

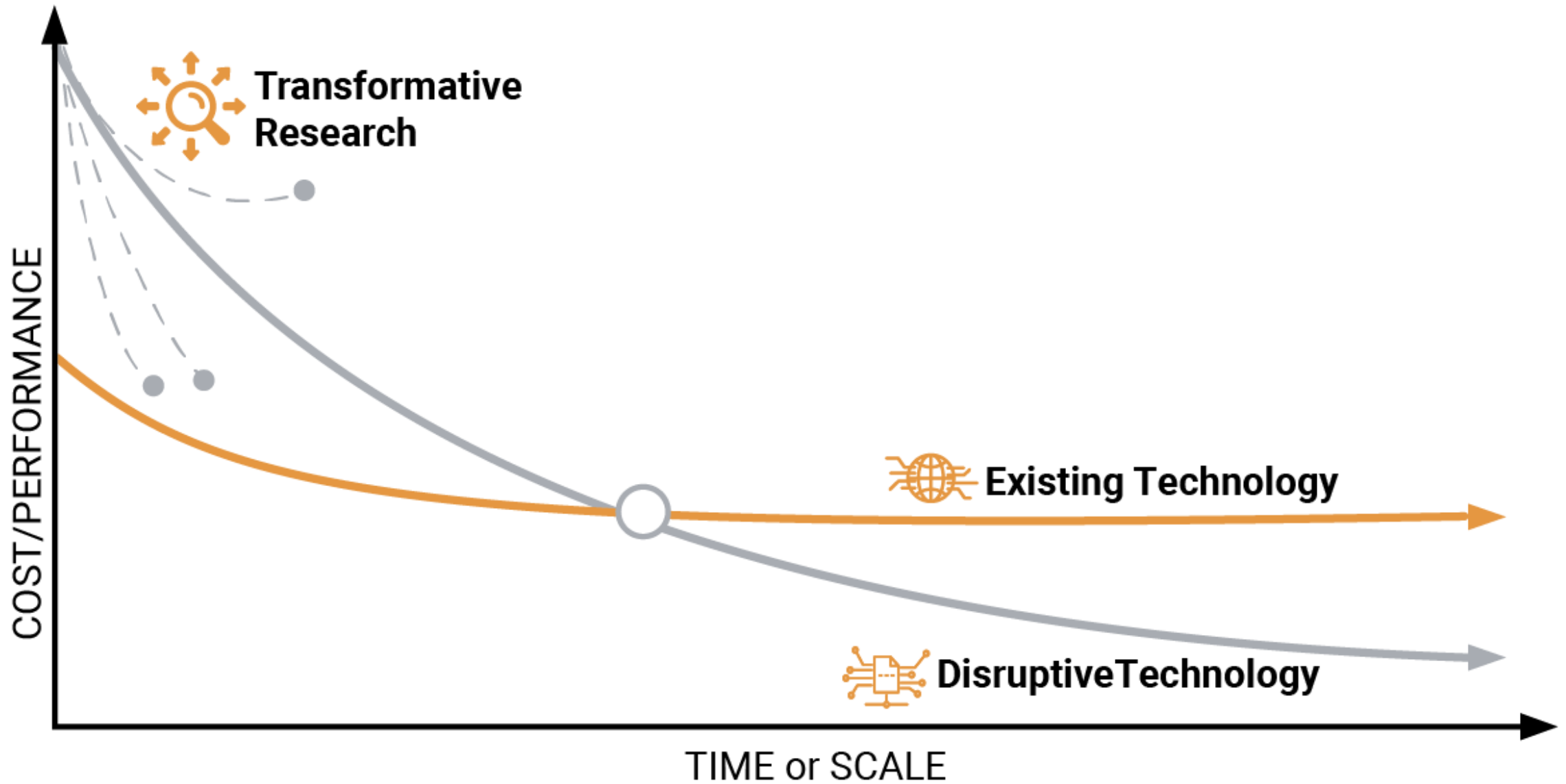
INTRODUCTION TO ARPA-E

Dr. Jenifer Shafer
Associate Director for Technology

Tuesday, November 14th, 2023

ARPA-E Mission





ARPA-E Impact Indicators 2023

Since 2009
ARPA-E has provided
\$3.58 billion
in R&D funding to
more than **1,500 projects**
+ 42 selected projects



