A DECADE OF IMPACT

2025 Energy I-Corps Annual Report

ENERGY I-CORPS

OTC Office of Technology Commercialization

An initiative of the U.S. Department of Energy (DOE) Office of Technology Commercialization, Energy I-Corps trains National Lab researchers in evaluating industry needs and potential market applications for their DOE technologies.

Letter From the Chief Commercialization Officer

Greetings,

Anthony Pugliese,
Chief Commercialization Officer,
U.S. Department of Energy

In 2025, the U.S. Department of Energy (DOE) Office of Technology Commercialization (OTC) marked a historic milestone: 10 years of Energy I-Corps (EIC). This annual report highlights how far the program has come as we continue to accelerate the journey from innovation to impact.

A flagship OTC initiative, Energy I-Corps equips DOE researchers with the entrepreneurial skills and support to evaluate real-world demands and prepare their technologies for market. DOE's National Laboratories, plants, and sites are at the heart of this work, advancing the Trump administration's goals for American energy dominance. Through Energy I-Corps, we're investing in the culture behind the research to embed commercialization thinking into earlier stages of innovation. It's important to advance the ideas with the best chance of becoming impactful solutions. By doing so, we can ensure our national competitiveness and deliver a solid return on taxpayer dollars.

This year, I had the opportunity to attend the 20th Energy I-Corps cohort's graduation. I was impressed by the depth of customer discovery and the precision with which each team approached their market challenge—whether in artificial intelligence, advanced nuclear, grid resilience, or other critical energy industries. Energy I-Corps has now trained more than 570 DOE researchers, who have collectively gone on to secure more than $234 million in follow-on funding. These outcomes demonstrate the program's growing value to both the Department and the broader innovation ecosystem.

Notable accomplishments from 2025 include:

- Team Switchable Polarity Solvents from Idaho National Laboratory (INL) leveraged Energy I-Corps to pivot their water treatment research into a licensed, award-winning mineral recovery process supporting U.S. supply chains.
- Scientists from Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratories (SNL) identified a need for ultrafast nuclear imaging and launched a thriving startup.
- Researchers from SNL transformed wildfire risk mapping technology into a startup helping utilities identify risks and strengthen grid resilience.
- INL, partnering with the Thomas Jefferson National Accelerator Facility (JLab), ran the Multi-Lab Energy I-Corps Pipeline Development Program, providing diverse instruction, networking opportunities, and tailored support to overcome barriers to EIC participation at these labs. Program participation significantly exceeded the goals set at the beginning of the project and ultimately resulted in the first JLab team joining Cohort 20.
- Another team from SNL explored how their radiation-detection polymer could improve high-risk applications. They now have a marketable technology that is being used to protect cancer patients receiving radiation treatment, military personnel, and first responders.

Each of these teams reflect what's possible when cutting-edge science meets focused commercialization training.

All 17 National Labs have participated in an Energy I-Corps topic area, and the number of DOE program offices funding teams has continued to grow. Looking ahead, we are committed to building on this incredible momentum and instilling Energy I-Corps principles and training among all of the dedicated researchers at DOE's unparalleled labs, plants, and sites.

Energy I-Corps is a critical piece of how we connect DOE's research and development (R&D) assets to the private sector. I invite you to explore the impacts shared in this report and to continue championing this effort in your lab, your office, and beyond. Commercialization is where research meets reality, and Energy I-Corps helps ensure we get there.

Anthony Pugliese
Chief Commercialization Officer, U.S. Department of Energy

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“There’s so much to be leveraged from [Energy I-Corps] to make your research more impactful. It’s amazing to have an opportunity to look at out-of the-box applications to see how those might translate to real-world impact.”

George Larsen

Cohort 18 Participant from Savannah River National Laboratory

Acronyms

3D	three-dimensional
AI	artificial intelligence
AMO	Advanced Manufacturing Office
AMMTO	Advanced Materials and Manufacturing Technologies Office
ANL	Argonne National Laboratory
BETO	Bioenergy Technologies Office
BNL	Brookhaven National Laboratory
BTO	Building Technologies Office
CESER	Office of Cybersecurity, Energy Security, and Emergency Response
DERMS	distributed energy resource management system
DOE	U.S. Department of Energy
EERE*	Office of Energy Efficiency and Renewable Energy
EIC	Energy I-Corps
EM	Office of Environmental Management
FE	Office of Fossil Energy
FNAL	Fermi National Accelerator Laboratory
FY	fiscal year
GTO	Geothermal Technologies Office
HFTO	Hydrogen and Fuel Cell Technologies Office
ITO	Industrial Technologies Office
INL	Idaho National Laboratory
JLab	Thomas Jefferson National Accelerator Facility
LANL	Los Alamos National Laboratory
LBNL	Lawrence Berkeley National Laboratory
LLNL	Lawrence Livermore National Laboratory
NAWI	National Alliance for Water Innovation
NE	Office of Nuclear Energy
NETL	National Energy Technology Laboratory
NLR	National Laboratory of the Rockies
NNSA	National Nuclear Security Administration
NSF	National Science Foundation
OE	Office of Electricity
ORNL	Oak Ridge National Laboratory
OTC	Office of Technology Commercialization
PNNL	Pacific Northwest National Laboratory
SAF	synthetic aviation fuel
SC	Office of Science
SC-ASCR	Office of Science-Advanced Scientific Computing Research
SC-BES	Office of Science-Basic Energy Sciences
SC-FES	Office of Science-Fusion Energy Sciences
SC-IP	Office of Science-Isotope R&D and Production
SETO	Solar Energy Technologies Office
SLAC	SLAC National Accelerator Laboratory
SNL	Sandia National Laboratories
SRNL	Savannah River National Laboratory
VTO	Vehicle Technologies Office
WETO	Wind Energy Technologies Office
WPTO	Water Power Technologies Office
WWPTO	Wind and Water Power Technologies Office
Y-12	Y-12 National Security Complex

*EERE is now the Office of Critical Minerals and Energy Innovation (CMEI)

About Energy I-Corps

DOE makes significant annual investments into the National Lab complex, empowering these institutions and associated plants and sites to drive energy dominance both domestically and globally. This investment is crucial for expanding energy production, reducing energy costs for American families and businesses, and maintaining global competitiveness through technical leadership. The focus of these investments is on accelerating the work of the Department's National Laboratories to advance technologies, foster American leadership in scientific innovation, strengthen the reliability of our energy system, and bolster America's manufacturing competitiveness and supply chain security. The discoveries and innovations being developed by the labs have an even greater impact when we invest in bringing these ideas to the market, where they can benefit the nation and world.

OTC integrated EIC into its portfolio in 2018, aiming to accelerate the transition of innovative concepts into market-ready solutions. OTC's mission is to benefit the American public by fostering economic growth, bolstering energy security, and enhancing the United States' global technological leadership. To achieve this, OTC leverages a comprehensive suite of initiatives under the Energy I-Corps portfolio designed to equip researchers with the skills, funding, and partnerships necessary to advance their R&D toward successful commercialization.

Energy I-Corps provides three avenues of support to DOE National Labs based on their goals and needs. The flagship Topic 2 offers an immersive 10- to 12-week training program, also known as "Training Cohorts," across the DOE National Lab complex. Under Topic 1: Pipeline Development, DOE National Labs, plants and sites propose projects aimed at increasing the number of researchers who apply for Topic 2: Training Cohorts. Under Topic 3: Post Energy I-Corps, graduates of the Topic 2 training cohorts apply for funding to execute on a discrete next step toward commercialization (Figure 1).

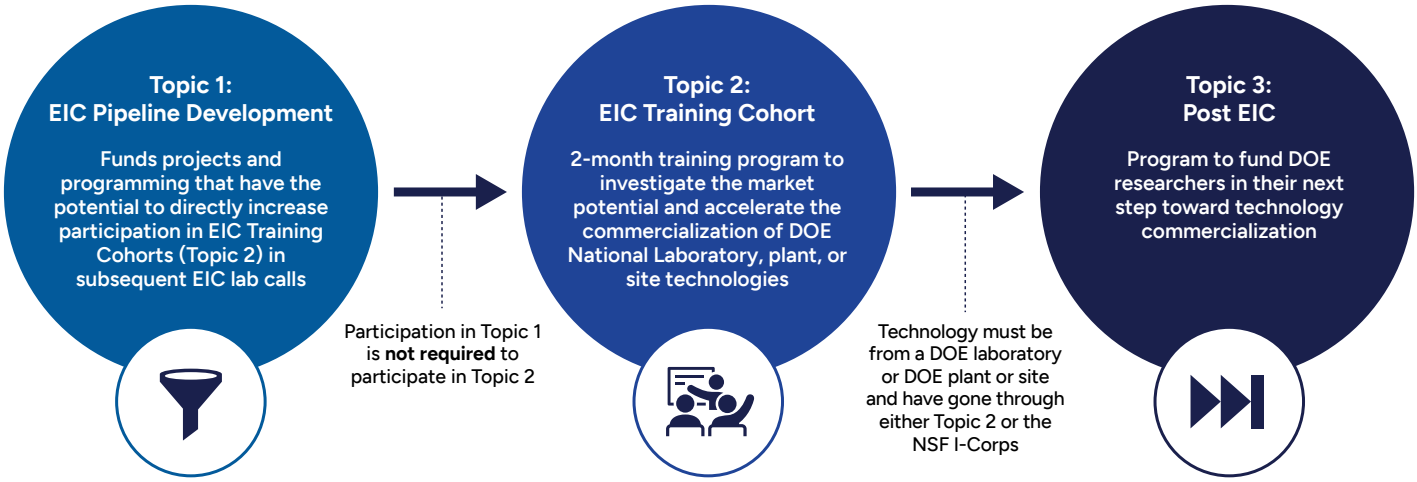


Figure 1: Energy I-Corps Program Structure

Portfolio Overview

Topic 1: Pipeline Development

In response to feedback from National Lab partners and DOE program offices, OTC developed the Energy I-Corps Pipeline Development (Energy I-Corps Topic 1) opportunity. Topic 1 is a refocused version of the previously offered Energy I-Corps "Satellite," "Site," or "Asynchronous" funding. Within this topic, DOE National Labs, plants, and sites are provided funding to implement projects and programming that aim to directly increase participation in subsequent Energy I-Corps training cohorts. Projects with a single DOE National Laboratory, plant, or site applicant are considered for up to $100,000. Projects with at least three DOE National Laboratories, plants, or sites applying together may apply for up to a total of $200,000. OTC provides each lab with the latitude to develop a program to best serve its unique research community while seeding participation in Topic 2: Training Cohorts.

