



Solar Beyond Grid Parity Workshop: Introduction to ARPA-E

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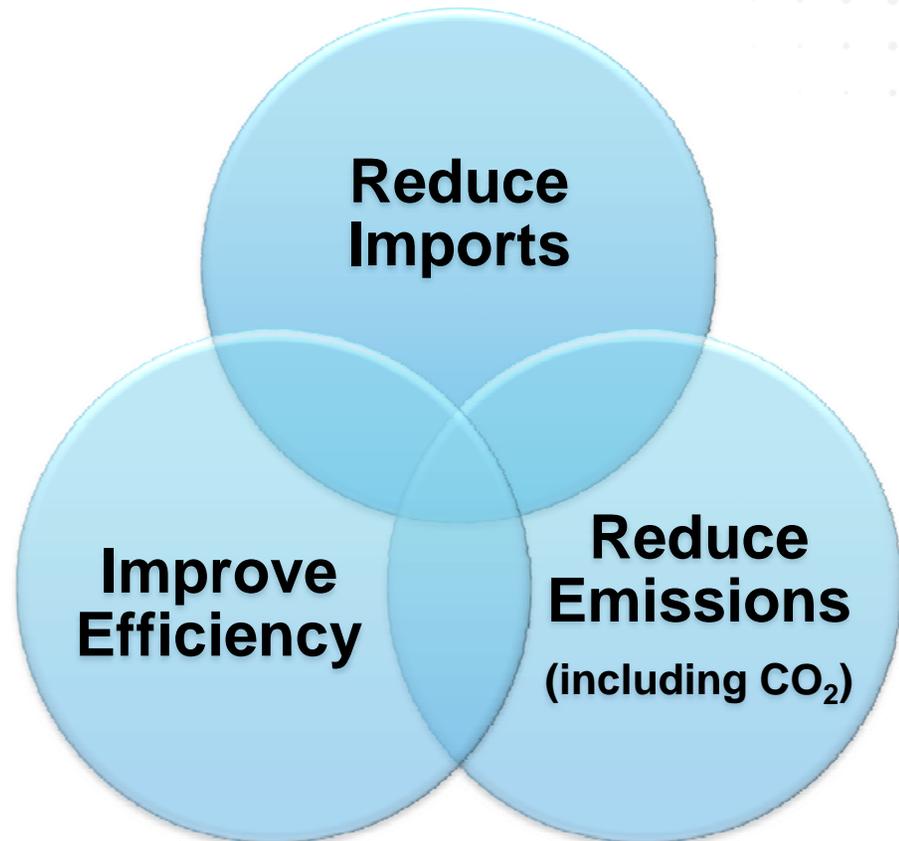
April 11, 2013

