

# **Panel: Evaluating the Impacts of Energy Innovation Policies**

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# ARPA-E Mission – high risk, high reward energy R&D

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



REDUCE  
IMPORTS



IMPROVE  
EFFICIENCY



REDUCE  
EMISSIONS



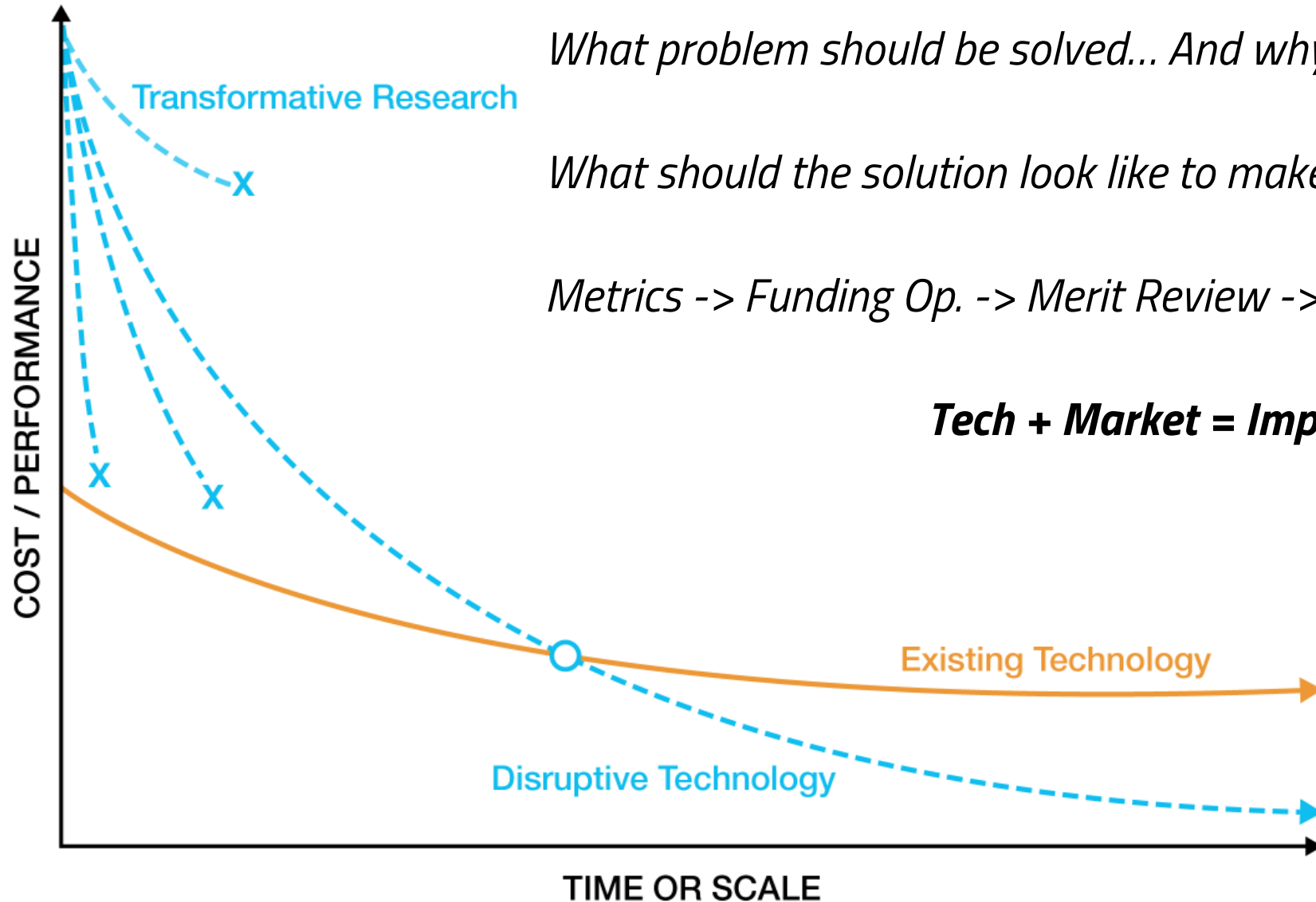
IMPROVE THE MANAGEMENT,  
CLEAN-UP, AND DISPOSAL OF  
RADIOACTIVE WASTE AND SPENT  
NUCLEAR FUEL



