



# EnergyTech University Prize

October 20, 2021



# WEBINAR WILL BEGIN SHORTLY

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# EnergyTech University Prize

October 20, 2021

# Webinar Housekeeping



## Two Options for Audio (select audio mode):

1. Listen through your computer:  
Click the 'up arrow' next to the "mute" button in the bottom left corner.  
Under "Select a Speaker," click "Same as System."
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Click "Switch to Phone Audio."

Panelists – reminder to mute your audio device when not presenting.

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## Having Trouble with the Webinar?

Technical difficulties - contact Zoom Support at: 888-799-9666.

A video/audio recording of this webinar and the slide deck will be made available.



# Welcome!

Victor Kane

Commercialization Programs Team Lead

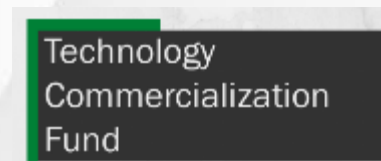
U.S. Department of Energy (DOE)'s Office of Technology Transitions (OTT)



# About the Office of Technology Transitions



The **Mission of the Office of Technology Transitions** is to expand the public impact of the department's research, development, demonstration, and deployment (RDD&D) portfolio to advance the economic, energy and national security interests of the nation. OTT is the front door to DOE's products, facilities and expertise. The office integrates "market pull" into its planning to ensure the greatest return on investment from DOE's RDD&D activities to the taxpayer.

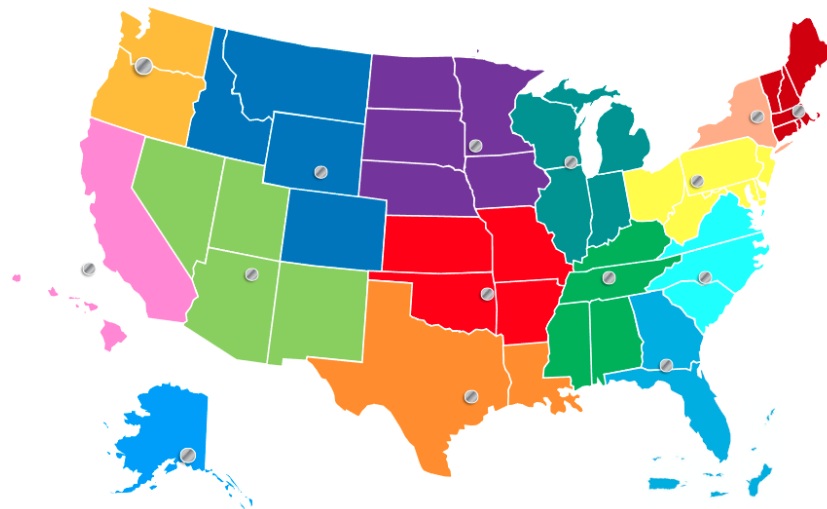





Tasking student teams to develop and present a business plan that leverages national lab-developed and other high-potential energy technologies.

# Agenda

- Introduction to the Program
  - Goals of the Competition
  - Eligibility
  - Program Structure
  - Timeline
  - Prizes
- Energy I-Corps
- Lab Partnering Service
- Carnegie Mellon University's Energy Week
- Next Steps
- Questions and Answers