The team spotlights highlighted in this section include projects selected in 2024 and completed in 2025.

FY 2024 Topic 1 Team Spotlight: NLR

NLR implemented entrepreneurial training ("EIC Sprint") with a cohort of 13 NLR researchers. Participants were matched with Topic 2 alumni and learned about training cohort opportunities, toured local startups, and attended instructor office hours and workshops. Following the EIC Sprint, participants continued their research to gain an understanding of the market and industry applications for their technology.

2024 Topic 1 Projects

Collectively, Topic 1 projects selected in Fiscal Year (FY) 2024 provided site-specific entrepreneurial training to more than 140 researchers, conducted more than 300 stakeholder discovery interviews, engaged more than 30 external partners, and increased the number of submissions to future Energy I-Corps training cohorts, supporting 30 new applications.

FY 2024 Topic 1 Cumulative Goals	FY 2024 Topic 1 Cumulative Actuals
Researchers Trained: 140	Researchers Trained: 163
New Topic 2 Submissions: 30	New Topic 2 Submissions: 30

FY 2024 Topic 1 Team Spotlight: INL/JLab

INL and JLab delivered and administered the Energy I-Corps Pipeline Development Program, a 6-week entrepreneurial training program offered to lab researchers. The program provided 30 hours of training per researcher, including 15 hours of in-class presentations and training sessions and 15 hours for researchers to conduct stakeholder discovery interviews for their lab technologies.

2025 Topic 1 Projects

Topic 1 projects selected in FY 2025 had a range of tasks, including entrepreneurial training, customer discovery, pitch competitions, support for Topic 2 applications, and networking with industry partners and Energy I-Corps alumni. Cumulatively, the projects aim to provide site-specific entrepreneurial training to nearly 180 researchers and to increase the number of submissions to future Energy I-Corps training cohorts by at least 22.

For additional information on the Topic 1 projects, visit:

- Energy I-Corps Topics 1 and 3, Fiscal Year 2025 (Spring)[1]
- Energy I-Corps Topics 1 and 3, Fiscal Year 2026 (Fall)[2]

FY 2024 Topic 1 Team Spotlight: LANL

Los Alamos National Laboratory (LANL) executed the Design Sprint and Energy I-Corps Lite programs. The Design Sprint offered participants an intensive 2-and-a-half-day curriculum to focus on customer and market insights, increasing future commercialization and partnership success as participants continue to develop their technologies. The Energy I-Corps Lite program taught the customer discovery methodology through facilitated curriculum and practice. Participants engaged in conversations with industry to develop and refine (or pivot) their value propositions, learn how to influence technology development toward a product outcome, and craft a business model.

[1] https://www.energy.gov/technologytransitions/energy-i-corps-topics-1-and-3-fy25-spring

[2] https://www.energy.gov/technologycommercialization/energy-i-corps-topics-1-and-3-fiscal-year-2026-fall

FY 2024 Topic 1 Team Spotlight: SNL, Nevada National Security Site, Pantex Plant, Kansas City National Security Campus, Y-12

SNL and partner sites and plants conducted the National Laboratory Entrepreneur Accelerator Pipeline Program. This 2 day event combined tactics from business accelerator programs with mentorship from successful entrepreneurs and Energy I-Corps alumni. The program allowed participants to become fluent in the Energy I-Corps process, introduced them to other commercialization resources, and produced an initial Business Model Canvas for the Energy I-Corps program.

Topic 2: Training Cohorts

The founding program in the Energy I-Corps portfolio is the Topic 2: Training Cohorts offering. Topic 2 teams of researchers participate in an immersive 10- to 12-week training to define technology value propositions, conduct at least 75 stakeholder discovery interviews, and explore viable market pathways for their technologies. Researchers return to their labs with a framework for industry engagement to guide future research and inform a culture of market awareness and engagement within the lab environment. In this way, Energy I-Corps increases the value of our investment in DOE National Labs, plants, and sites and maintains and strengthens long-term U.S. competitiveness. Topic 2 is managed by NLR, located in Golden, Colorado.

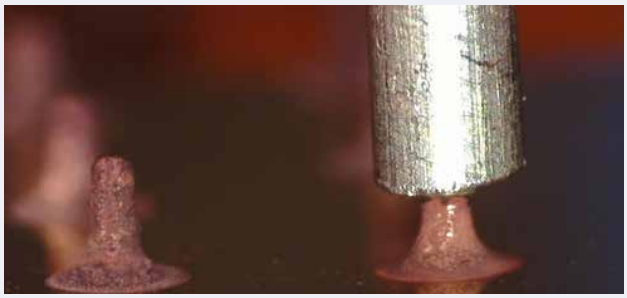
Read more about Topic 2 team spotlights starting on page 31.

Topic 3: Post Energy I-Corps

In response to feedback from DOE National Labs, plants, and sites as well as DOE program office supporters, OTC developed Topic 3: Post Energy I-Corps. This opportunity aims to support ongoing commercialization of DOE technologies that have either gone through EIC Topic 2 or the National Science Foundation (NSF) Innovation Corps™ (I-Corps™) program (NSF I-Corps™). Topic 3 funds are intended to cover the costs of the next actionable step in their commercialization journey and to help awardees reach their next source of more substantive funding.

The Team Spotlights highlighted in this section include projects selected in 2024 and completed in 2025.

FY 2024 Topic 3 Team Spotlight: SNL – Electro3D



Demonstration of copper pillar three-dimensional (3D) printing with Team Electro3D's new technology. *Photo courtesy of Sandia National Laboratories*

Electro3D is an electrochemical three-dimensional printing technology that enables high-precision 3D printing at room temperature and pressure. This project aims to accelerate the transition of Electro3D's technology from development to industrial application. This will be achieved by enhancing its technical readiness and commercialization potential through the 3D printing of copper for electronic applications. Electro3D intends to demonstrate its capabilities by developing a precommercial, pilot-scale system that can print electrical conductors for electronics.

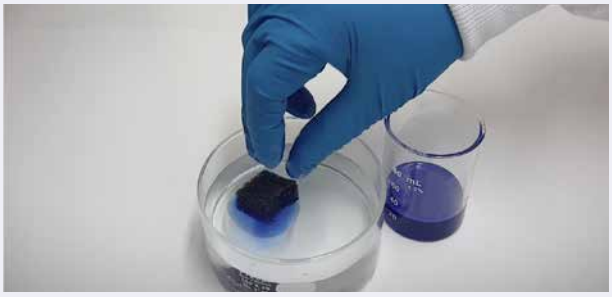
The following five projects were awarded in FY 2025:

- **Ames National Laboratory: Single-Step Manufacturing of Diesel Fuels Through Novel Mixed Plastic Deconstruction** (NSF I-Corps Cohort 2). This team developed a single-step process to manufacture cost-competitive diesel fuel by utilizing mixed waste plastics as feedstock. Funded by OTC, the Topic 3 project funds two pilot deployments with potential customers. The data generated will validate the economic and environmental analysis as well as the business model for this technology.
- **Argonne National Laboratory: Galileo** (EIC Cohort 13). Funded by OTC, the Galileo project aims to expedite the commercialization of Argonne National Laboratory's (ANL's) in situ physics-of-failure analysis technology by developing a customized failure-analysis test platform. The target customer segment is power-electronic device engineers who would benefit from a tailored lifetime analysis platform for devices utilized in aircraft and spacecraft.

- **Pacific Northwest National Laboratory: O2SAF** (EIC Cohort 15). The O2SAF team aims to improve the overall carbon efficiency of synthetic aviation fuel (SAF) production by upgrading low-value C1–C7 hydrocarbons into SAF-range aromatics, oligomers, and hydrogen. Building on the team's prior catalyst development work and immersion program experience, this project, funded by EERE's BETO, will help O2SAF refine and evaluate a powder catalyst system.
- **Sandia National Laboratories: CUBES** (EIC Cohort 16). The CUBES team developed a waste-to-bioproducts platform conceived by SNL. Funded by BETO, the project will help address uncertainties in the commercialization path of CUBES' fuels, particularly in sourcing productive feedstock material and in applicable fuel specifications. Further engagement with industry stakeholders will help identify key demonstrations to unlock potential partnerships and strategically position CUBES for follow-on funding opportunities, including large-scale locomotive engine testing and pre-pilot process validation.
- **Sandia National Laboratories: OptimalEnergy** (EIC Cohort 19). OptimalEnergy is an advanced, artificial intelligence (AI)-driven distributed energy resource management system (DERMS) developed to tackle key challenges in energy integration, grid resilience, and energy affordability. Funded by CESER, the project aims to validate the technology's performance in real-world conditions, address barriers to adoption, and support the commercialization of DERMS technologies for underserved and disaster-prone regions.

Cumulatively, these initiatives aim to engage 29 new external partners, create two new prototypes, and execute 11 new technology tests or deployments.

FY 2024 Topic 3 Team Spotlight: ANL – OleoSponge



Team OleoSponge's reusable sponge that soaks up oil could revolutionize oil- and diesel-spill cleanup.
Photo courtesy of Argonne National Laboratory

OleoSponge is a technology for recovering oil and petroleum products from water. The project delivered several key benefits, including identifying and engaging potential industrial partners for field testing of OleoSponge samples and manufacturing new mycelium-based materials. Market viability was strengthened through targeted field testing, which provided critical data on performance under diverse real-world conditions.

For additional information on the Topic 3 projects, visit:

- Energy I-Corps Topics 1 and 3, Fiscal Year 2025 (Spring)[3]
- Energy I-Corps Topics 1 and 3, Fiscal Year 2026 (Fall)[4] ■

[3] https://www.energy.gov/technologytransitions/energy-i-corps-topics-1-and-3-fy25-spring
[4] https://www.energy.gov/technologycommercialization/energy-i-corps-topics-1-and-3-fiscal-year-2026-fall

Portfolio Frequently Asked Questions

What is Energy I-Corps?

The goal of the Energy I-Corps portfolio is to support and train DOE National Lab, plant, and site researchers to advance energy-related technologies toward commercialization.

How many teams have participated?

1. **Topic 1: Pipeline Development:** All 17 National Labs have participated in either the Pipeline Development program or its previous iterations, referred to as "site" and "satellite" funding.
2. **Topic 2: Training Cohorts**: As of November 2025, 270 teams from 16 National Labs have participated in Topic 2 over the course of 21 cohorts and the pilot.
3. **Topic 3: Post Energy I-Corps**: As of November 2025, 11 teams from six National Labs have been awarded post Energy I-Corps funding since its inception in FY 2023.

What are the benefits?