IMPROVE THE RESILIENCE,  
RELIABILITY, AND SECURITY OF  
ENERGY INFRASTRUCTURE

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

# We are high-risk, high reward



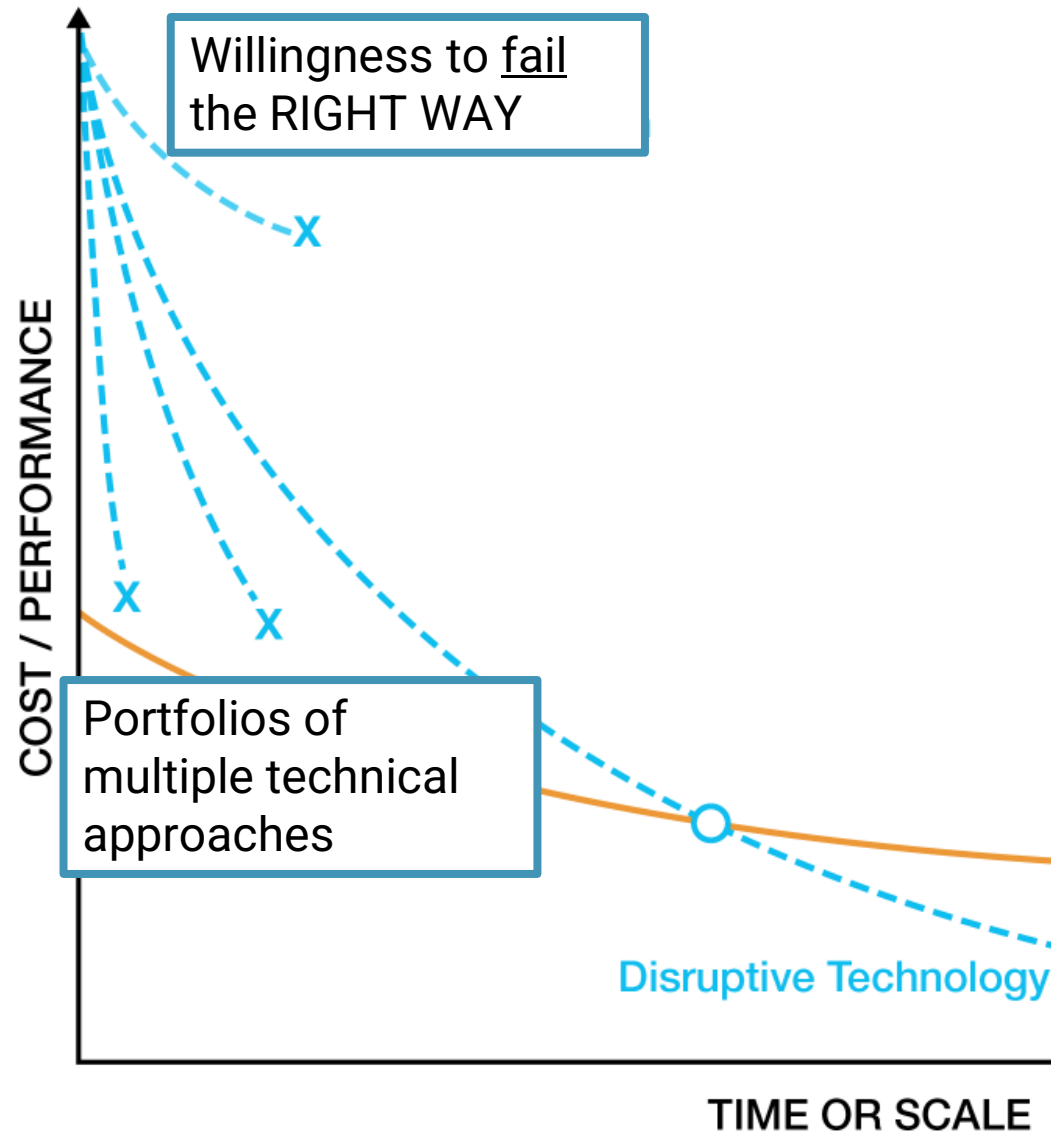
*What problem should be solved... And why?*