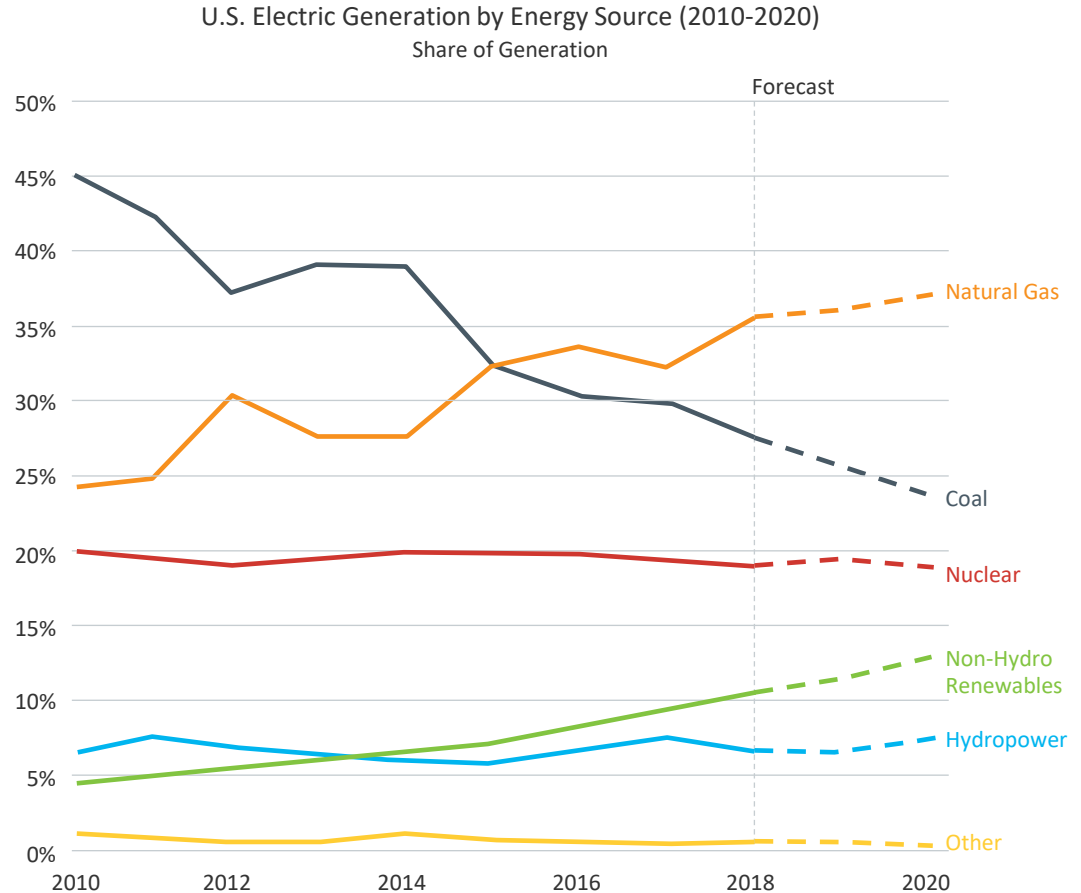
A photograph of a high-voltage electrical substation under a clear blue sky. A worker wearing a white hard hat and a high-visibility vest is positioned on a blue aerial lift, working on a large, white, box-like transformer. The transformer has several insulators and wires connected to it. In the background, other similar transformers and power lines are visible. A yellow utility vehicle is parked to the right of the transformer. The ground is covered with a metal grate.