212 projects
have attracted more than
\$11.5 billion
in private-sector follow-on funding



149 companies
formed by
ARPA-E projects



27 exits
market valuations worth
\$21.8 billion
from mergers, acquisitions, and IPOs



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



6,797
peer-reviewed
journal articles
from ARPA-E
projects



1,039
patents
issued by
U.S. Patent and
Trademark Office



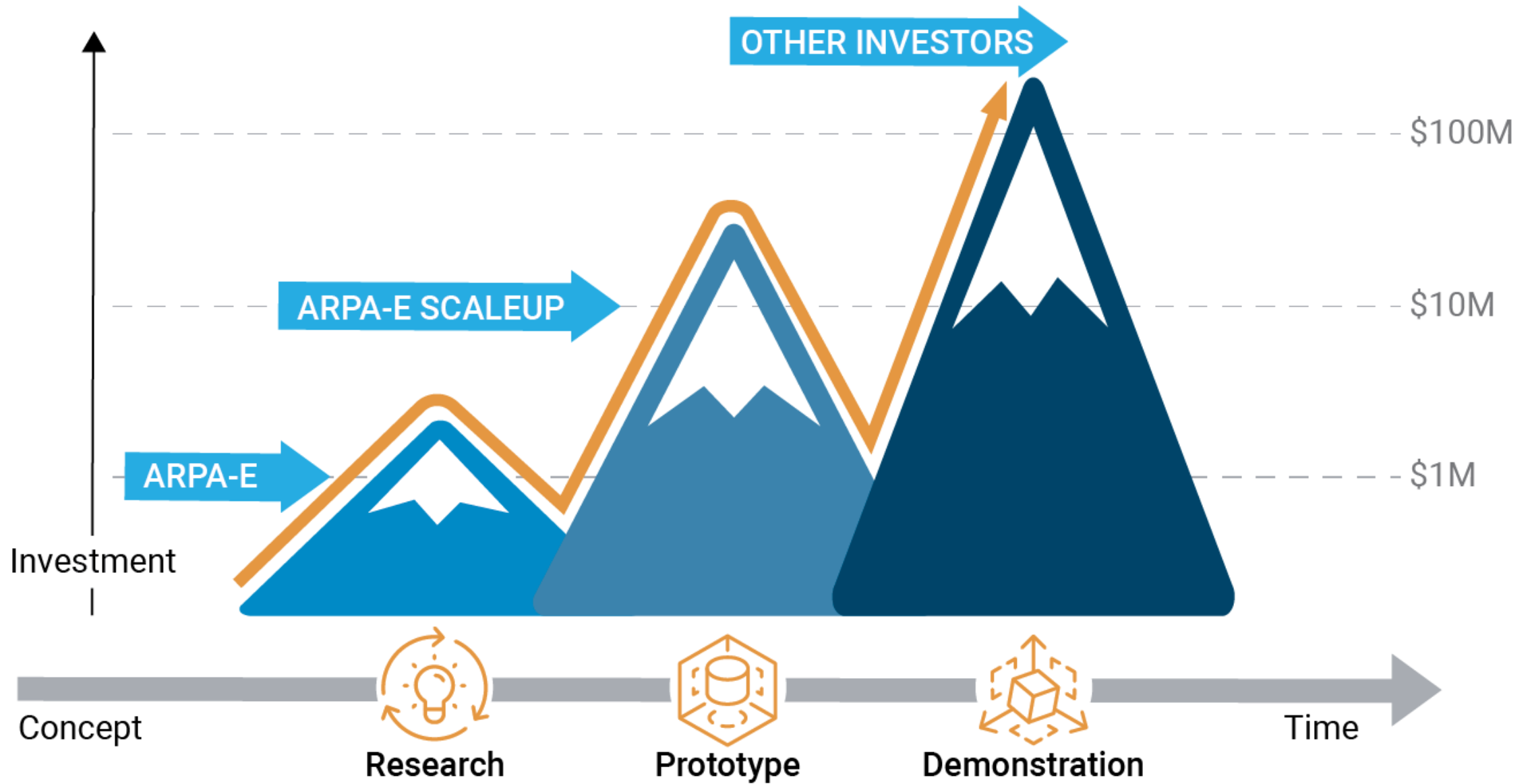
323
licenses
reported from
ARPA-E projects