*What should the solution look like to make an impact?*

*Metrics -> Funding Op. -> Merit Review -> Close Involvement*

***Tech + Market = Impact***

# Characteristics of a risk tolerant agency



- Bottom-up decision making
- No Roadmaps
- Term limits + Freedom
- World class talent
- Lean and Flat Organization – Trust and Empowerment
- Market integrated with Tech
- Peer Pressure Testing
- Extensive Outreach
- Close Involvement + Milestones

# ARPA-E Impact Indicators 2021

Since 2009  
ARPA-E has  
provided

**\$2.93 billion**

in R&D funding to  
more than **1,270 projects**



**183 projects**

have attracted  
more than

**\$7.6 billion**

in private-sector follow-on funding



**109 companies**

formed by  
**ARPA-E  
projects**



**17 exits**

market valuations worth

**\$19.4 billion**

from mergers, acquisitions, and IPOs



**266 projects**

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



**4,871**

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



**789 patents**

issued by U.S.  
Patent and  
Trademark Office



**253 licenses**

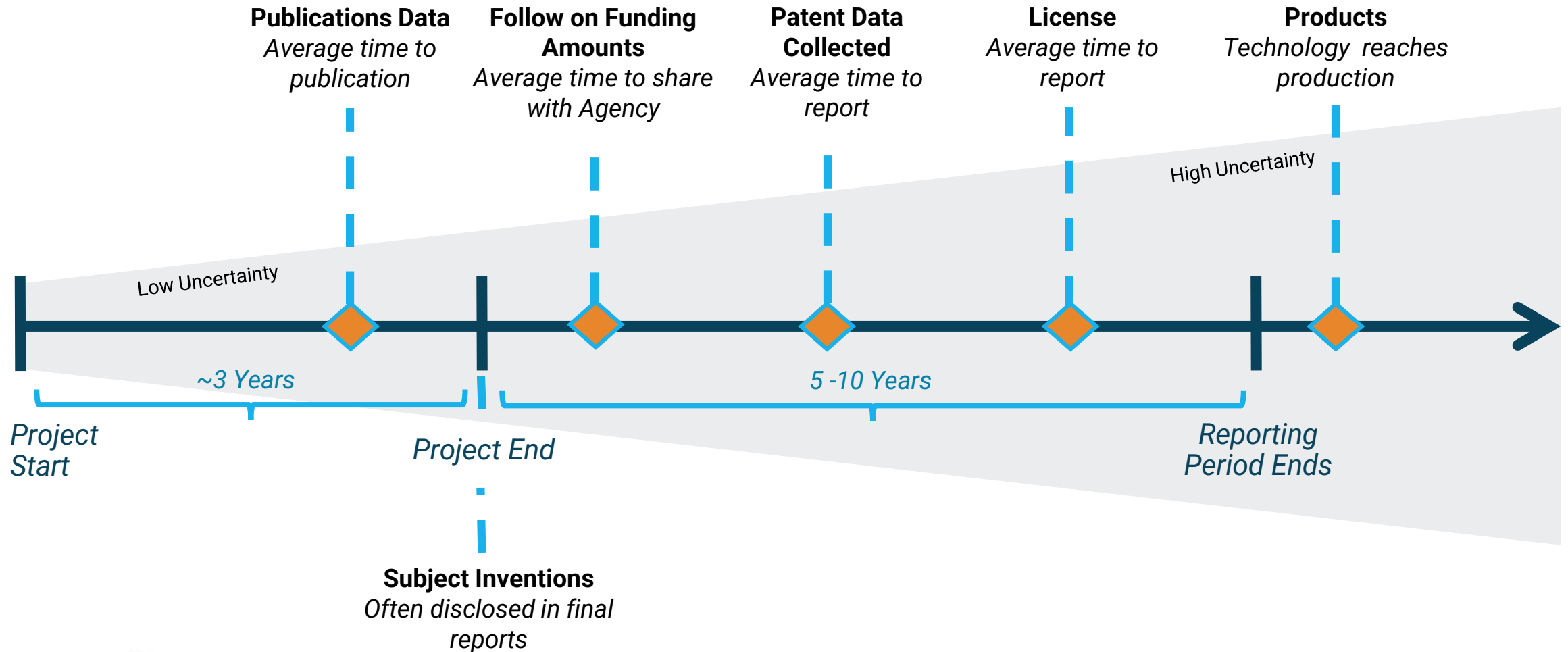
reported from  
ARPA-E projects



As of September 2021

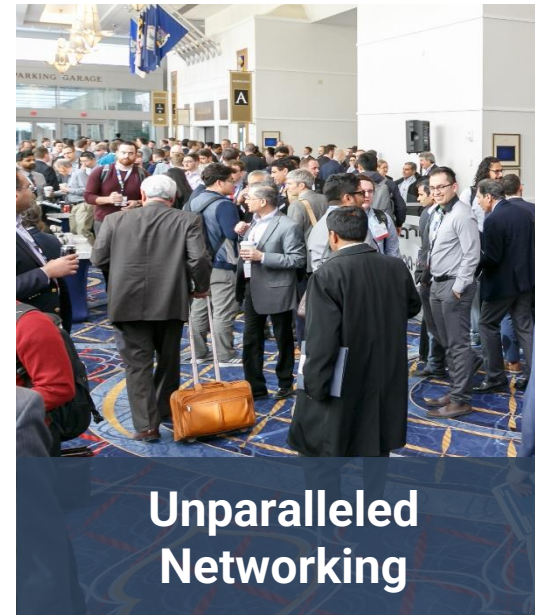
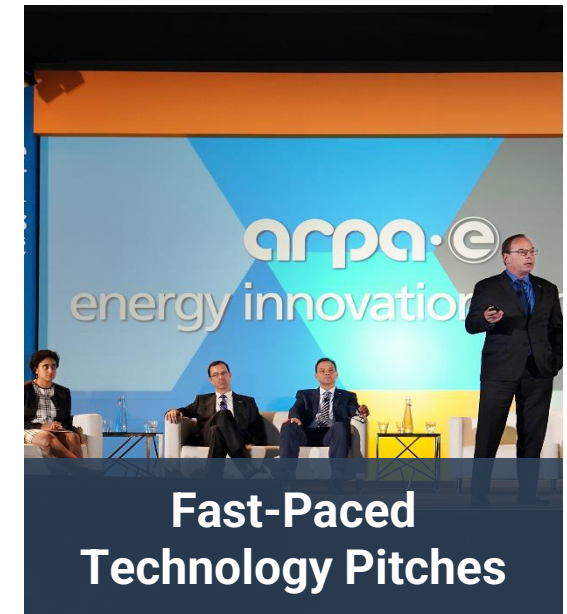
# ARPA-E Outcome Data Overview

## Reporting Required





energy innovation summit



[arpae-summit.com](http://arpae-summit.com)

**March 14-16, 2022 | Denver, Colorado**



U.S. DEPARTMENT OF  
**ENERGY**

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

# Life of an ARPA-E Program