Energy Enables the  
Success of the Nation

# U.S. Energy Supply is Varied and Complex

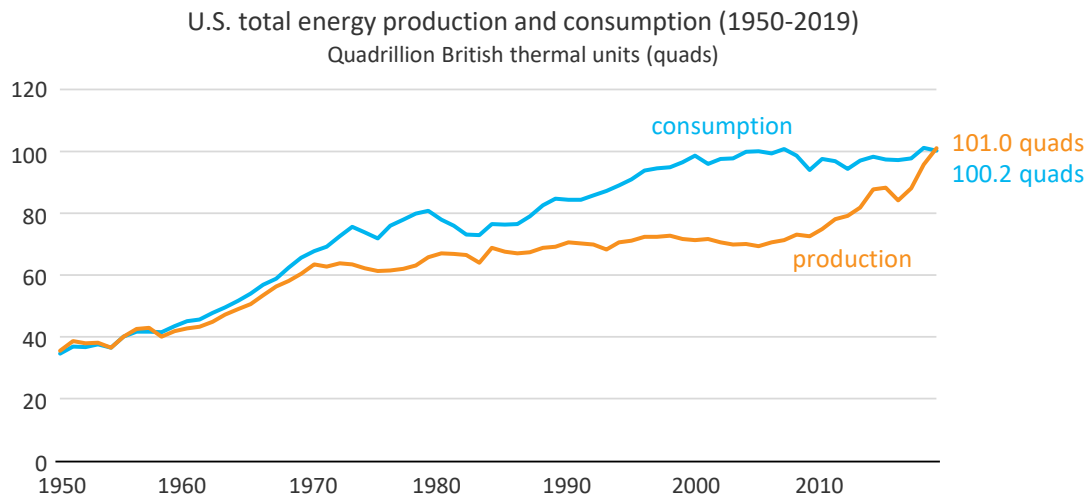
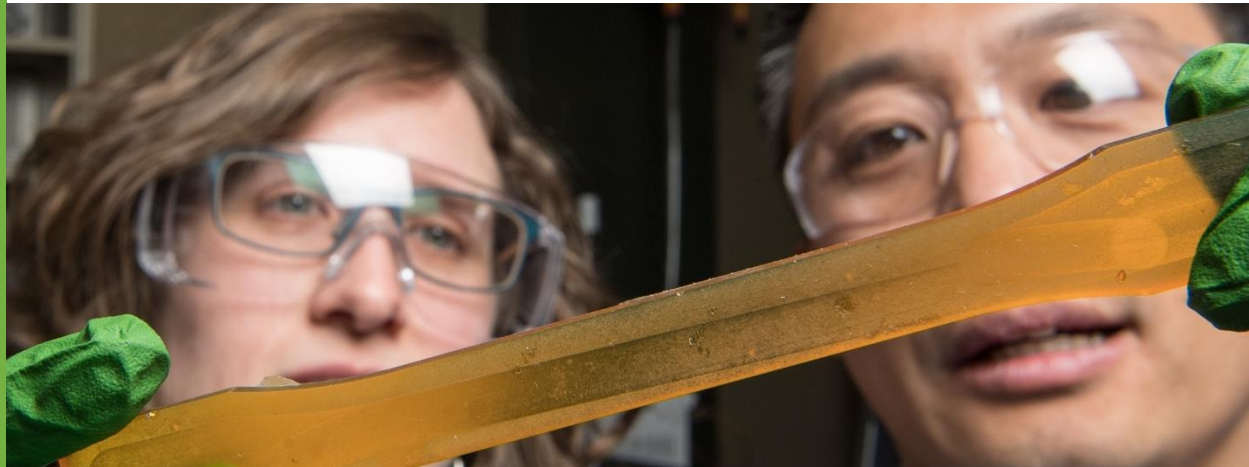
Opportunities exist for innovative and guided professionals to create businesses that have an impact.

New businesses could have a notable impact, but energy industry is sometimes seen as a difficult field to enter.



Changing  
opportunities for  
new technologies  
and businesses.

In 2019, for the first time  
in 62 years, energy  
production in the U.S.  
exceeded consumption.



Source: United States Information Agency, Today in Energy, April 28, 2020



# Business **Innovation** is Needed.



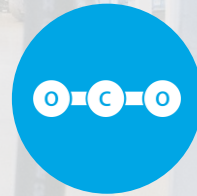
**Growing New  
Generation and  
Integration**



**Creativity  
Around  
Time-and-Place  
of Energy**



**Transportation  
and Logistics  
Modernization**



**Innovations  
in Material  
Science**



**Cybersecurity  
and Finance  
Challenges**

# Goals of the Program

- Build engagement between colleges, universities, the Department of Energy, national labs and industry
- Inspire others on the possibilities for leveraging energy technologies
- Increase commercialization and help launch careers.





# Why EnergyTech University Prize?



Strengthen the  
Energy Community



Identify Business  
Opportunities



Secure Our  
Energy Future



# EnergyTech University Prize

## How it will work

# EnergyTech University Prize



The Office of Technology Transitions (OTT) at the U.S. Department of Energy seeks multidisciplinary student teams to develop and present a business plan that leverages lab-developed and other high-potential energy technologies.

The EnergyTech University Prize (EnergyTech UP), in partnership with American-Made Challenges, is designed to be approachable, equitable, and scalable nationwide.

Distinct from many startup competitions, winners will be chosen based on the strength of their proposal, not the strength of their background.

**\$250,000 IN CASH PRIZES**

including

**\$25,000 bonus prizes from:**

Geothermal

Building

Solar Energy

Water Power

Nuclear Energy

Fossil Energy and Carbon Management  
Technologies Offices



# How It Works



## EnergyTech University Prize

JANUARY 2022

### EXPLORE

business and energy  
technology opportunities

10+ Teams to Pitch at Each  
of ~15 Regional Events



15 Regional  
Winners  
Selected

FEBRUARY & MARCH 2022

### REFINE

the market analysis  
and business opportunity

Regional Winners Receive Energy  
I-Corps Materials & Tailored Mentorship

MARCH 24, 2022

### PITCH

a viable  
business plan

Regional Winners Present to  
Industry Judges at Live Event



3-9 Winners  
Selected

# Eligibility



- Any lab-developed OR high-potential energy technology
  - Including those developed at your institution
- A team composed of three or more enrolled students
  - Accredited U.S.-based collegiate institution
    - 2-year, 4-year, and/or graduate institutions invited
  - Taking at least one class and pursuing a degree
  - Any level student (undergraduate or graduate level)
  - Team captain must be a U.S. citizen.