The ARPA-E Mission

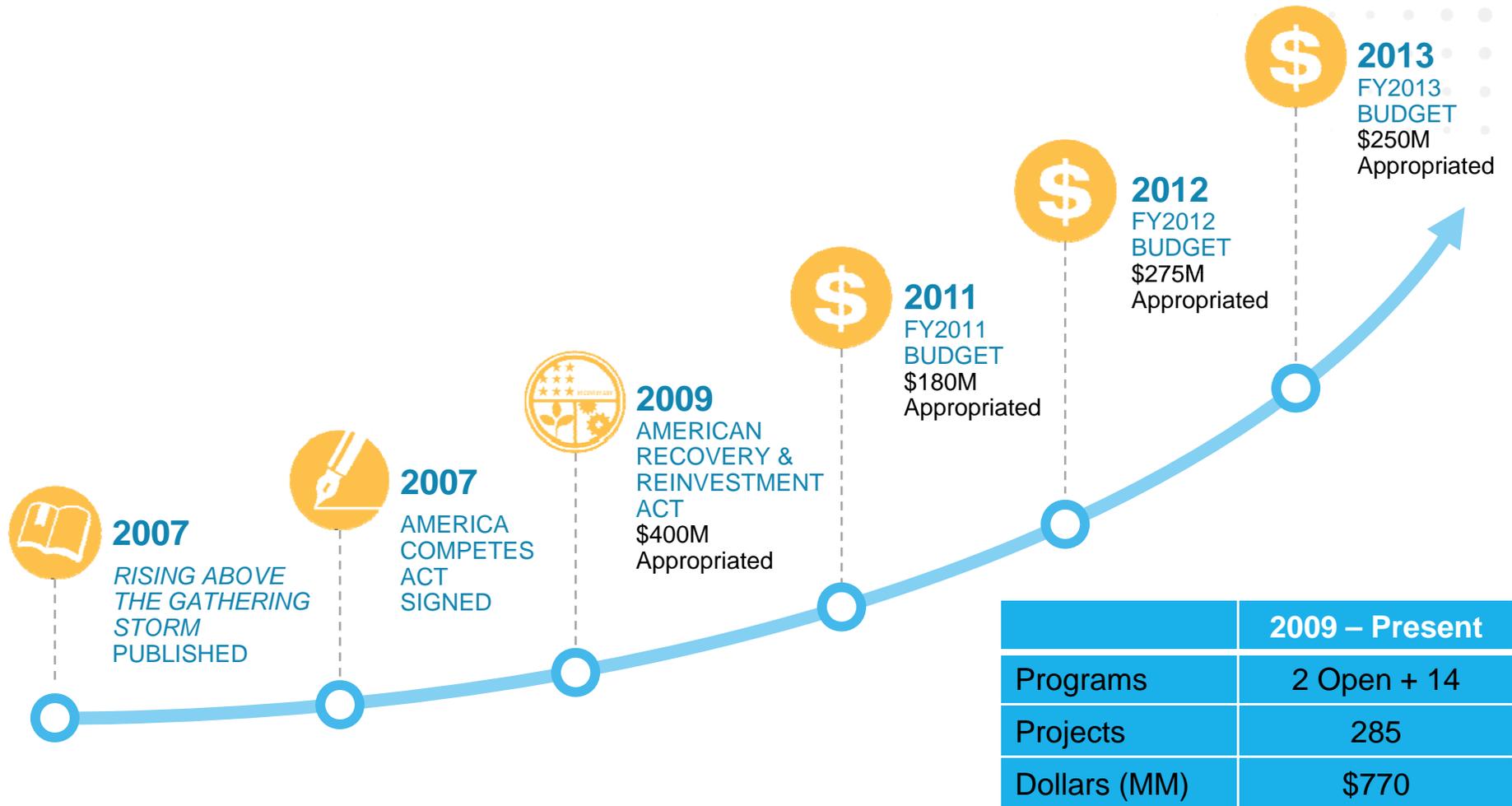
Catalyze and support the development of transformational, high-impact energy technologies