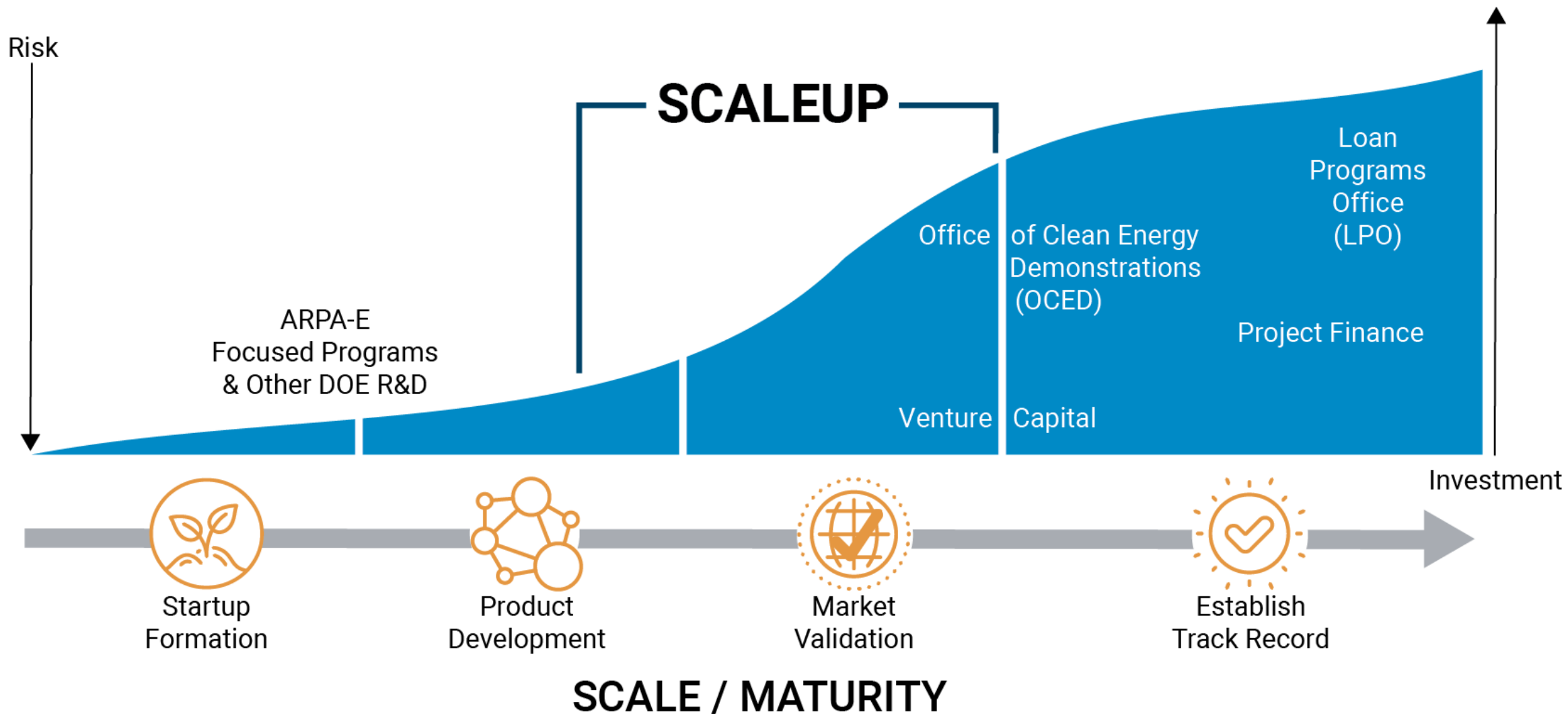


As of July 2023

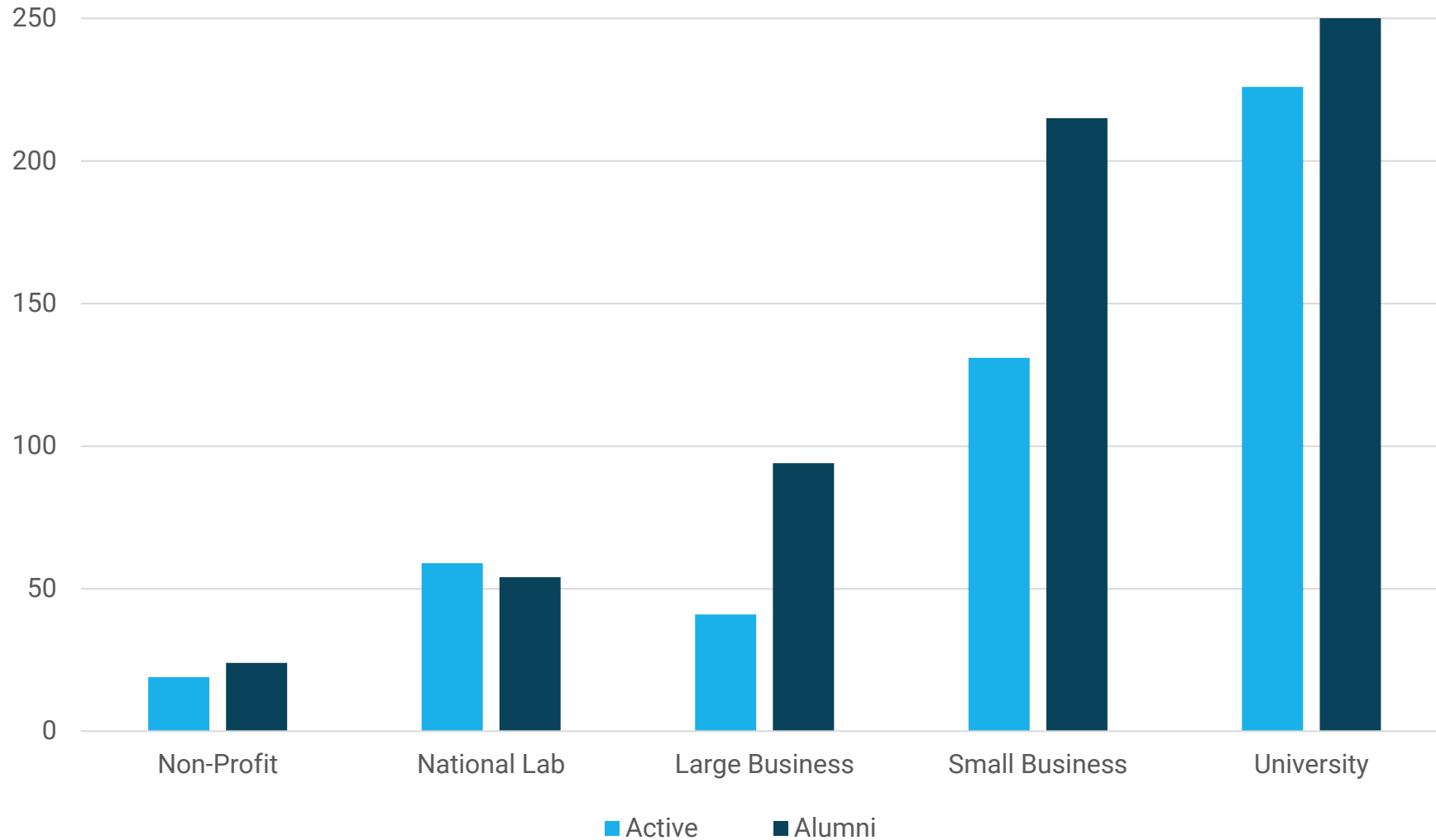
Built on DARPA foundation, but with key differences...