# Competition Rules

- Define the program goals, eligibility, submission requirements, and judging evaluation statements
- Expected release mid-November
- Follow the challenge to be notified when they are released.

1. Opportunity Identification	
<i>Evaluation and explanation of a technology to be leveraged as part of a business opportunity. ((2) 100-word written summaries + live elevator pitch).</i>	
<b>Content:</b> <ul style="list-style-type: none"> <li>What is the business opportunity?</li> <li>What is the technology to be leveraged?</li> </ul>	<b>Evaluation Statements:</b> <ul style="list-style-type: none"> <li>The technology is clearly described and understood.</li> <li>The opportunity is well-defined and actionable.</li> </ul>
2. Market Assessment	
<i>As part of a live presentation.</i>	
<b>Content:</b> <ul style="list-style-type: none"> <li>Who will buy the product or service?</li> <li>Who is currently serving this market?</li> <li>How can this technology help enable a business to better serve the market?</li> </ul>	<b>Evaluation Statements:</b> <ul style="list-style-type: none"> <li>The team understand the market for the technology and business.</li> <li>The technology will meet customer needs in a way that is currently not being met by the market.</li> </ul>
3. Business Strategy	
<i>As part of a live presentation.</i>	
<b>Content:</b>	<b>Evaluation Statements:</b> <ul style="list-style-type: none"> <li>Business capabilities and are clearly defined.</li> <li>Business demonstrates a plan and a reasonable chance of success.</li> <li>Business is well-defined and actionable.</li> <li>Business to determine eligibility and are not scored.</li> </ul>

## What to Submit

Section	Included in Regional Presentation	Included in Final Submission
Technology Identification	✓	✓
Market Assessment	✓	✓
Comprehensive Business Plan		✓
Economic Feasibility Analysis		✓
Business Funding Requirements		
Customer Value Proposition		
Customer Acquisition Strategy		
Recorded Presentation Video		
Summary Slide		
Team Information (unscored)		

## How We Score

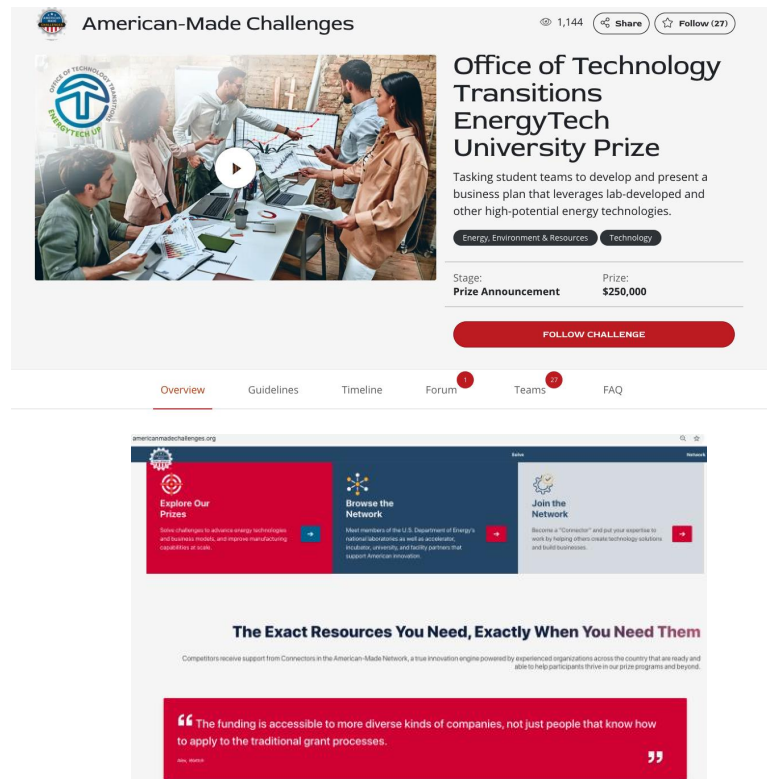
The competition administrator evaluates the Submissions using the statements given in Table x. Teams advance as finalists if the competition administrator agrees (on average) with the evaluation statements more than they disagree with the statements. Progress Submissions are scored on a scale of 1 (Strongly Disagree) to 6 (Strongly Agree) as shown in Table y.

