

# BEYOND LITHIUM-ION BATTERIES FOR ELECTRIC VEHICLES

## WHY THIS TOPIC

In the next generation combat vehicle power generation, energy storage, energy recharge, and energy distribution capabilities will be critically important. Full or partial electrification of a vehicle will enable significant improvements in offensive capabilities, agility & maneuverability, extended operational duration, on-board and exportable power, and reduced signatures for vehicles and mobility systems.

## WHAT WE NEED FROM YOU - THE INNOVATORS

As part of a Highly Electrified Platform (HEP), we are looking for innovators who can develop a next generation energy storage device for future U.S. Army vehicle platforms, to include hybrids and fully electric vehicles.

The HEP will have extremely high energy demands that will require vehicles to store several Megawatts of energy ensuring full system functionality in all operational environments across the range of military operations. The technology should include, but is not limited to:

- Providing, at a minimum, specific energy of 400 watts per kilogram
- A capability of recharge at a rate of >2C
- The same safety and reliability standards as today's Li-Ion batteries

## WHAT YOU RECEIVE FROM US

By design, this program provides up to \$50k in non-dilutive capital for qualified U.S. small businesses to complete a 12-week program that culminates in a pitch to Army stakeholders, strategic partners, and private investors. This program puts you side-by-side with the real Soldiers who could use what you create. You'll hear their frustrations firsthand, have a "translator" to explain Army jargon, and be backed by a concierge to help navigate the DOD — all while maturing your company and expanding your market reach. Learn more at [www.aal.army/spartn](http://www.aal.army/spartn)

## WHAT MAKES THIS PROGRAM DIFFERENT?

- ✓ Cohort based (routine Soldier/scientist interactions)
- ✓ Opportunity to access relevant Army equipment
- ✓ Access non-dilutive capital for your business
- ✓ Hybrid model - on-site and virtual programing
- ✓ Opportunity for future awards up to \$1.1 million
- ✓ Designed for U.S. small businesses (<500 employees)
- ✓ Learn firsthand how to work with the DOD
- ✓ Build brand recognition within a valuable market
- ✓ Receive increased data rights protections
- ✓ Participate while maintaining other sources of revenue

## ABOUT THE ARMY APPLICATIONS LABORATORY

We're not a laboratory in the traditional sense of the word. As the U.S. Army's innovation unit, we don't make things — we make things possible. The Army Applications Laboratory (AAL) is fundamentally reshaping how the Army works with industry to reunite American innovation and national security. Together, we question *why* and deliver *what if*. Learn how we do it at [aal.army](http://aal.army).