1. **Topic 1: Pipeline Development**: Each selected DOE National Lab, plant, or site develops a Topic-2-supporting program that will most benefit their unique research community. This can provide researchers an introductory experience of commercialization concepts and opportunities before committing to the full Topic 2 program; a lab-hosted, abridged version of Topic 2; startup engagement; market research support; or other programming.
2. **Topic 2: Training Cohorts**: The training equips DOE National Lab, plant, and site researchers with tools to evaluate the real-world relevance of their technologies and viable pathways to market. Participants benefit from workshops taught by industry experts while gaining market insights from conducting more than 75 discovery interviews during the program. These tools help inform future research and potential partnerships at DOE National Labs, plants, and sites.
3. **Topic 3: Post Energy I-Corps**: Selected teams receive funding to support their next commercialization step, helping them avoid a "valley of death" at a critical point in technology and business plan maturation. Examples of Topic 3 projects include developing a prototype and testing a pilot with a potential customer.

Who may participate?

1. **Topic 1: Pipeline Development**: DOE National Labs, plants, and sites may apply. Applicants propose projects and programming with the potential to directly increase participation in future Energy I-Corps training cohorts.
2. **Topic 2: Training Cohorts**: DOE National Lab, plant, and site researchers who want to pursue commercialization of DOE National Lab intellectual property may apply. This program is open to all technologies, but technologies should fall within DOE's mission.
3. **Topic 3: Post Energy I-Corps**: DOE National Lab complex employees are eligible to apply with a DOE technology that has successfully gone through either Topic 2 or NSF I-Corps.

Who supports the participants?

1. **Topic 1: Pipeline Development**: Applications are reviewed by OTC and shared with other DOE program offices and the National Nuclear Security Administration (NNSA) as projects to potentially fund.
2. **Topic 2: Training Cohorts**: Applications are reviewed by OTC and relevant DOE program offices. The offices of Electricity, Environmental Management, Fossil Energy, Nuclear Energy, and Cybersecurity, Energy Security, and Emergency Response, NNSA, EERE, and certain programs within the Office of Science have supported teams.
3. **Topic 3: Post Energy I-Corps**: Applications are reviewed by OTC, relevant DOE program offices, and NNSA.

How can I get involved?

OTC solicits proposals for all three Energy I-Corps topics through a lab call. If you are interested in participating in Energy I-Corps, please contact your lab's technology transfer office or the Energy I-Corps team (energyicorps@hq.doe.gov) to learn more. ■

Topic 2 Program Structure

Overview

For each training cohort of Energy I-Corps, National Labs recruit researchers working on energy technologies that show potential for commercial application. Researchers selected for the program receive comprehensive training and conduct at least 75 discovery interviews with industry stakeholders during the program.

Upon completing the program, researchers will have developed important industry connections and insights to better prepare their energy technologies for market acceptance and deployment. In addition, they will have established an industry-engagement framework applicable to future research.

From this point onward, this report will focus on Energy I-Corps Topic 2: Training Cohorts. The following words will be used interchangeably: Energy I-Corps, Topic 2, training cohorts, and cohorts.

Curriculum

The Energy I-Corps curriculum was developed in partnership with the NSF. With the support of the National Labs and external industry advisors, NLR and OTC adapted NSF's nationally recognized I-Corps training to meet the needs of DOE National Lab, plant, and site participants.

Adjustments to the NSF I-Corps curriculum address the specific challenges scientists working within the National Lab complex face when preparing their innovations for market, such as navigating the complexities of lab-owned intellectual property, licensing, and appropriate pathways for startup development. As more teams complete the training, OTC and NLR continue to improve and enhance the Energy I-Corps Topic 2 curriculum to best meet participant and industry needs. For example, in 2023, instruction in the Adoption Readiness Level framework[5] was added to the curriculum.

Four key elements comprise Energy I-Corps:

Implementation Team: NLR is responsible for developing and delivering the training, as well as providing program guidance to participating laboratories, plants, and sites.

Participating Labs, Plants, and Sites: Participating DOE National Labs, plants, and sites recruit, assemble, and submit applications for each cohort. The DOE National Labs, plants, and sites play an integral role in supporting teams before, during, and after the program. That support may include assistance identifying team members, as well as technology transfer and support for commercialization plans identified by the team during training.

Teams: Applicants apply to Energy I-Corps as a team comprising a principal investigator with a commercially relevant technology, an entrepreneurial lead, and an industry mentor. The team works together to identify potential commercialization pathways for their selected technology, as well as opportunities where further technology development could add commercial value.

Training Program: Energy I-Corps Topic 2 spans 10 to 12 weeks, using a custom-designed curriculum. During the program, teams attend in-person and virtual sessions, participate in weekly webinars, and learn from faculty how to systematically identify the most appropriate market applications and commercialization pathways for their technologies. Participation requires a considerable amount of time spent outside of the classroom conducting at least 75 stakeholder discovery interviews. ■

[5] https://www.energy.gov/technologycommercialization/adoption-readiness-levels-arl-framework

To date, teams have participated from:

- Argonne National Laboratory
- Brookhaven National Laboratory*
- Fermi National Accelerator Laboratory
- Idaho National Laboratory
- Lawrence Berkeley National Laboratory
- Lawrence Livermore National Laboratory
- Los Alamos National Laboratory
- National Energy Technology Laboratory
- National Laboratory of the Rockies
- Oak Ridge National Laboratory
- Pacific Northwest National Laboratory
- Sandia National Laboratories
- Savannah River National Laboratory
- SLAC National Accelerator Laboratory
- Thomas Jefferson National Accelerator Facility*
- Y-12 National Security Complex*

* First-time participant in FY 2025

Celebrating 10 Years





“For 10 years, Energy I-Corps has helped DOE researchers sharpen their understanding of what the market needs and how their innovations can meet it. It’s not just a training—it’s a mindset shift for the participating researchers, which positions DOE research and the people that power it to drive toward real-world outcomes.”

Anthony Pugliese

DOE Chief Commercialization Officer and Director of the OTC

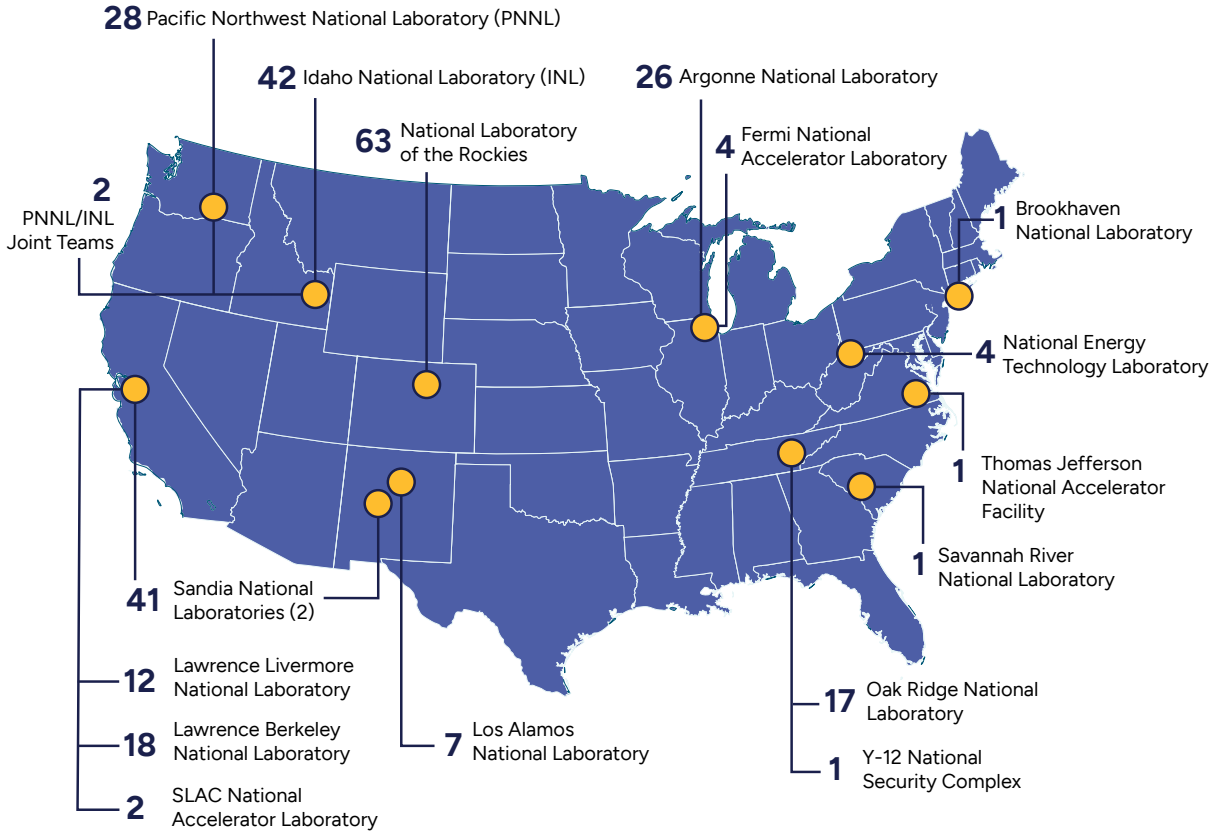




Photos by Amy Griffin, John De La Rosa, and Werner Slocum

21 COHORTS of ENERGY I-CORPS

270 TEAMS | 16 NATIONAL LABS, PLANTS, AND SITES



LEARNING FROM

More than 270 industry mentors and **more than 19,760** stakeholder discovery interviews with organizations like:

Shell, Ford, World Bank, John Deere, Siemens Gamesa, Chevron, Eaton, Samsung, Lowes, Johns Manville, LEGO, U.S. Army, Trane, Tesla, GM, Dow Chemical, 3M, Whirlpool, GE, Home Depot, Google, Amazon, McKinsey & Company, Master Builders Solutions, and IBM