1	2	3	4	5	6
Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree

# Competition Management Platform

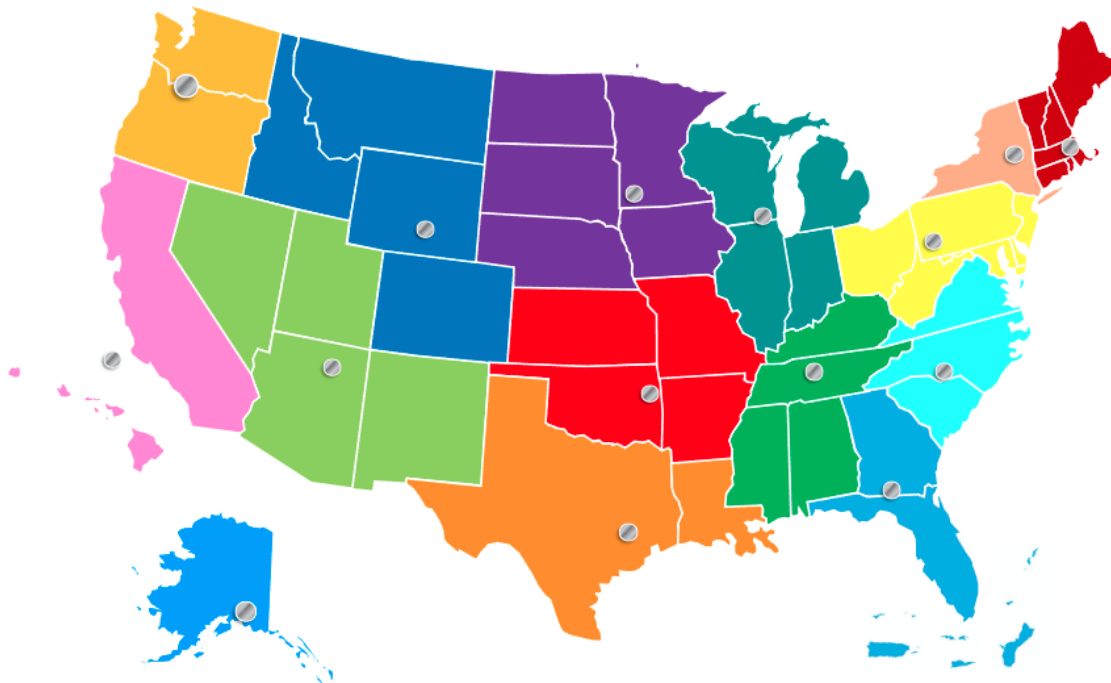


- HeroX
  - As part of the American-Made Challenges and American-Made Network
  - “Follow” the competition to receive regular updates and additional details
  - Use platform to register and ultimately submit the various deliverables
  - Will become a centralized community for further engagement
  - Will be used by judges to score entries.



# Regional Convener Partners

~15 regional convener partners will host events where schools will pitch their ideas. The winner from each region will advance to the Refine phase.



# Program Structure Recap



## EnergyTech University Prize

JANUARY 2022

### EXPLORE

business and energy  
technology opportunities

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FEBRUARY & MARCH 2022

### REFINE

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MARCH 24, 2022

### PITCH

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business plan

Regional Winners Present to  
Industry Judges at Live Event



3-9 Winners  
Selected

# WHAT YOU WIN



- Regional winners - \$2,000 each
- **1<sup>st</sup> Place** - \$50,000
- **2<sup>nd</sup> Place** - \$15,000
- **3<sup>rd</sup> Place** - \$5,000
- Technology Bonus Prizes - \$25,000 each
  - Building Technologies Office (BTO)
  - Geothermal Technologies Office (GTO)
  - Office of Fossil Energy and Carbon Management (FECM)
  - Office of Nuclear Energy (NE)
  - Solar Energy Technologies Office (SETO)
  - Water Power Technologies Office (WPTO).



# Resources and Support You'll Receive



- Highlighted energy technologies with business potential
- Access to Energy I-Corps educational materials
- Expert mentorship from DOE and/or lab staff
- Cash prizes
- Industry connections.