Ensure America's

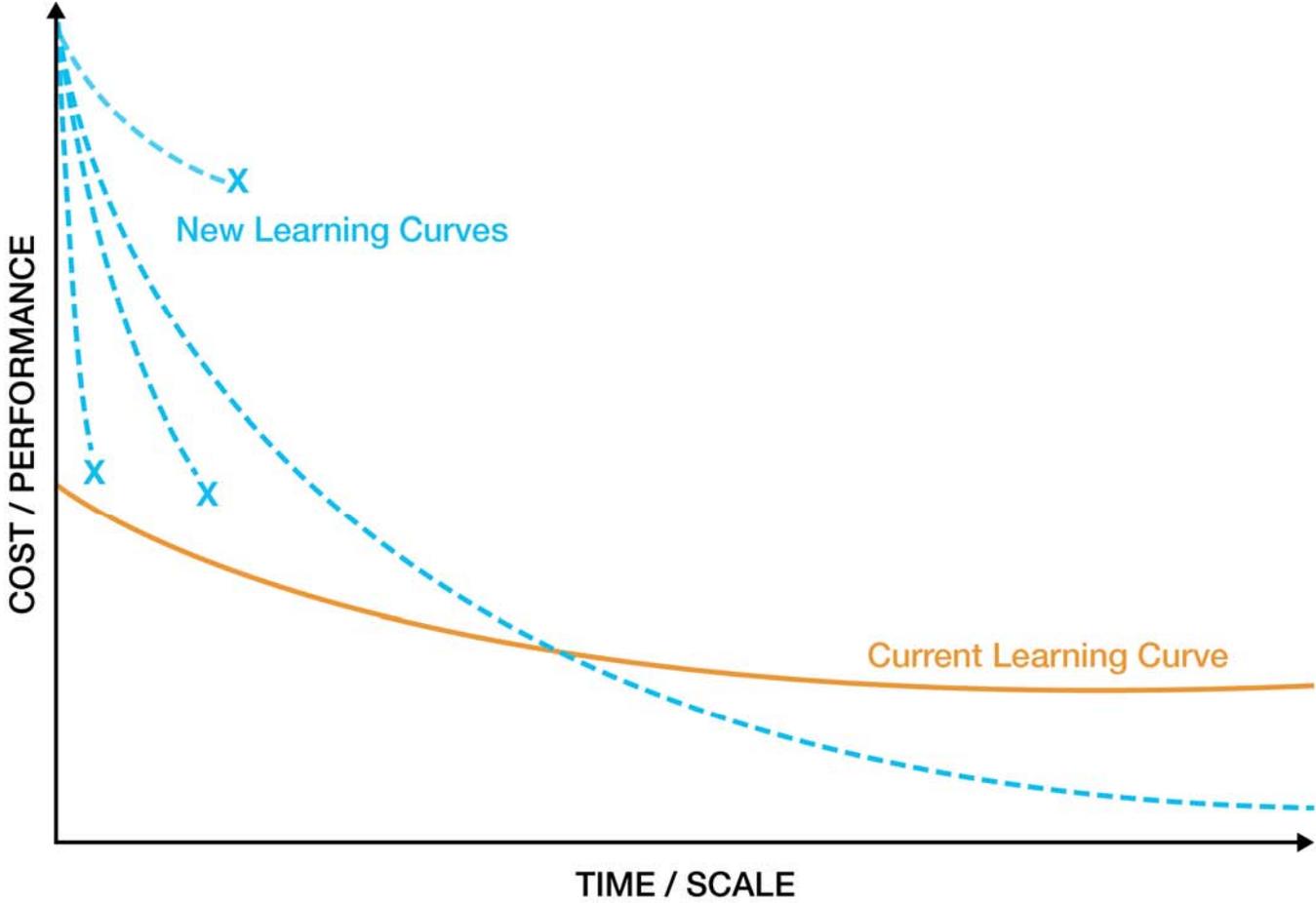
- National Security
- Economic Security
- Energy Security
- Technological Lead



Evolution of ARPA-E



Creating New Learning Curves



What Makes an ARPA-E Project?



IMPACT

- ▶ High impact on ARPA-E mission areas
- ▶ Credible path to market
- ▶ Large commercial application



TRANSFORM

- ▶ Challenges what is possible
- ▶ Disrupts existing learning curves
- ▶ Leaps beyond today's technologies



