Jennifer Gerbi
Associate Director for Technology

ARPA-E
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.

- **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

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

2007

- 800+ Awards
- 49 Programs
- Current Funding: $353M (FY18)
ARPA-E Mission

Mission: To overcome long-term and high-risk technological barriers in the development of energy tech
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
If it works... will it matter?
Technology Acceleration Model

PROGRAM CYCLE

~4 YEARS

ACTIVELY MANAGED EXECUTION

PROJECT HANDBOFF

DEFINITION

Transition Toward Market Adoption

COMPETITION
Technology Acceleration Model

Program Development Cycle

Envision
- Program Conception (Idea/Vision)
- Workshop
- Program Approval

Establish
- Contract Negotiations & Awards
- Project Selection

Engage
- FOA Development & Issuance
- Merit Review of Proposals

Evaluate
- Proposal Rebuttal

Execute
- Project Handoff
- Transition Toward Market Adoption

Ongoing Technical Review

ARPAC E
Changing What’s Possible
Tech To Market Approach

**SCOPE**
Provide strategic market insights necessary to create innovative, commercially relevant programs

**MANAGE**
Manage project teams’ T2M efforts through T2M plans and jointly developed milestones

**ADVISE**
Support project teams with skills & knowledge to align technology with market needs

**PARTNERSHIPS**
Engage third-party investors and partners to support technology development towards the market
ARPA-E Impact Indicators

Since 2009 ARPA-E has provided $2 billion in R&D funding to more than 800 projects.

145 Projects have attracted more than $2.9 billion in private-sector follow-on funding.

76 projects have formed new companies.

131 projects have partnered with other government agencies for further development.

2,489 peer-reviewed journal articles from ARPA-E projects.

346 patents issued by U.S. Patent and Trademark Office.

As of March 2019
ARPA-E Could be the Hallmark of Your Career

**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

**FELLOW**
- Independent energy technology development
- Program Director support
- Organizational support

Learn more and apply: [www.arpa-e.energy.gov/jobs](http://www.arpa-e.energy.gov/jobs)