

## The Lab-Embedded Entrepreneurship Program (LEEP)

Supporting the next generation of clean tech entrepreneurs to move science innovations from lab to market

Addressing climate change, sustainability, and social justice cannot be based solely on deployment of existing technologies. New innovations, derived from massive U.S. investments in basic and applied energy research at universities and the national labs, are critically needed to achieve net-zero carbon emissions by 2050.

Successfully maturing a clean tech innovation into deployment at scale is notoriously hard. The process is arduous and expensive, with many technical, business, and manufacturing hurdles to overcome. Direct participation by the scientists and engineers who made the initial discovery increases the likelihood of translating these innovations into impact. However, the traditional STEM career path often does not prepare scientists to be successful entrepreneurs.

### LEEP

The Lab-Embedded Entrepreneurship Program (LEEP) was developed in 2015 by the U.S. Department of Energy (DOE) and the national labs to address all these challenges. LEEP accelerates the deployment of transformative energy technologies that address climate change and other challenges, while also creating jobs, promoting domestic manufacturing, and providing benefits to disadvantaged communities. LEEP is a multi-office DOE program managed by the LEEP Multi-Office Advisory Committee led by the Advanced Materials and Manufacturing Technologies Office (AMMTO). Currently 11 offices support the program focused on the following technology areas of interest:



Photo courtesy of the U.S. Department of Energy

- Advanced materials
- Improving manufacturing efficiency
- Industrial decarbonization
- Lowering building carbon and energy footprints
- Solar energy
- Wind energy
- Hydrogen and fuel cell technologies
- Quantum computing
- Energy storage – electric grid
- Innovative grid sensing and data analytics technologies
- Circularity (Re-X pathways; circular economy)
- Food, water, energy nexus
- Carbon dioxide removal
- Carbon capture, utilization and storage
- Other as determined by the LEEP nodes (comprised of respective lab programming) and DOE

### Leveraging national labs to accelerate cleantech to market

LEEP nodes are currently located at four of the 17 national laboratories operated by DOE: [Chain Reaction Innovations](#) (CRI) located at Argonne National Laboratory, [Innovation Crossroads](#) located at Oak Ridge National Laboratory, [Cyclotron Road](#) located at Lawrence Berkeley National Laboratory and [West Gate](#), located at the National Renewable Energy Laboratory.

U.S. DEPARTMENT OF  
**ENERGY** | **LEEP**  
Lab-Embedded Entrepreneurship Program

**CHAIN REACTION  
INNOVATIONS**  
Entrepreneurship at Argonne

**INNOVATION  
CROSSROADS**  
OAK RIDGE NATIONAL LABORATORY

**cyclotronroad**

**WEST  
GATE**



LEEP alumni, like CRI's ClearFlame Engine Technologies, developed their technologies at national labs and are currently running successful clean energy businesses.

Image from Argonne National Laboratory

LEEP's mission is to train the next generation of clean tech entrepreneurs to develop game-changing technologies for a clean energy future. LEEP taps into the many unique resources, facilities, and personnel in the national labs. LEEP nodes also leverage the vast business and manufacturing acumen present in innovation ecosystems locally, regionally, and nationally. The program seeks to move innovations into deployment at scale far more quickly and efficiently than is typical.

## How LEEP works

LEEP recruits clean energy's best and brightest minds through a national call for a two-year funded fellowship that will move their startup technology into the market.

Early-stage startups embed at their respective national lab and are mentored by a lab scientist. Each node consists of a vibrant community of current and alumni fellows, as well as the node team, to support each new cohort of innovators. The nodes also provide access to local/regional/national ecosystem support including business-entrepreneurship training to eliminate the hurdles traditionally faced by early-stage clean tech startups.

These innovators are our future. The LEEP program supports the revolutionary technologies that may quite literally save the planet.

## Current support

The program offers two years of support to allow LEEP fellows to focus fully on entrepreneurial training, maturing their innovation, forming a startup, and building a team to transition their innovations into the market, including:

- Paid two-year fellowship of up to \$115,000 per year
- \$150,000 to support technical work at a national lab
- Healthcare benefits
- \$12,000 yearly travel allowance
- Mentorship, programming, ecosystem networking
- Annual Demo Day introduce ecosystem partners and investors to startups
- All support is non-dilutive.

## Success stories

- [Read about successful CRI innovators.](#)
- [Browse Innovation Crossroads stories.](#)
- [Read more about Cyclotron Road.](#)
- [Read more about West Gate innovators.](#)

## Lab-Embedded Entrepreneurship Program



The LEEP program connects innovators with national laboratories and ecosystem partners to move science innovations from lab to market. Image by U.S. Department of Energy

## Our future

We need a transformative community of clean energy entrepreneurs. LEEP fellows and their startups have a proven track record of addressing the challenges early-stage clean tech startups face, supporting the visionary technologies that are changing the world.

As LEEP enters its tenth year, the goal is to grow the number of fellows in the program as well as the breadth of energy technologies supported. LEEP also strives to support DOE's diversity, equity, inclusion, and accessibility (DEIA) goals, while assuring the benefits of climate investments reach disadvantaged communities and inform equitable research, development, and deployment. ■

## Contacts

### Paul Syers

Technology Manager,  
Advanced Materials & Manufacturing  
Technologies Office  
U.S. Department of Energy  
Email: [paul.syers@ee.doe.gov](mailto:paul.syers@ee.doe.gov)  
<https://www.energy.gov/eere/ammto>

### Dick Co

Director, Chain Reaction Innovations  
Argonne National Laboratory  
Email: [chainreaction@anl.gov](mailto:chainreaction@anl.gov)  
[chainreaction.anl.gov](http://chainreaction.anl.gov)

### Dan Miller

Director, Innovation Crossroads  
Oak Ridge National Laboratory  
Email: [innvcrossrds@ornl.gov](mailto:innvcrossrds@ornl.gov)  
[innovationcrossroads.ornl.gov](http://innovationcrossroads.ornl.gov)

## Impact by the numbers

**181** Total LEEP  
Fellows

**\$1.85B** Follow-On  
Funding

**2,262** Jobs  
Created

### Thomas Kirchstetter

Acting Division Director, Cyclotron Road  
Lawrence Berkeley National Laboratory  
Email: [cyclotronroad\\_admin@lbl.gov](mailto:cyclotronroad_admin@lbl.gov)  
[cyclotronroad.lbl.gov](http://cyclotronroad.lbl.gov)

### Shelly Curtiss

Director, West Gate  
National Renewable Energy Laboratory  
Email: [westgate@nrel.gov](mailto:westgate@nrel.gov)  
[westgate.nrel.gov](http://westgate.nrel.gov)

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