BRIDGE

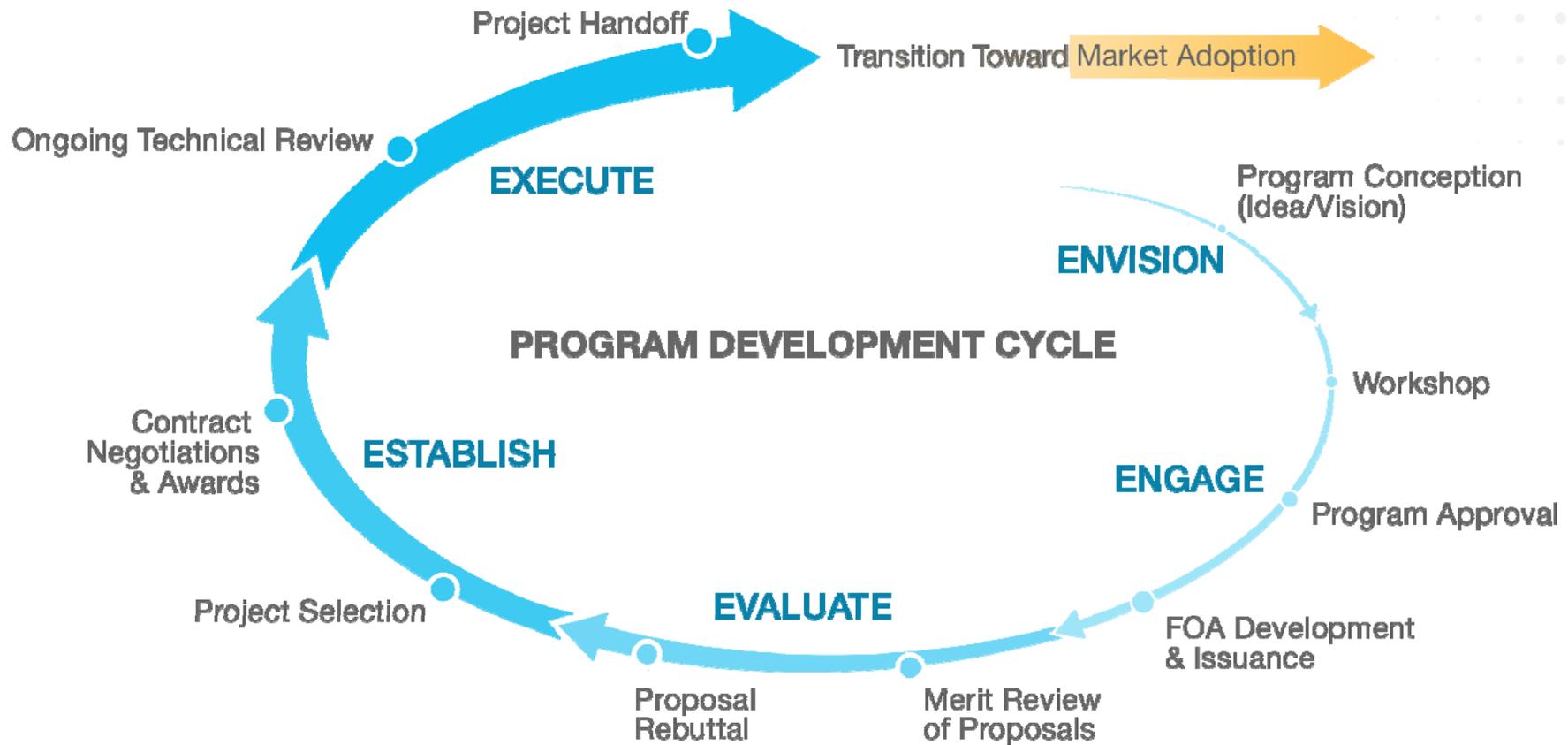
- ▶ Translates science into breakthrough technology
- ▶ Not researched or funded elsewhere
- ▶ Catalyzes new interest and investment



