PETRO	
 ELECTROFUELS	 AMPED	 BEEST

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

# Technology Acceleration Model

---



We have very FLEXIBLE funding vehicles

We are all about bringing together diverse and unusual communities

We are pursuing more PILOT-type validation for key projects (see [bit.ly/PILOTRFI](https://bit.ly/PILOTRFI))

# ARPA-E Impact Indicators

Since 2009  
ARPA-E has  
provided

**\$1.8 billion**

in R&D funding to  
more than **660 projects**



**136 Projects** have  
attracted more than

**\$2.6 billion**

in private-sector follow-on funding



**71 projects**

have formed  
**new  
companies**



**109 projects**

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



**1,634**

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



**248 patents**

issued by U.S.  
Patent and  
Trademark Office



# ARPA-E Recruitment Opportunities



*Want to work at ARPA-E? There may be a role for you!*

## 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

## PhD Fellow

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



U.S. DEPARTMENT OF  
**ENERGY**

<https://arpa-e.energy.gov>