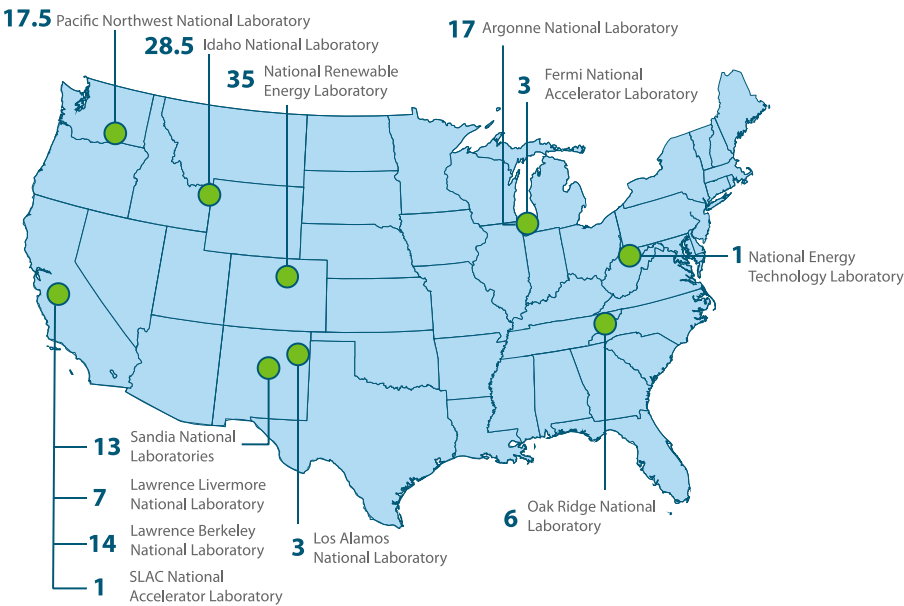
The Energy I-Corps program is a specialized training curriculum intended to:

- Increase the number of national laboratory-developed technologies that are transferred into commercial development or industry agreements
- Train national laboratory researchers to better understand the commercialization process and private sector needs
- Transform national laboratory culture to value commercialization and entrepreneurial activities.

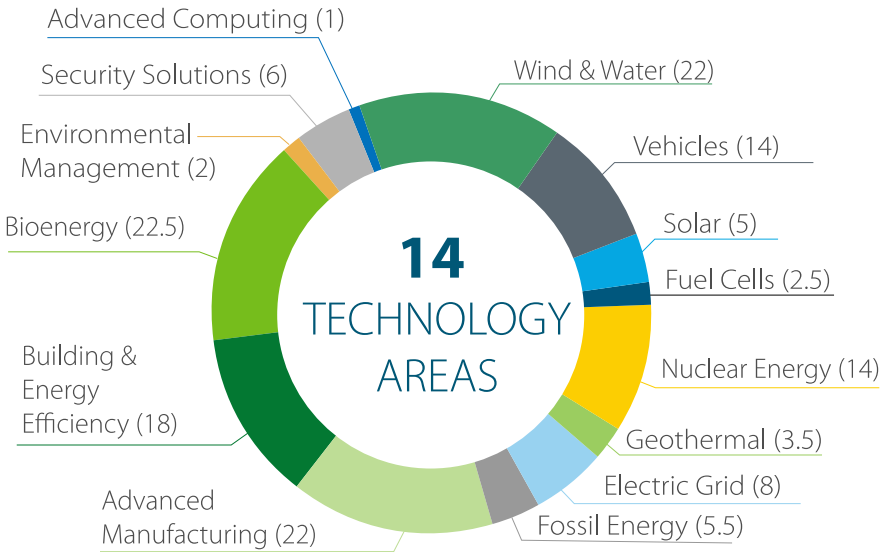


# 12 Cohorts of Energy I-Corps

146 TEAMS | 12 NATIONAL LABORATORIES



BRINGING ENERGY INNOVATIONS TO



# Core Concepts

## Program Highlights – through Cohort 12

- Business model canvas
- Customer discovery process
- Ecosystem
- Customer segments
- Value propositions
- Direct market feedback.



