Office of ENERGY ENERGY EFFICIENCY & RENEWABLE ENERGY

The Lab-Embedded Entrepreneurship Program (LEEP)

Supporting the next generation of energy and manufacturing tech entrepreneurs to move science innovations from lab to market

New innovations, derived from massive U.S. investments in basic and applied energy research at universities and the national labs, are critically needed to secure US energy futures and domestic manufacturing competitiveness.

Successfully maturing a new technology innovation into deployment at scale is notoriously hard. The process is arduous and expensive, with many technical, business, and manufacturing hurtles 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 and manufacturing technologies, while also creating jobs and promoting domestic manufacturing. 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 16 DOE program offices are engaged with the program with the following topic areas of interest:



- · Advanced materials
- · Improving manufacturing efficiency
- Lowering building carbon and energy footprints
- · Solar energy
- · Wind energy
- Hydrogen and fuel cell technologies
- · Quantum computing
- Energy storage for electric grid
- Innovative grid sensing and data analytics technologies
- Supply Chain Circularity (RE-X Pathways)
- Food, water, energy nexus
- Carbon capture, utilization and storage (CCUS)
- Other as determined by the LEEP nodes & DOE

Leveraging national labs to accelerate new tech to market

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













LEEP alumni, like CRI's ClearFlame Engine Technologies, developed their technologies at national labs and are currently running successful energy and manufacturing energy businesses. *Image by Argonne National Labortory.*

LEEP's mission is to train the next generation of energy and manufacturing tech entrepreneurs to develop gamechanging technologies for our 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 the country'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 energy and manufacturing tech startups.

These innovators are our future. The LEEP program supports the revolutionary technologies for the US to lead in energy and manufacturing innovation.

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.

- 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 introduces 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



Our future

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

As LEEP enters its tenth year, the program strives to continue supporting the strategic objectives in advancing technologies and securing US energy and manufacturing futures.

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Impact by the numbers

212 Total LEEP Fellows

\$4B Follow-on Funding

3,840 Jobs Created

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For more information, visit: energy.gov/eere/ammto/ lab-embedded-entrepreneurship-program

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