570+ Researchers Trained

21 Offices within DOE and NNSA contributed funds to EIC teams and projects

$234M+ Post-Program Funding

19,760+ Stakeholder Discovery Interviews

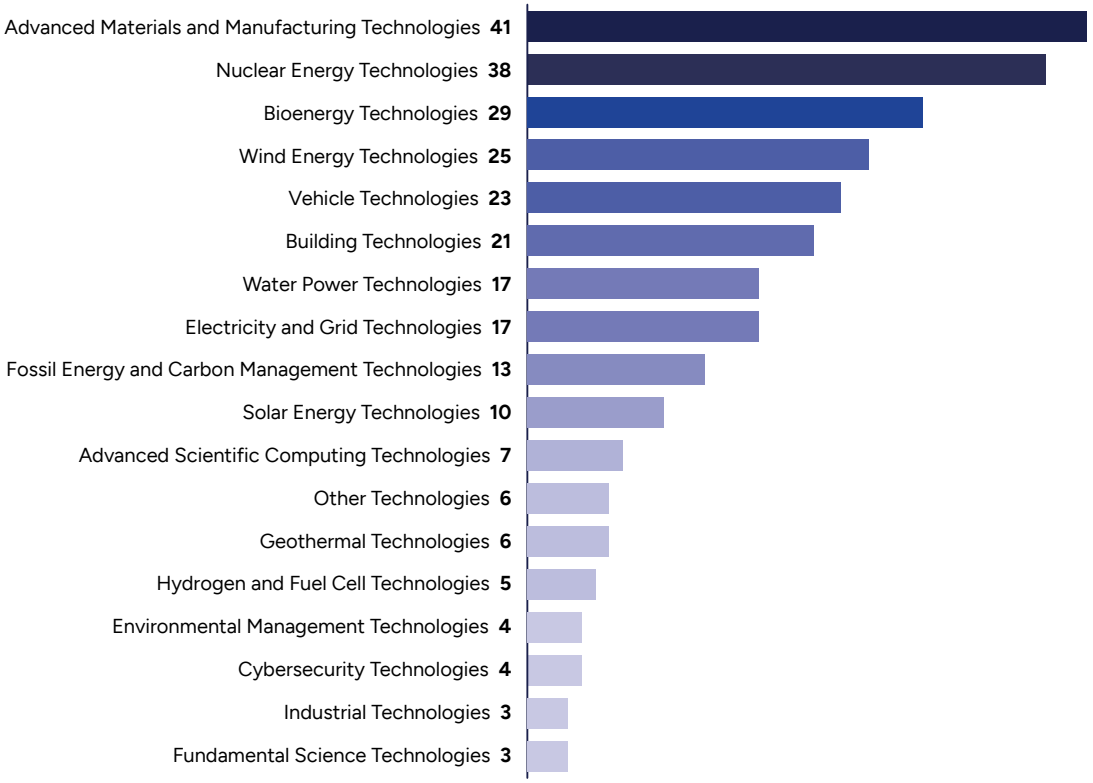
99 Licenses Executed

For more information, visit: energyicorps.energy.gov

Quick Stats

270 Energy I-Corps Topic 2 teams have attracted more than $234 million in post-program funding

BRINGING **ENERGY INNOVATIONS** TO



"It's Y-12's first time inside of this cohort-based program and we're very excited to be a part of it! We're looking forward to learning from the breadth of expertise that [Energy I-Corps] offers."

Daniel Riddick

Cohort 21 Participant from the Y-12 National Security Complex

By the Numbers

To support participation in an EIC Training Cohort, teams are awarded funding from DOE program offices, NNSA, their National Lab, or industry partners. After the program concludes, teams often seek additional funding for continued commercialization activities. Post-program funding may take many forms, including DOE funding, grants, laboratory research funding, cooperative research awards, industry support, private capital, etc. The information shown below highlights the initial funding investments, as well as the post-program funding reported by teams.

PROGRAM FUNDING TO DATE
$21,225,000

POST-PROGRAM FUNDING
$234,632,953

Funding Snapshot

Funded By	Funded Teams	Investment	Post-Program Funding
National Lab	14	$987,500	$11,454,998
Pilot	10	$750,000	$2,897,000
Private	1	$75,000	$246,861
Program Office	245	$19,412,500	$220,034,094
Grand Total	**270**	**$21,225,000**	**$234,632,953**

Technology Office Funding Detailed Breakdown

DOE Funding Office	Funded Teams (full or partial funding)	Investment	Post-Program Funding
AMMTO	14	$960,000	$800,000
AMO*	31	$2,147,500	$33,954,739
BETO	28	$2,020,000	$11,596,617
BTO	14	$985,000	$4,093,250
CESER	6	$301,667	$33,333
EM	2	$150,000	$7,572,500
FE	11	$802,500	$9,810,000
GTO	8	$475,833	$4,936,667
HFTO	6	$382,500	$2,796,857
ITO	2	$180,000	$1,100,000
NAWI**	2	$150,000	$4,600,000
NE	20	$1,449,167	$15,621,333
NNSA	17	$1,310,000	$10,472,002
OE	18	$1,224,167	$11,458,333
OTC	7	$580,000	$7,379,485
SC-ASCR	7	$565,000	$11,730,000
SC-BES	3	$103,333	$666,667
SC-FES	1	$100,000	$0
SC-IP	1	$80,000	$0
SETO	10	$729,167	$46,576,333
VTO	24	$1,762,500	$9,870,323
WETO	21	$1,484,167	$5,859,654
WPTO	16	$1,170,000	$15,756,000
WWPTO†	4	$300,000	$3,350,000
Grand Total	**273**	**$19,412,500**	**$220,034,094**

*In 2023, AMO restructured to ITO and AMMTO.

**NAWI is not a DOE program office. It is a research program and public-private partnership supported by DOE.

†In 2016, WWPTO restructured to WPTO and WETO.

By the Numbers

TEAMS FUNDED
270

STAKEHOLDER DISCOVERY INTERVIEWS
19,760+

By Laboratory

Lab	Funded Teams	Post-Program Funding Received	Discovery Interviews
ANL	26	$20,706,709	1,972
BNL	1	$0	76
FNAL	4	$1,550,000	258
INL	42	$27,279,088	3,108
PNNL/INL Joint Teams	2	$1,386,000	181
JLab	1	$0	76
LANL	7	$2,202,000	563
LBNL	18	$26,522,500	1,324
LLNL	12	$16,755,500	713
NETL	4	$5,825,000	306
NLR	63	$78,348,190	4,746
ORNL	17	$15,437,714	1,321
PNNL	28	$19,961,250	1,947
SLAC	2	$345,000	83
SNL	41	$18,314,002	2,926
SRNL	1	$0	78
Y-12	1	$0	83
Grand Total	**270**	**$234,632,953**	**19,761**

By Cohort

Cohort	Funded Teams	Post-Program Funding Received	Discovery Interviews
0	3	$0	225
1	14	$3,851,000	767
2	14	$28,846,222	815
3	8	$4,150,000	475
4	15	$48,015,000	937
5	12	$1,728,000	916
6	8	$14,634,361	606
7	8	$15,170,714	669
8	10	$6,095,000	776
9	12	$9,720,000	910
10	10	$11,925,500	763
11	17	$24,581,409	1,148
12	18	$13,063,750	1,361
13	16	$10,952,997	1,251
14	16	$11,605,000	1,052
15	10	$8,239,000	837
16	13	$6,614,000	1,029
17	11	$7,585,000	837
18	14	$7,656,000	1,073
19	13	$200,000	1,084
20	16	$0*	1,263
21	12	$0*	967
Grand Total	**270**	**$234,632,953**	**19,761**

*2025 EIC cohorts have not reported post-program funding to date.

> **“To me, Energy I-Corps is about getting engineers out there talking to people and seeing if our technology is viable in the broader marketplace—not just in our cocoon of research.”**

Noelle Collins

Cohort 21 Participant from Sandia National Laboratories

Participation by Program Offices

EIC teams are funded by individual program offices within DOE and NNSA. Labs also have the opportunity to fund teams or find industry partners to fund teams. Information provided on the following pages incorporates reporting from the first cohort pilot through Cohort 21, ending in November 2025.

Teams can be jointly funded by multiple program offices. These teams are marked as "(.5)" or "(.33)" following their team name, depending on the number of funding program offices. Jointly funded teams' interview numbers are divided by the number of funding program offices.

Advanced Manufacturing Office (AMO)*

Team	Lab	Cohort	Discovery Interviews
Micro Miners (.5)	LLNL	2	30
NanoHeatBlock	ANL	2	83
Saline Solutions	LLNL	2	50
Fermians	FNAL	3	48
E-RECOV	INL	4	57
Re-Light	INL	5	75
Electroplate (.5)	INL	5	28
BaSiC	NLR	5	80
COMBA	LBNL	7	107
LaserSense (Iris Light Technologies)	ANL	7	79
FLO.materials	LBNL	7	78
HyMag (.5)	ANL	8	39
CAN-Coatings	ANL	8	72
Shakti Power Systems	ANL	9	71
C-CHiRP	ANL	10	78
E-Ionsorb	LLNL	10	61
EMEE	INL	11	79
ARME	PNNL	11	77
Sustainability Integrators	INL	11	74
RE-Metal	INL	11	76
EC-Leach	INL	12	71
RECOVER (.5)	PNNL	12	39
WESAP	PNNL	12	93
CO2 Converters (.5)	ANL	12	39
Wolfram Plating	SNL	13	68
GALILEO	ANL	13	80
Phase Changers	NLR	14	78
FrozEn	PNNL	14	79
CAML	SNL	14	55
Solar Dry Reforming	SNL	15	65
Mixed Plastic Upcycling	ORNL	15	88

FUNDED TEAMS**
31

INVESTMENT TOTAL
$2,147,500

POST-PROGRAM FUNDING
$33,954,739

DISCOVERY INTERVIEWS
2,096

*In 2023, AMO restructured to ITO and AMMTO.

**Full or partial funding

Participation by Program Offices

Advanced Materials and Manufacturing Technologies Office (AMMTO)

Team	Lab	Cohort	Discovery Interviews
Diamond Semiconductors	SNL	16	77
Recyclobot	ANL	16	103
Litholution	INL	17	76
SSAM (.33)	PNNL	17	25
Advanced Cathodes (.5)	ANL	18	39
MatDNA (.33)	SNL	18	25
HEMatGan (.33)	SNL	18	31
MXel	ANL	20	105
BatterUp	SNL	20	79
AMPERE (.5)	LLNL	20	38
AutoLab (.5)	BNL	20	38
BindAll	ORNL	21	77
SPARC	SNL	21	81
RapidID	NLR	21	81

FUNDED TEAMS*
14

INVESTMENT TOTAL
$960,000

POST-PROGRAM FUNDING
$800,000

DISCOVERY INTERVIEWS
856

Industrial Technologies Office (ITO)

Team	Lab	Cohort	Discovery Interviews
ENERWAVE	NETL	18	79
HFLW Concrete	ORNL	20	78

FUNDED TEAMS*
2

INVESTMENT TOTAL
$180,000

POST-PROGRAM FUNDING
$1,100,000

DISCOVERY INTERVIEWS
157

*Full or partial funding

“I like [Energy I-Corps’] focus on quick to-market and risk reduction. It’s good practical advice [for these researchers].”

