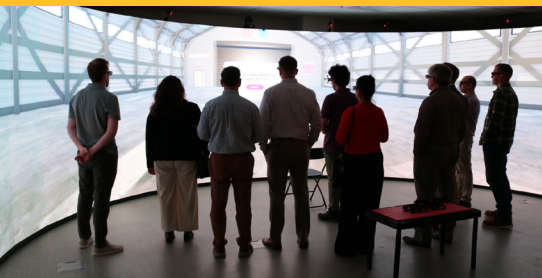


This is the BEST START Digest, an energy sciences newsletter published by the Energetics Technology Center (ETC) Inc. BEST START provides the crucial support businesses need to bring their visionary technologies to the warfighter. Whether refining smart grid technologies, enhancing renewable energy applications, or creating resilient solutions for power generation, BEST START partners with Minnesota companies to move technology forward. This newsletter aids in this mission.



BEST START Technology Demonstration attendees tour the UST Data Visualization Lab.



Exergi Predictive demonstrated fuel-efficiency gain compared to state-of-the-art heuristic control strategies.



LEMA Defense demonstrated dual axis solar array by powering a surveillance tower equipped with batteries, inverters, and a generator.

Updates

May 4–6 Technology Demonstration

BEST START convened defense, government, academic, and industry leaders for a three-day event showcasing advanced energy and power technologies designed to enhance operational resilience and warfighter capability. The event featured demonstrations from BEST START's partner companies, who are developing solutions in energy resilience, power generation, autonomous operations, thermal management, and microgrids. These technologies address key Department of Defense priorities, including reducing fuel logistics risks, improving energy security in contested environments, supporting distributed operations, and meeting the growing power demands of AI-enabled and autonomous systems. [Read the full press release from the event.](#)



Aza Power demonstrated their Rugged Ammonia Mobile Power Source (RAMPS) ammonia-fueled generator.

Virtual Technology Demonstration held June 11

A virtual technology presentation by BEST START program directors and partner companies was held June 11, 2026. For a summary of the demonstration, please contact beststart@etcmd.com.



Maxwell Labs previewed laser cooling across three key material platforms: ion-doped crystals, molecular dye dispersions, and semiconductors.

Partner Updates

Syncris recently participated in a SOCOM Technical Sprint Exercise where they demonstrated their modular, scalable inverters in the field. They operated their inverters in different configurations, showing their adaptability to a multitude of situations.

LEMA Defense recently participated in a Technology Readiness Experimentation (TREX) Event with DEVCOM where they demonstrated the operation of their surveillance tower and their rapidly deployable solar panels.



BWR Innovations debuted a clean sheet 5 kW hydrogen fuel cell in an off grid backup power scenario engineered for extreme demands.

BEST START Partner Companies

Maxwell Labs Inc.	Photonic Cooling
SYNCRIS	Microgrid Inverter with Model Predictive Control
BWR Innovations, LLC	Hydrogen Fuel Cell
Ascentek, LLC	Sodium Ion Battery
Aza Power Systems	Ammonia Power Combustion
LEMA, Inc.	Dual-axis high-efficiency Solar Power System
Exergi Predictive, LLC	AI-Based Energy Control for Tactical Microgrids

General News

[Chill Out at Own Peril: How Cooling Demand-Not AI- May Create Biggest Future Energy Crisis](#)

A rise in cooling energy demand may be a bigger issue than the demand caused by increased computing, potentially doubling total energy demand by 2050 according to a report by researchers at Rocky Mountain Institute. This is a consequence of rising global temperatures causing new stress on cooling, for all applications including comfort, industrial operations, and data centers. Solution strategies include “nature-based solutions such as urban greening, building design strategies and reduced carbon emissions overall.”

[First Quarter M&A Activity Tops \\$2.3B for Energy Storage Companies](#)

According to research by Mercom Capital Group, merger and acquisition activity across the energy storage value chain rose slightly to \$2.3M. Capital across the sector is expanding and investment is moving “beyond batteries to hydropower, biofuels and hydrogen, according to reports.” The International Energy Agency (IEA) projects the need to reach more than 5 terawatts (TW) globally for battery storage capacity by 2050 from less than 200 GW in 2023.

[U.S. Air Force Research Lab Awards \\$18 Million Contract to Develop Advanced Energy Storage Solutions](#)

Concurrent Technologies Corporation (CTC) was awarded an \$18M contract to develop advanced energy storage solutions for military operations. This

contract was issued under AFRL’s Operational Energy and Installation Resilience Program. These types of energy storage solutions are being sought after across the services to support its warfighters.

[Energy Department Awards \\$94 Million to American Companies to Help Expedite the Deployments of Small Modular Reactors in the United States](#)

Eight companies were selected by the Department of Energy to “support the near-term deployment of advanced light-water small modular reactors (SMRs) in the United States.” Two companies were selected for site selection & preparation, and six companies were chosen for the development of the supply chain for SMRs.

Legislative Updates

[Energy Subcommittee Holds Hearing on Electricity Transmission for Reliable and Affordable Power](#)

The subcommittee discusses permitting reforms to make it easier to build, mentioning federal authorities and red tape that has been an impediment to timely construction. Historically, the electrical grid has been built and maintained “state by state utility, by utility, with state regulators who understood their communities, their geography, their customers, and their specific energy needs better than any federal agency ever could,” says Congresswoman Laurel Lee (FL-15).

Opportunities and Solicitations

[Grid Catalyst launches GridReady, a utility innovation partnership to deliver cutting-edge technology solutions to Minnesota](#)

Grid Catalyst is “seeking companies with validated solutions ready for real-world deployment (TRL 7 or higher)” in focus areas including “grid modernization and grid enhancing technologies, electrification, and energy storage.” The program connects startups with real-world pilot opportunities and has a track record of success for developing these projects with MN partners, having supported the mobilization of 16 cutting-edge technology pilots in MN since 2022. Applications are due June 26, 2026.

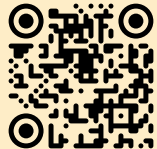
[Topics for SBIR/STTR Solicitations](#)

12 new topics are released on the first Wednesday of each month. Pre-release and open and closing dates for DoD SBIR/STTR topics can be found on the [Defense SBIR/STTR Innovation Portal](#).



BEST START

Scan QR or visit
<https://www.beststart.io>
for more information.



UPCOMING EVENTS

Date	Event	Organizer	Location
July 8–9	DOW Energy & Power Summit	Defense Strategies Institute	Washington, DC
Aug. 4–6, 2026	Data Center Frontier Trends Summit	Data Center Frontier	Reston, VA
Sept. 1–3, 2026	T&D World Live	APS	Phoenix, AZ
Sept. 28–30, 2026	Yotta 2026	DatacenterDynamics	Las Vegas, NV
Sept. 28–30, 2026	Experience POWER 2026	Access Intelligence	Washington, DC
Oct. 6	2026 Manufacturer's Summit	MN Chamber of Commerce	MN
Nov. 16–19, 2026	RE+ 26	RE+ Events	Las Vegas, NV