**60+** Licenses Executed



**\$83M**

Post-Program  
Funding

Because of Energy I-Corps, technologies have reached a point of commercial viability that has attracted more than **\$83M in post-program funding**



**12** New  
Businesses

**12 teams have launched new businesses** based on their Energy I-Corps Technology

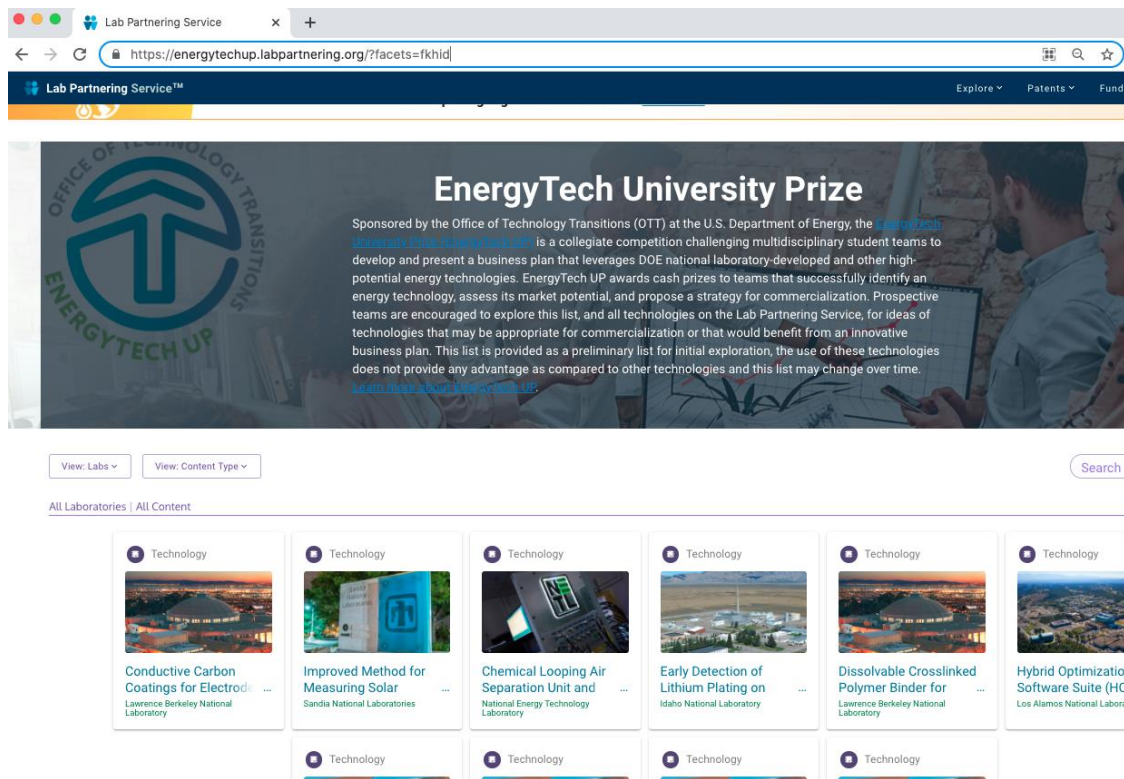


**10,300** + Customer Discovery Interviews

# Lab Partnering Service



- Technologies ready for commercialization highlighted
- Teams are not restricted to the technologies listed
- More technologies will be added in the coming weeks that are in line with the focus areas for each technology office.





# Carnegie Mellon University's Energy Week



- Designed to engage thought leadership on critically important topics for our nation's energy and cleantech innovation future
- Hosted by CMU's Scott Institute in March 2022 in Pittsburgh, PA
  - March 21 – 25, 2022
- Regional winners will present their completed business plan and pitch to an industry judging panel on March 24, 2022.





# Next Steps

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- Spread the word & build a team
- “Follow” us on HeroX
- Explore energy technologies
- Ask questions via [ott.energytechup@nrel.gov](mailto:ott.energytechup@nrel.gov).

# Leverage Resources to Spread the Word



## EnergyTech University Prize

### Collegiate Student Business Plan Competition

Sponsored by the Office of Technology Transitions (OTT) at the U.S. Department of Energy (DOE), the EnergyTech University Prize (EnergyTech UP) is a collegiate competition challenging multidisciplinary student teams to develop and present a business plan that leverages DOE national laboratory-developed and other high-potential energy technologies. EnergyTech UP awards a total of \$250,000 in cash prizes to teams that successfully identify an energy technology, assess its market potential, and propose a strategy for commercialization.