Ron Sinton
Cohort 21 Industry Mentor

Participation by Program Offices

Bioenergy Technologies Office (BETO)

Team	Lab	Cohort	Discovery Interviews
High-Moisture Pelleting Process	INL	2	86
FiberSAS	ANL	3	76
WasteNot	ANL	3	70
FUSS	LANL	4	71
Bio-Blend aka OptiBlend	INL	4	75
Nitrilica	NLR	5	77
Glycoplastics	NLR	5	77
CuB Fuels	NLR	5	98
Electro-Active (.5)	ORNL	7	40
Fermeley	LBNL	8	81
EcoPod	LBNL	8	77
Embodied Carbon	NLR	9	78
Grab-X	ANL	9	83
CYCle	NLR	10	86
Greenrm	SNL	10	78
BETTER	NLR	11	73
UltraSep	LANL	12	76
Bio-NIPU (.5)	NLR	12	39
BioPack-ML	LANL	12	76
REVAMP	NLR	13	81
Bioreactor	LLNL	14	60
O2SAF	PNNL	15	77
CUBES	SNL	16	82
3HP	PNNL	16	78
ReCapture (.5)	NLR	18	42
NextGen Hydrothermal Liquefaction	PNNL	19	81
Cellulose 2.0	INL	19	77
LignoCat	LBNL	19	75

FUNDED TEAMS*
28

INVESTMENT TOTAL
$2,020,000

POST-PROGRAM FUNDING
$11,596,617

DISCOVERY INTERVIEWS
2,070

*Full or partial funding

“The advantage of doing [the Energy I-Corps program] early, before taking [our technology] to market, is that we can help with the development and tailor where that need really is.”

Ashley Gaulding

Cohort 21 Participant from the National Laboratory of the Rockies

Participation by Program Offices

Building Technologies Office (BTO)

Team	Lab	Cohort	Discovery Interviews
VOLTTRON	PNNL	2	33
MAI for Buildings	ORNL	3	74
SwitchGlaze (.5)	NLR	3	27
Thermoelectric Dryer	ORNL	4	45
Beyond Fault Detection	NLR	5	76
GreenBlox	NLR	6	74
Amber LEDs	NLR	9	77
ThermaStor	LBNL	9	78
EB Treement	FNAL	11	56
Bio-NIPU (.5)	NLR	12	39
FreeSpace Tank Team	NLR	12	77
UBEM	LBNL	12	77
Catch It	NLR	16	77
Retrofit-Ready Decarb	LBNL	17	75

FUNDED TEAMS*
14

INVESTMENT TOTAL
$985,000

POST-PROGRAM FUNDING
$4,093,250

DISCOVERY INTERVIEWS
885

Office of Cybersecurity, Energy Security, and Emergency Response (CESER)

Team	Lab	Cohort	Discovery Interviews
OptimalEnergy (.33)	SNL	19	28
MSE (.25)	INL	20	20
Top Gear (.5)	INL	20	38
CYSAT (.5)	NLR	20	40
NanoSurge (.5)	SNL	21	39
OpDefender	INL	21	97

FUNDED TEAMS*
6

INVESTMENT TOTAL
$301,667

POST-PROGRAM FUNDING
$33,333

DISCOVERY INTERVIEWS
261

Office of Environmental Management (EM)

Team	Lab	Cohort	Discovery Interviews
Gamma Rayality (GRI)	LBNL	6	77
Purebeam	FNAL	7	78

FUNDED TEAMS*
2

INVESTMENT TOTAL
$150,000

POST-PROGRAM FUNDING
$7,572,500

DISCOVERY INTERVIEWS
155

*Full or partial funding

Participation by Program Offices

Office of Fossil Energy (FE)

Team	Lab	Cohort	Discovery Interviews
MECS	LLNL	4	64
CO2BOL-NG	PNNL	5	75
Memzyme	SNL	10	81
CO2 Converters (.5)	ANL	12	39
ALFa-LDS for Methane	LANL	15	72
Pipeline Sensors	NETL	15	78
Lignocrete	NLR	17	76
ReCapture (.5)	NLR	18	42
Green Capture	ORNL	19	86
SCANIT	LBNL	19	78
In-Pipe Slurry Separation	PNNL	21	78

FUNDED TEAMS*
11

INVESTMENT TOTAL
$802,500

POST-PROGRAM FUNDING
$9,810,000

DISCOVERY INTERVIEWS
769

Geothermal Technologies Office (GTO)

Team	Lab	Cohort	Discovery Interviews
Micro Miners (.5)	LLNL	2	30
TOUGH	LBNL	2	54
GeoCAES	NLR	4	51
Sandia Technology Systems	SNL	4	40
Dual-Source Heat Pump	ORNL	16	76
MatDNA (.33)	SNL	18	25
HEMatGan (.33)	SNL	18	31
Xhangi	LANL	19	111

FUNDED TEAMS*
8

INVESTMENT TOTAL
$475,833

POST-PROGRAM FUNDING
$4,936,667

DISCOVERY INTERVIEWS
417

Hydrogen and Fuel Cell Technologies Office (HFTO)

Team	Lab	Cohort	Discovery Interviews
Polymer Membranes	SNL	2	41
CryoH2	LLNL	4	56
Electro-Active (.5)	ORNL	7	40
High Flying Hydrides	NLR	13	78
GreenHEART (.5)	NLR	17	38
P-SOEC	INL	19	77

FUNDED TEAMS*
6

INVESTMENT TOTAL
$382,500

POST-PROGRAM FUNDING
$2,796,857

DISCOVERY INTERVIEWS
330

*Full or partial funding

Participation by Program Offices

National Alliance for Water Innovation (NAWI)*

Team	Lab	Cohort	Discovery Interviews
Water DAMS	NLR	11	82
Water-TAP3	NLR	11	72

FUNDED TEAMS**
2

INVESTMENT TOTAL
$150,000

POST-PROGRAM FUNDING
$4,600,000

DISCOVERY INTERVIEWS
154

Office of Nuclear Energy (NE)

Team	Lab	Cohort	Discovery Interviews
QUAKE	INL	2	35
Monolith	SNL	3	37
Change Detection Systems	INL	4	71
Dry Cask Vital Signs	INL	4	51
EMRALD	INL	5	76
Electroplate (.5)	INL	5	28
AMAFT	INL	5	76
4C's	INL	6	38
ELINA	INL	6	102
HOT	INL	7	75
AxiVis	INL	7	90
M2LD	INL	8	116
Rotoro	INL	9	77
Thermal Sound On	INL	10	73
Mesofluidics	PNNL	13	63
Feedforward K9	INL	14	60
MIA	ORNL	17	94
SSAM (.33)	PNNL	17	25
SHIELDS	INL	19	76
VIPER	INL	20	81

FUNDED TEAMS**
20

INVESTMENT TOTAL
$1,449,167

POST-PROGRAM FUNDING
$15,621,333

DISCOVERY INTERVIEWS
1,344

*NAWI is not a DOE program office. It is a research program and public-private partnership supported by DOE.

**Full or partial funding

Participation by Program Offices

National Nuclear Security Administration (NNSA)

Team	Lab	Cohort	Discovery Interviews
Enduring Advantage	SNL	10	75
UXI	SNL	10	81
HECATE	SNL	11	81
CAP Fastener	SNL	11	60
MAD3	SNL	12	74
EPDR	SNL	12	71
ThermaSET	SNL	13	103
Fractured	SNL	13	76
Disease Precognition	LANL	14	82
nDETECT	SNL	14	75
Tough Adhesive	ORNL	15	74
Ridged Electrodes	SNL	16	77
Electro3D	SNL	16	76
MagTag	SNL	17	75
PhotoSil	LLNL	17	77
InterFluid Sensors	SNL	18	72
NERO	SNL	19	79

FUNDED TEAMS*
17

INVESTMENT TOTAL
$1,310,000

POST-PROGRAM FUNDING
$10,472,002

DISCOVERY INTERVIEWS
1,308

Office of Electricity (OE)

Team	Lab	Cohort	Discovery Interviews
DCAT	PNNL	6	75
Glass paper	INL	8	75
EnergyBlox	SLAC	8	27
EcoBlock	LBNL	9	75
DER-CAM	LBNL	9	78
TRAST	PNNL	11	78
THERMS (.5)	SNL	12	34
C3D	INL	13	87
MASTERRI	INL	14	55
GRIP	SLAC	14	56
Fire Map	SNL	16	75
GridSense	SNL	17	80
OptimalEnergy (.33)	SNL	19	28
XGridDS	LLNL	20	75
MSE (.25)	INL	20	20
AMPERE (.5)	LLNL	20	38
RAPID-MIB	INL	20	75
NanoSurge (.5)	SNL	21	39

FUNDED TEAMS*
18

INVESTMENT TOTAL
$1,224,167

POST-PROGRAM FUNDING
$11,458,333

DISCOVERY INTERVIEWS
1,069

*Full or partial funding

Participation by Program Offices

Office of Science Advanced Scientific Computing Research (SC-ASCR)

Team	Lab	Cohort	Discovery Interviews
SuperChips	LBNL	11	72
INN-Design	NLR	12	69
RoboDT	ANL	14	76
Intercept Imaging	LANL	18	75
GreenSight	ORNL	18	80
QICK	FNAL	18	76
ELLMO	SNL	21	80

FUNDED TEAMS* **7**

INVESTMENT TOTAL **$565,000**

POST-PROGRAM FUNDING **$11,730,000**

DISCOVERY INTERVIEWS **528**

Office of Science Basic Energy Sciences (SC-BES)

Team	Lab	Cohort	Discovery Interviews
MatDNA (.33)	SNL	18	25.33
HEMatGan (.33)	SEL	18	30.66
AutoLab (.5)	BNL	20	38

FUNDED TEAMS* **3**

INVESTMENT TOTAL **$103,333**

POST-PROGRAM FUNDING **$666,667**

DISCOVERY INTERVIEWS **94**

Office of Science Fusion Energy Sciences (SC-FES)

Team	Lab	Cohort	Discovery Interviews
IgniteAM	LLNL	20	78

FUNDED TEAMS* **1**

INVESTMENT TOTAL **$100,000**

POST-PROGRAM FUNDING **$0**

DISCOVERY INTERVIEWS **78**

Office of Science Isotope R&D and Production (SC-IP)

Team	Lab	Cohort	Discovery Interviews
Efficient Isotopes	PNNL	15	76

FUNDED TEAMS* **1**

INVESTMENT TOTAL **$80,000**

POST-PROGRAM FUNDING **$0**

DISCOVERY INTERVIEWS **76**

*Full or partial funding

Participation by Program Offices

Solar Energy Technologies Office (SETO)