ARPA-E Projects by Lead Organization Type



ARPA-E Program Portfolio

	ELECTRICITY GENERATION & DELIVERY	EFFICIENCY	TRANSPORTATION	
Active	GOPHURRS CURIE ONWARDS SHARKS GAMOW PERFORM GEMINA BETHE ATLANTIS DAYS MEITNER INTEGRATE IONICS GRID DATA NODES GENSETS	SEACO2 <i>(new)</i> MINER <i>(new)</i> HESTIA <i>(new)</i> REMEDY FLECCS REPAIR DIFFERENTIATE BREAKERS HITEMMP SENSOR CIRCUITS PNDIODES COOLERCHIPS ENLITENED ROOTS SHIELD	EVS4ALL ECOSYNBIO ULTIMATE ASCEND REEACH SMARTFARM MARINER REFUEL NEXTCAR RANGE	
	Alumni	MOSAIC ALPHA CHARGES REBELS FOCUS SOLAR ADEPT HEATS GENI GRIDS IMPACCT	ARID MONITOR DELTA SWITCHES METALS REACT BEETIT ADEPT	TERRA REMOTE TRANSNET AMPED MOVE PETRO ELECTROFUELS BEEST
		+ULTRAFAST	+ROSIE	+PROPEL-1K
	+ OPEN 2009, 2012, 2015, 2018, & 2021 Solicitations + Seedlings, Competitions, Complementary Exploratory Topics + SCALEUP 2019 & 2021			

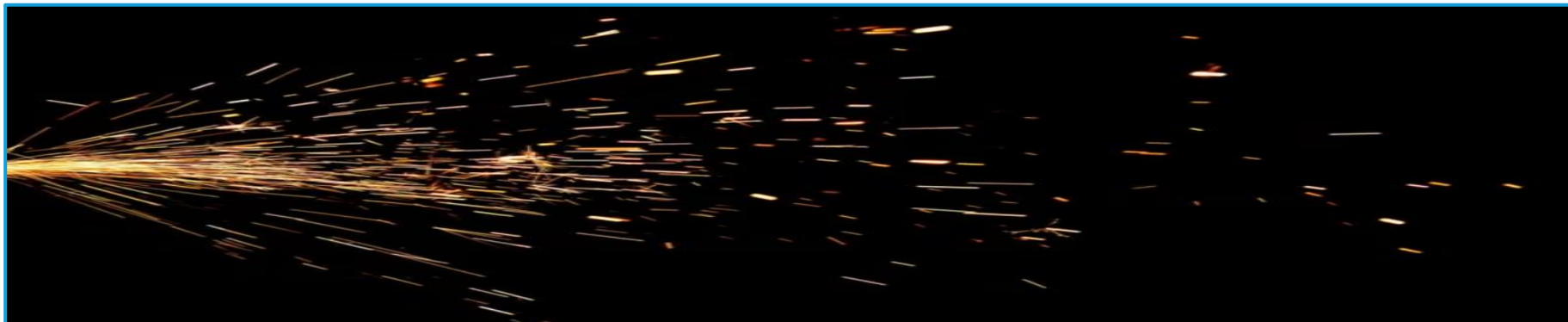
SPARKS – A New Program!

Spurring **P**rojects to **A**dvance energy **R**esearch and **K**nowledge **S**wiftly

provides a rolling opportunity for the *rapid* support of early-stage applied research with the *potential for disruptive changes* in energy tech

Available Funding: ≤\$500k per concept
Period of Performance: ≤18 months

Engagement with Program Directors prior to submission is highly encouraged





OPEN Programs

support 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

OPEN 2021

68 projects

\$175 million investment

13 technical areas



SCALEUP

Seeding Critical Advances for Leading Energy technologies with Untapped Potential

Supports previously funded ARPA-E technologies to commercial viability

*

Enables further technology de-risking of pre-production prototypes

*

Encourages small business, company, and industry participation

*

SCALEUP 2019

9 Awardees – \$70 million

*

SCALEUP 2021

8 awardees - \$100M available

If it works...

will it matter?

SAVE THE DATE



energy innovation summit

May 22-24, 2024

Dallas, Texas

www.ARPAAE-Summit.com

THANK YOU!



U.S. DEPARTMENT OF
ENERGY

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