[Learn more](#)

Ready to join the challenge?  
Follow the prize on HeroX:  
[heroX.com/EnergyTechUP](https://heroX.com/EnergyTechUP)

1

#### Follow the Prize

Create a HeroX account and follow the prize to get updates about deadlines, events, and updates: [heroX.com/EnergyTechUP](https://heroX.com/EnergyTechUP)

2

#### Explore Possible Technology Opportunities

See what inspires you to develop a business plan: [energytechup.labpartnering.org](https://energytechup.labpartnering.org)

3

#### Develop Your Business Plan

Start crafting your business plan with your teammates

4

#### Plan to Participate

Prepare to present your concept at a regional event in January 2022



### EnergyTech University Prize

A collegiate competition challenging student teams to develop and present a business plan that leverages lab-developed and other high-potential energy technologies.



Tailored mentorship & Energy I-Corps Materials



Access to lab-developed technologies



\$250,000 in cash prizes

Prepare to present your concept at a regional event in January 2022: [HeroX.com/EnergyTechUP](https://HeroX.com/EnergyTechUP)

U.S. DEPARTMENT OF  
**ENERGY**


Office of  
TECHNOLOGY TRANSITIONS

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# Follow the Challenge on HeroX





## American-Made Challenges



1,144

Share

Follow (27)

### Office of Technology Transitions EnergyTech University Prize

Tasking student teams to develop and present a business plan that leverages lab-developed and other high-potential energy technologies.

Energy, Environment & Resources Technology

Stage: Prize Announcement Prize: \$250,000

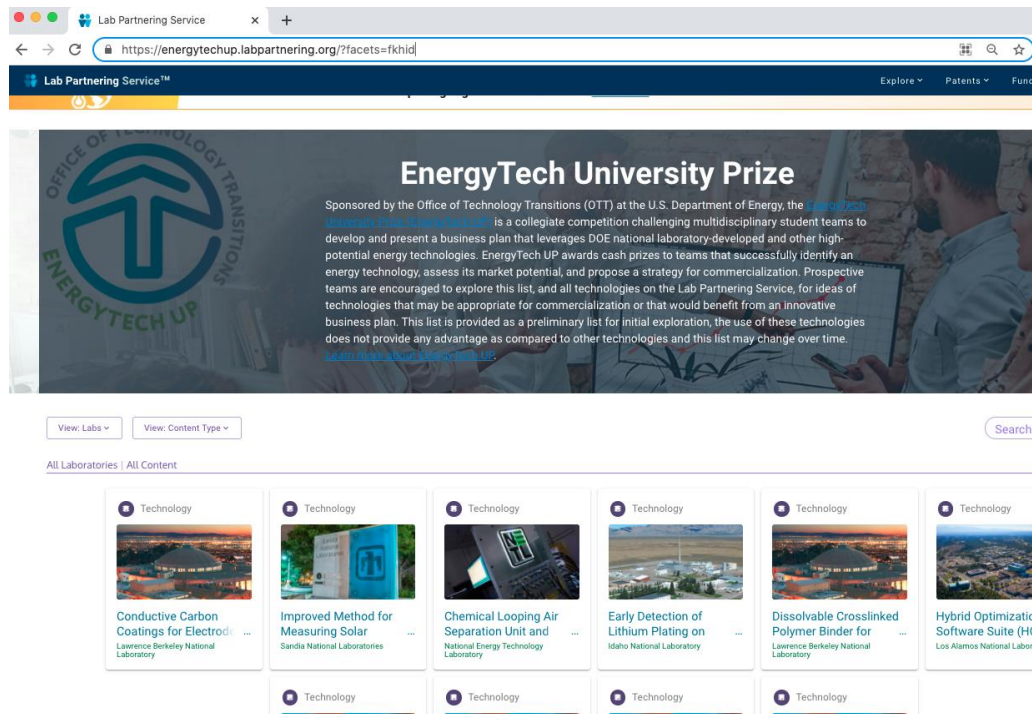
**FOLLOW CHALLENGE**

Overview Guidelines Timeline Forum 1 Teams 27 FAQ



# Explore Opportunities

- Lab-developed technologies
- Your institution's technologies
- Industry gaps or needs
- Teaming potential.







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Thank you for attending!  
[ott.energytechup@nrel.gov](mailto:ott.energytechup@nrel.gov)