Team	Lab	Cohort	Discovery Interviews
Solguard	NLR	2	51
Hydroscanner	LLNL	3	44
HALO	NLR	4	83
THERMS (.5)	SNL	12	34
AVIAN-SOLAR	ANL	15	123
NIO	NLR	16	79
SSAM (.33)	PNNL	17	25
Step 1	SNL	19	75
TES.CP	NLR	21	76
SYRA	NLR	21	78

FUNDED TEAMS*
10

INVESTMENT TOTAL
$729,167

POST-PROGRAM FUNDING
$46,576,333

DISCOVERY INTERVIEWS
668

Vehicle Technologies Office (VTO)

Team	Lab	Cohort	Discovery Interviews
Smart Charge Adapter	ANL	2	71
CellSage	INL	4	44
Lubricant Engineers	PNNL	4	75
MicroWatts	NLR	5	75
FAST	PNNL	6	91
Beyond Lithium-Ion Batteries	ANL	7	82
routeE	NLR	8	80
BOND-NORTHWEST	PNNL	8	93
Resilicoat	ANL	9	82
HeadCount	NLR	10	74
SWaP Electronics	SNL	11	47
RECOVER (.5)	PNNL	12	39
e-Mission	NLR	12	78
Athena	NLR	13	82
DFI	SNL	13	76
EnStore for BTMS	NLR	13	88
Lithium Battery	INL	13	75
Real-Twin	ORNL	14	78
ShAPE Recycling	PNNL	14	63
ZAV-SNL	SNL	14	48
Track Analytics	SNL	16	75
Advanced Cathodes (.5)	ANL	18	39
SprayCell	ANL	19	110
EVI-FBA	NLR	20	76

FUNDED TEAMS*
24

INVESTMENT TOTAL
$1,762,500

POST-PROGRAM FUNDING
$9,870,323

DISCOVERY INTERVIEWS
1,721

*Full or partial funding

Participation by Program Offices

Wind Energy Technologies Office (WETO)

Team	Lab	Cohort	Discovery Interviews
HyMag (.5)	ANL	8	39
SpiderFloat	NLR	8	77
MADe3D	NLR	9	78
SAND	INL	9	77
ThermalTracker-3D	PNNL	9	56
HOPP	NLR	11	44
OpenOA	NLR	11	44
RBLO	NLR	12	57
TAP	NLR	12	76
WindEZ	NLR	14	76
HighWind	NLR	15	107
NoVo Rotor	NLR	16	79
Distributed Wind Toolkit	NLR	16	75
Hercules	NLR	17	75
GreenHEART (.5)	NLR	17	38
INDRAGUARD	ORNL	18	79
OptimalEnergy (.33)	SNL	19	28
Windpowercast	NLR	19	76
LiBERTi	NLR	20	79
MSE (.25)	INL	20	20
WR-90	PNNL	21	76

FUNDED TEAMS*
21

INVESTMENT TOTAL
$1,484,167

POST-PROGRAM FUNDING
$5,859,654

DISCOVERY INTERVIEWS
1,355

Water Power Technologies Office (WPTO)

Team	Lab	Cohort	Discovery Interviews
IHESS2020	INL	11	72
SLIC	PNNL	11	61
Irrigation Viz	INL; PNNL	12	96
GLIDES	ORNL	13	75
Lab-on-a-Fish	PNNL	13	52
Under the C	NLR	14	71
Hydrogen Ships	SNL	14	40
SeaDragon	NLR	17	57
Integrated Energy Box	NLR	18	75
NAIAD	INL; PNNL	18	85
PoSeiDOn	NLR	18	84
HydroHub	INL	20	75
MSE (.25)	INL	20	20
Top Gear (.5)	INL	20	38
CYSAT (.5)	NLR	20	40
Origami FlexWEC	NLR	21	83

FUNDED TEAMS*
16

INVESTMENT TOTAL
$1,170,000

POST-PROGRAM FUNDING
$15,756,000

DISCOVERY INTERVIEWS
1,024

*Full or partial funding

Participation by Program Offices

Wind and Water Power Technologies Office (WWPTO)

Team	Lab	Cohort	Discovery Interviews
Dynamic Line Rating aks GLASS	INL	3	72
Autonomous Concrete Printing	NLR	4	79
RF Tag	PNNL	4	75
WindSOCK	NLR	5	75

FUNDED TEAMS*
4

INVESTMENT TOTAL
$300,000

POST-PROGRAM FUNDING
$3,350,000

DISCOVERY INTERVIEWS
301

Lab Funded

Team	Lab	Cohort	Discovery Interviews
CI-ReClad	ORNL	1	75
Dynamic Aperture	ANL	1	23
EcoSnap	NLR	1	45
HYDRA	PNNL	1	40
SubLambda	PNNL	1	37
Tunation	ORNL	1	86
WISDEM	NLR	1	80
BioAlchemy	LBNL	2	51
Biolyst Renewables	NLR	2	81
Evodia	LBNL	2	45
Resin Wafer Deionization (RWEDI Solutions)	ANL	2	75
SwitchGlaze (.5)	NLR	3	27
OleoSponge	ANL	6	62
APeX Imaging	NLR	15	77

FUNDED TEAMS*
14

INVESTMENT TOTAL
$987,500

POST-PROGRAM FUNDING
$11,454,998

DISCOVERY INTERVIEWS
804

Office of Technology Commercialization (OTC)

Team	Lab	Cohort	Discovery Interviews
UTS	ORNL	10	76
MAC	NETL	12	69
memQ	ANL	13	87
Hyper Team	NETL	13	80
CECIE	SRNL	18	78
Hydra	JLab	20	76
PA&QI Tools	Y-12	21	83

FUNDED TEAMS*
7

INVESTMENT TOTAL
$580,000

POST-PROGRAM FUNDING
$7,379,485

DISCOVERY INTERVIEWS
549

*Full or partial funding

Participation by Program Offices

Pilot Funded

Team	Lab	Cohort	Discovery Interviews
Frequency Sensing Load Controller	ANL	0	75
My Green Car	LBNL	0	75
TwistAct	SNL	0	75
ARAI	INL	1	96
C-Best	LLNL	1	13
Co-Culture Green	PNNL	1	34
Ring Burner	LBNL	1	71
SonicLQ	ANL	1	11
STARS	PNNL	1	78
Switchable Polarity Solvents	INL	1	78

FUNDED TEAMS*
10

INVESTMENT TOTAL
$750,000

POST-PROGRAM FUNDING
$2,897,000

DISCOVERY INTERVIEWS
606

Privately Funded

Team	Lab	Cohort	Discovery Interviews
Opt-Grid	NLR	6	87

FUNDED TEAMS*
1

INVESTMENT TOTAL
$75,000

POST-PROGRAM FUNDING
$246,861

DISCOVERY INTERVIEWS
87

*Full or partial funding

“The end goal is to reduce the time and money that is spent on missteps or drift and help [these researchers] be more laser focused on having their technology matter to solve real issues sooner.”

Jean Redfield
EIC Instructor

Post-Program Funding

Team Post-Program Funding*

Team Name	Post-Program Funding Received	Funding Office
4C's	$1,500,000	NE
ALFa-LDS for Methane	$450,000	FE
AMAFT	$103,000	NE
APeX Imaging	$850,000	NLR
ARAI	$161,000	Pilot
ARME	$225,000	AMO
Athena	$375,000	VTO
AVIAN-SOLAR	$1,644,000	SETO
Bio-NIPU	$486,500	BETO, BTO
Biolyst Renewables	$6,449,998	NLR
Bioreactor	$225,000	BETO
BOND-NORTHWEST	$40,000	VTO
C3D	$570,000	OE
CAN-Coatings	$300,000	AMO
Change Detection Systems	$775,000	NE
CO2 Converters	$500,000	AMO, FE
CO2BOL-NG	$520,000	FE
COMBA	$3,600,000	AMO
CuB Fuels	$360,000	BETO
CUBES	$1,200,000	BETO
DCAT	$10,000	OE
DFI	$2,547,000	VTO
Dual-Source Heat Pump	$1,420,000	GTO
Dynamic Line Rating aks GLASS	$1,850,000	WWPTO
E-Ionsorb	$1,500,500	AMO
e-Mission	$1,140,000	VTO
E-RECOV	$280,000	AMO
EcoBlock	$8,000,000	OE
EcoSnap	$350,000	NLR
Electro-Active	$3,573,714	BETO, HFTO
Electro3D	$150,000	NNSA
ELINA	$6,505,000	NE
EMRALD	$745,000	NE
Enduring Advantage	$435,000	NNSA
ENERWAVE	$1,100,000	ITO
EPDR	$1,250,000	NNSA
Fermeley	$500,000	BETO
FireMap	$500,000	OE
FLO.materials	$4,800,000	AMO
Fractured	$16,000	NNSA
FrozEn	$600,000	AMO

*Reported through June 2025

Post-Program Funding

Team Post-Program Funding* (continued)

Team Name	Post-Program Funding Received	Funding Office
GALILEO	$1,150,000	AMO
Gamma Rayality (GRI)	$6,022,500	EM
GeoCAES	$300,000	GTO
Glass paper	$1,560,000	OE
GreenHEART	$2,020,000	HFTO, WETO
GridSense	$275,000	OE
GRIP	$345,000	OE
HALO	$41,880,000	SETO
HEMatGan	$2,000,000	AMMTO, GTO, SC-BES
Hercules	$50,000	WETO
High-Moisture Pelleting Process	$1,400,000	BETO
HOT	$840,000	NE
Hyper Team	$725,000	OTC
IHESS2020	$4,900,000	WPTO
Integrated Energy Box	$100,000	WPTO
Irrigation Viz	$350,000	WPTO
LaserSense (Iris Light Technologies	$807,000	AMO
Lignocrete	$2,000,000	FE
MAC	$800,000	OTC
MAD3	$345,000	NNSA
MADe3D	$800,000	WETO
MASTERRI	$40,000	OE
MECS	$1,680,000	FE
memQ	$1,564,485	OTC
MIA	$2,200,000	NE
Micro Miners	$4,900,000	AMO, GTO
Mixed Plastic Upcycling	$1,600,000	AMO
NAIAD	$1,036,000	WPTO
NanoHeatBlock	$1,782,026	AMO
nDETECT	$565,000	NNSA
NIO	$2,644,000	SETO
O2SAF	$425,000	BETO
OleoSponge	$350,000	ANL
OpenOA	$346,321	WETO
Opt-Grid	$246,861	IP Group (Private)
OptimalEnergy	$100,000	CESER, OE, WETO
PhotoSil	$200,000	NNSA
Pipeline Sensors	$3,200,000	FE
Purebeam	$1,550,000	EM
QUAKE	$2,820,000	NE
RE-Metal	$1,230,000	AMO
Real-Twin	$600,000	VTO