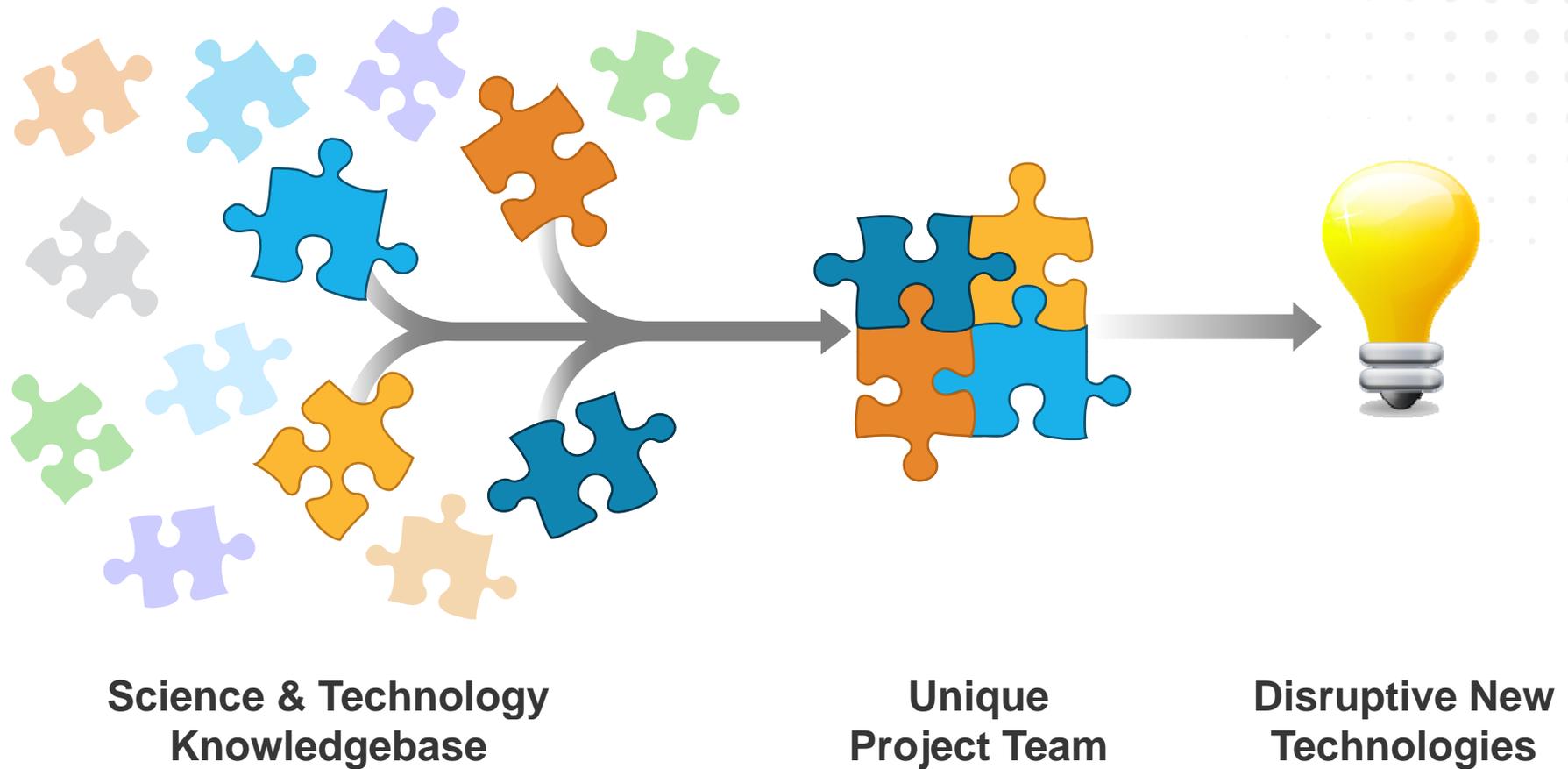
TEAM

- ▶ Comprised of best-in-class people
- ▶ Cross-disciplinary skill sets
- ▶ Translation oriented

Technology Acceleration Model



How does ARPA-E Enable Transformations?



ARPA-E teams come from a multiple segments of the S&T base to attack problems in entirely new ways

Program Directors

ARPA-E is always recruiting new Program Directors, who serve 3-year terms

ROLES & RESPONSIBILITIES

Program development

- ▶ Perform technical deep dive soliciting input from multiple stakeholders in the R&D community
- ▶ Present & defend program concept in climate of constructive criticism

Active project management

- ▶ Actively manage portfolio projects from merit reviews through project completion
- ▶ Extensive “hands-on” work with awardees

Thought leadership

- ▶ Represent ARPA-E as a thought leader in the program area

ATTRIBUTES

- ▶ R&D experience; intellectual integrity & flexibility; technical breadth; commitment to energy; communication skills; leadership; and team management
- ▶ *Confidence, but not arrogance*



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