*Reported through June 2025

Team Post-Program Funding* (continued)

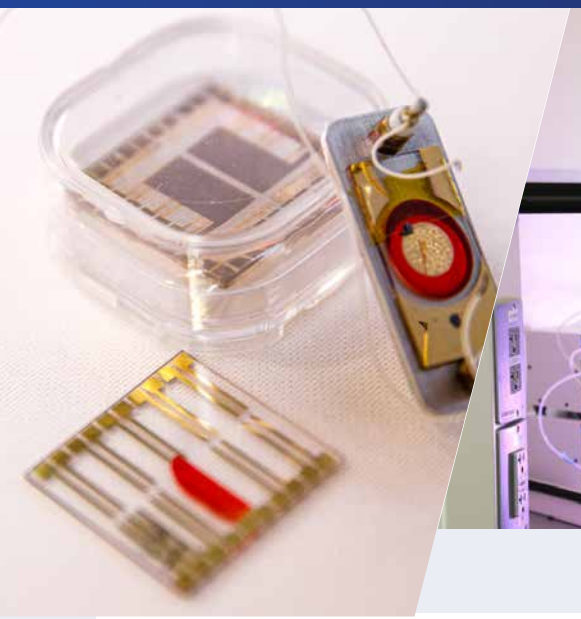
Team Name	Post-Program Funding Received	Funding Office
ReCapture	$3,420,000	BETO, FE
RECOVER	$1,960,250	AMO, VTO
Resin Wafer Deionization (RWEDI Solutions)	$1,701,000	ANL
REVAMP	$2,094,510	BETO
RF Tag	$1,500,000	WWPTO
RoboDT	$9,230,000	SC-ASCR
routeE	$1,795,000	VTO
Saline Solutions	$8,250,000	AMO
SeaDragon	$440,000	WPTO
SLIC	$8,930,000	WPTO
Smart Charge Adapter	$1,393,198	VTO
Solar Dry Reforming	$70,000	AMO
Solguard	$150,000	SETO
SonicLQ	$285,000	Pilot
SpiderFloat	$1,900,000	WETO
SSAM	$400,000	AMMTO, NE, SETO
STARS	$2,001,000	Pilot
SuperChips	$2,500,000	SC-ASCR
Sustainability Integrators	$1,550,088	AMO
SWaP Electronics	$300,000	VTO
Switchable Polarity Solvents	$450,000	Pilot
SwitchGlaze	$2,300,000	BTO, NLR
TAP	$800,000	WETO
ThermalTracker-3D	$920,000	WETO
ThermaSET	$1,811,002	NNSA
Thermoelectric Dryer	$1,600,000	BTO
THERMS	$250,000	OE, SETO
Track Analytics	$700,000	VTO
Tunation	$154,000	ORNL
UBEM	$1,100,000	BTO
UltraSep	$1,652,000	BETO
UTS	$4,290,000	OTC
UXI	$5,700,000	NNSA
Water DAMS	$600,000	NAWI**
Water-TAP3	$4,000,000	NAWI**
WESAP	$2,430,000	AMO
WISDEM	$450,000	NLR
Wolfram Plating	$100,000	AMO
Xhangi	$100,000	GTO
Total	**$234,632,953**	

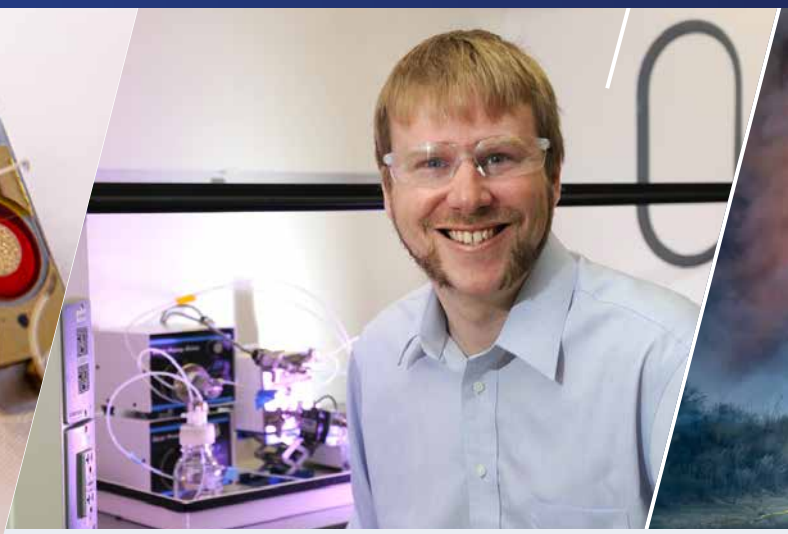
*Reported through June 2025

**NAWI is not a DOE program office. It is a research program and public-private partnership supported by DOE.

Team Spotlights

Energy I-Corps Topic 2 aims to accelerate the commercialization of energy technologies by delivering training and funding support to National Lab scientists and engineers. The following pages showcase the commercialization success and impact—both during and after the program—of just a few of the teams that have participated in EIC.





“This strategy of talking to 75 potential customers and [working on] the marketing is that this is least likely to be natural to the researchers at the National Labs. So, [Energy I-Corps] is a good bridge for them [to take a technology to market].”

Ron Sinton

Cohort 21 Industry Mentor

Electronic Polymer Dosimeter for Radiotherapy

Lab: Sandia National Laboratories

Funding Organization: National Nuclear Security Administration

Cohort: 12

How a Wearable Patch Could Revolutionize Cancer Treatment

What began as a project to develop a radiation-detection polymer for military personnel turned into a new technology for delivering radiation therapy to cancer patients, thanks in part to Energy I-Corps.

Shortly after SNL researchers Isaac Aviña and Patrick Doty developed the polymer for NNSA, Doty began investigating its application in cancer therapy. They entered the Energy I-Corps program to better understand the need behind the technology they were developing. Could it be applied to improve the safety and effectiveness of cancer treatments?

Together, the two researchers conducted more than 75 interviews, many with oncology doctors across the country. They discussed a patch that could monitor the beam of radiation going into the patient in real time, giving healthcare teams greater dosing precision. One of the interviews was with a pediatric oncologist who explained that radiation treatment is especially hard for kids, who require physical restraints and anesthesia to stay still during treatment. Additionally, dosing precision is of the utmost importance in pediatric patients because of their smaller-size tissues and organs.

Currently, there is no good option to measure the dosage and location of the beam on the patient during radiation therapy. Medical teams use pre- and post-treatment CT scan data to measure success of the radiation, which leads to more radiation exposure for patients and imprecise dosage, ultimately increasing the risk to healthy tissue.

“We didn’t quite understand the precision and accuracy problem of today’s radiation treatments,” Aviña said. “The Energy I-Corps program helped us understand how much our technology is really needed to address these issues.”

Participating in Energy I-Corps helped SNL researchers Patrick Doty (left) and Isaac Aviña develop a patch to improve precision and prevent damage to healthy tissue during radiotherapy. *Photo courtesy of Spencer Toy, SNL*

After Energy I-Corps, Aviña and Doty developed the Electronic Polymer Dosimeter for Radiotherapy (EPDR), which detects, directs, and measures radiation delivery to tumors, reducing costs and significantly enhancing treatment safety and effectiveness. Packaged as a disposable, adhesive patch, the imaging sensor attaches to the patient’s skin to measure the amount of radiation delivered and the location where the radiation enters the body. This happens in real time with minimal damage to healthy tissues.

This award-winning technology is undergoing clinical trials through a start-up company, WearableDose Precision Cancer/Radiation Therapy, which has a cooperative R&D agreement with SNL. So far, WearableDose has raised more than $1 million in financial endorsements to develop the EPDR.

Patented in 2024, the EPDR’s unique ability to provide high-resolution, real-time radiation dose monitoring addresses critical gaps not only in clinical radiotherapy but also in defense and emergency response settings. Its flexible and scalable design makes it adaptable for diverse use cases such as protecting military personnel and first responders operating in radiologically hazardous environments.

“As the father of three small children, I appreciate that what we’ve created is going to help kids going through cancer treatment,” Aviña said. “We can invent all day in the lab, but making something that can be used to reduce children’s pain and suffering—and also help ensure that soldiers and first responders are safe—makes a difference in how I view my work.” ■

FireMap

Lab: Sandia National Laboratories

Funding Organizations: Office of Electricity and Office of Cybersecurity, Energy Security, and Emergency Response

Cohort: 16

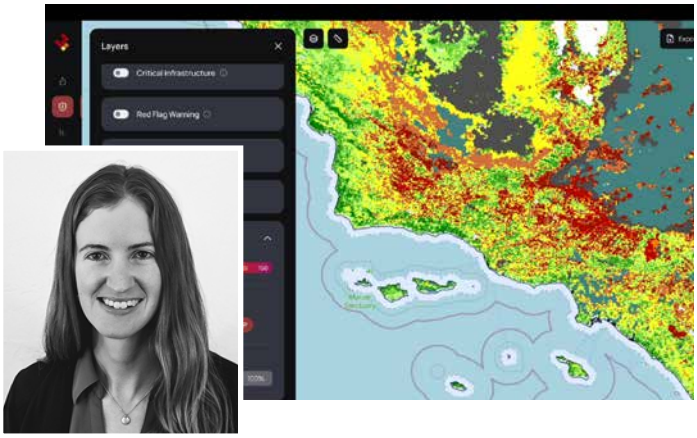
FireMap Helps Utilities Spot Wildfire Risks and Boost Grid Resilience

Wildfires pose a physical threat to the electric grid and are becoming more frequent and severe across the western United States. This motivated SNL researchers Holly Eagleston and Forest Danford to develop FireMap, a software that combines satellite imagery, weather data, and machine learning to characterize wildfire fuel conditions and simulate risk to electric-grid components. After completing a robust customer discovery process in the Energy I-Corps program, Eagleston launched her startup Firescape with a better understanding of her customer's needs.

FireMap helps utilities understand the specific nature of their wildfire risks and identify appropriate mitigation strategies to improve grid resilience. It uses satellite imagery to assess the moisture of flammable vegetation and calculate an energy release component, which is the measure of how much heat would be released if there were a fire in that area. With wildfire risk mapped, asset data can be overlaid to determine what areas are at risk of damage from wildfire. This grid resilience was added to Firescape's platform.

"There's actually a lot of competition in this space, especially with the wildfires that happened recently," said Eagleston, "so one of our distinguishing features is that we are a decision-making tool." Smaller utilities don't typically have enough staff or capacity to process data and find meaningful insights. "So Firescape does all that work for them—shows them which mitigations to use where and at what time," she added.

The FireMap team's participation in Cohort 16 of Energy I-Corps helped them discover a major pivot. Initially, they thought insurance agencies were their target customers. But in their customer discovery interviews, Eagleston and her team learned "Our technology was more focused on situational awareness than it was on risk mapping, and insurers didn't see that as a strong need or pain point." So FireMap pivoted to focus on utilities instead.



(Left) Firescape co-founder, Holly Eagleston. (Right) FireMap's technology combines satellite imagery and data on weather, vegetation density, and infrastructure from over 50 sources to predict wildfire potential and "hotspots." *Photos courtesy of Firescape*

"The [Energy I-Corps] training we received on how to ask the right questions was invaluable. It's something that any researcher could use to understand how their solution might be used in industry," said Eagleston.

After the team completed Energy I-Corps, Eagleston departed SNL through their Entrepreneurial Separation to Transfer Technology program and launched Firescape—a company that helps utilities and other stakeholders proactively manage wildfire risks to safeguard critical infrastructure and communities. Firescape won a $500,000 grant from New Mexico's advanced energy program to build out their technology.

Eagleston is in the process of applying to the DOE Office of Electricity's Digitizing Utilities Prize. Additionally, Firescape will launch two 6-month pilot programs with utilities in New Mexico and the Northeast region of the United States, which Eagleston secured during a pitch competition.

Eagleston recommends every scientist participate in Energy I-Corps. "You start to really understand what the product needs to be rather than simply how your research solves a problem. Even if you're not interested in being an entrepreneur, it helps you become a better grant writer. You'll understand how your technology can actually plug in to industry." ■

Switchable Polarity Solvents

Lab: Idaho National Laboratory

Funding Organization: Not applicable - EIC pilot program team

Cohort: 1

How a Research Pivot Crystallized a Commercial Success Story

Some breakthroughs don't start with success—they start with a pivot.

For INL researcher Aaron Wilson, the journey from concept to commercial impact didn't follow a straight line. But with guidance from Energy I-Corps, Wilson found a new direction that would reshape his work in the lab for years to come.

In 2015, Wilson joined the first-ever Energy I-Corps cohort (then called Lab Corps) with a promising water treatment concept called Switchable Polarity Solvents. The technology showed potential, but when the team couldn't meet the performance metrics required for follow-on funding, Wilson knew it was time to reassess. The entrepreneurial skills and sharper market perspective he gained through Energy I-Corps inspired Wilson to look beyond well-worn solutions. "There are a lot of water treatment technologies out there," he said. "And collectively, we had been rehashing the same ones for more than 40 years. We needed to come up with something truly different."

That industry-focused mindset took shape during Wilson's time in Energy I-Corps.

"The program pushed me to continually evaluate markets and keep talking with people," Wilson said.

What followed was an unexpected but game-changing shift in direction. Wilson investigated an old process (solvent-driven crystallization) with a new solvent (dimethyl ether) that is highly recyclable, which led to a new scientific model and paved the way for a more efficient and energy-saving approach to water filtration and mineral recovery.

Aaron's team pivoted to a new technique called dimethyl ether fractional crystallization, which recovers critical minerals and salts with exceptional efficiency and minimal energy use. This process has already demonstrated strong potential across a wide range of complex solutions,

Aaron Wilson from INL took part in the first-ever Energy I-Corps cohort and now applies that experience to lead innovative, real-world-focused separation technology research. *Photo courtesy of INL*

including battery and magnet recycling, acid mine drainage, and industrial byproducts. It is rapidly advancing toward real-world application through scale-up efforts with industry partners and recognition through a R&D 100 Award in 2023.

The Switchable Polarity Solvents technology has resulted in three licenses and two patents. Additionally, Wilson's team was awarded $750,000 in funding to continue to develop and deploy this technology.

Today, Wilson's team leads a diverse portfolio of projects all grounded in a focus on real-world application and commercial impact. "We don't continue to develop a technology if it doesn't have industrial potential," Wilson said. That principle has helped the INL group secure several licenses for work to support DOE's Critical Materials Innovation Hub and Minerals to Materials Supply Chain Research Facility program.

One lesson that stuck with Wilson came from Energy I-Corps instructor Peter Fisk: the importance of diversifying while staying focused. Today, Wilson's team applies that approach across 10 active projects, each targeting different markets, but all rooted in the same core technical foundation to scale impact without losing strategic direction.

To Wilson, commercialization means making science useful. "You've got to be able to explain why your work helps people," he said.

"That's what Energy I-Corps taught me: Focus on the real-world problem and then go build something that matters." ■

Ultra-Fast X-Ray Imager

Lab: Sandia National Laboratories

Funding Organization: National Nuclear Security Administration

Cohort: 10

Behind the Startup Framing Fusion's Fastest Moments

They set out to take pictures of nuclear experiments—and ended up building a startup tackling high-stakes challenges.

Supported by NNSA, a team from SNL began developing a technology capable of capturing visible phenomena occurring near the speed of light, with their first large-format image sensor fielded in 2012. Today, thanks in large part to the Energy I-Corps program, the team leads a thriving company fueled by precision, purpose, and a bit of fun.

The technology was born from a high-stakes need: to give fusion physicists more than a single snapshot of what's happening during their experiments. "One frame doesn't tell the story," said Liam Claus, cofounder of Advanced hCMOS Systems. "You need to see how an experiment evolves over time, especially when it's happening on a nanosecond scale." The team's sensor system makes it possible to take up to four time-gated images during a single experiment, filtering out background radiation and allowing physicists to validate complex simulations.

Deployed at facilities like Sandia's Z Pulsed Power Facility and Lawrence Livermore's National Ignition Facility, the system quickly became essential to stockpile stewardship diagnostics and fusion research. As requests for the sensors kept rolling in, the team found themselves wondering about the technology's future. They enrolled in Cohort 10 of the Energy I-Corps program to find out whether their innovation had legs in the market.

"Energy I-Corps taught us a lot," said Marcos Sanchez, also a cofounder of the startup. "What we learned wasn't that we had a billion-dollar idea, but that we had a viable one. We could build a sustainable business doing what we love."

Since joining Energy I-Corps as part of Team Ultra-Fast X-Ray Imager (UXI) in 2019, Claus has become a vocal advocate for the program.

Marcos Sanchez (left) and Matthew Dayton prepare for product delivery to the National Laboratories. *Photo courtesy of Advanced hCMOS Systems*

"The point of Energy I-Corps is getting scientists to think about business. It gave me a mindset I never would've entertained on my own, and it gave our team the courage to make the leap," he said.

With support from SNL's entrepreneurial leave program, Claus and Sanchez, along with Matthew Dayton, a colleague from Lawrence Livermore National Laboratory, launched Advanced hCMOS Systems. Today, their four-person startup continues to design and supply high-performance sensors for the National Laboratories while also expanding into the fast-growing commercial fusion sector.

Operating beyond the lab has allowed Advanced hCMOS Systems to streamline development and reduce costs, all while deepening their technical contributions to the national research mission. The company is currently working on new sensor designs, including a partnership with Lawrence Livermore National Laboratory to engineer devices capable of operating reliably in even more extreme test environments. They are also preparing to launch their first commercial product line.

But for the team, it's not just about commercial success. It's about building tools that expand what scientists can observe and understand. As Claus puts it: "We're nerds at heart, and we're building a business that reflects that." ■

Teaching Team

The teaching team brings the EIC Training Cohort curriculum to life. EIC instructors and coaches are the backbone of the program and bring the following to participants during their EIC experience:

- Time, energy, and commitment to guide teams to success
- Industry expertise including decades of startup experience
- Introduction to the commercialization process
- Deep technical backgrounds and advanced business experience
- Professional development and commercialization pathway opportunities
- One-on-one advisory sessions and presentation coaching
- Invaluable team-building exercises and networking opportunities.

Steve Albers
Cofounder and CTO,
Living Ink Technologies

Latane Brackett
Innovation Program Manager,
Division of Research and Economic Development, Jackson State University

Max Green
Founder and Managing Member, Ratio Flux

Rebecca Kauffman
Principal, Sun Raven

Alice Nichols
Entrepreneurship and Research Commercialization Specialist

Jean Redfield
CFO and Cofounder,
JM Redfield LLC

Tom Teynor
CEO, Bell Plumbing and Heating

“My favorite part [as a coach] has been two-fold: Helping researchers in the National Labs think about their technologies in terms of fit and commercialization, which is totally new for most of them. The other part of it is what I get to learn—being in this space keeps my mind renewed.”

Latane Brackett
EIC Coach

Program Team

The program team operates behind the scenes, ensuring the seamless execution of EIC's mission to educate and empower National Lab researchers. These dedicated administrators play a pivotal role in shaping the program's success and support the transformative journey of EIC researchers as they navigate the program.

Katherine Harsanyi
Program Manager for full EIC portfolio, OTC

Rebecca Szymkowicz
Program Manager for full EIC portfolio, OTC

Matt O'Brien
Program Manager for full EIC portfolio, contractor to OTC

Fernando Gouveia
Program Manager for full EIC portfolio, contractor to OTC

Katie Woslager
Program Manager for Topic 2: Training Cohorts, NLR

Andy Goeke
Program Operations for Topic 2: Training Cohorts, NLR

"[The cohorts have] developed strategic engagement and commercialization skills that will yield exceptional results in driving new technologies to market to help advance America's energy dominance."

Anthony Pugliese
DOE Chief Commercialization Officer and Director of the OTC

Thank You

Thank you to the DOE program offices, laboratories, instructors, and all who have made Energy I-Corps possible.

21
cohorts* completed as of fall 2025

270
teams from 17 National Labs

270+
industry mentors and instructors offered advice and guidance

21
offices within DOE and NNSA contributing funds to EIC teams and projects

570+
researchers trainied

19,760+
stakeholder discovery interviews conducted

“[Energy I-Corps] helps teams think differently than what they thought before with a different perspective and different set of questions. As a coach, this is what I love to see.”

Jean Redfield
EIC Instructor

*Plus pilot program cohort

Thank You


Cohort 20
Graduation Ceremony
Energy I-Corps


Yesterday's Interviews:
Interviewed
Interviewed Yesterday
Regulation
EPA, state, local

ENERGY I-CORPS

OTC Office of Technology Commercialization

Prepared by the National Laboratory of the Rockies,
a National Laboratory of the U.S. Department of Energy,
Office of Critical Minerals and Energy Innovation,
operated under Contract No. DE-AC36-08GO28308.

Uncredited photos courtesy of Kira Vos and Donica Payne

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