



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.

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Join us May 4–6 for the BEST START Technology Demonstrations!

Join us for the [BEST START Technology Demonstrations](#), May 4-6 in Minneapolis and St. Paul. This three-day event brings together a small group of defense, government, academic, and industry leaders for live demonstrations of seven breakthrough technologies focused on energy resilience and warfighter capability, developed by the partner companies

below. This is an opportunity to see systems operating in real-world and extreme-condition environments, including next-generation battery performance, hydrogen fuel cell backup systems, AI-driven tactical microgrid optimization, and more.

[Register Now!](#)

Partner Updates

BWR has developed and recently deployed a 600kW hydrogen fuel cell demonstration unit for Air Force Research Lab in Katy, TX.

Ascentek has completed their battery package design and testing and

have shown they can provide 1600A continuously for 30 seconds.

The BEST START team briefed the DoW OUSW R&E Operational Energy Innovation Directorate on the continued value of the program, highlighting the significant milestones reached by partner companies in clean energy technology development.

COMPANY	PROJECT
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

[Manjeet Rege of UST talks with FOX9 about Google’s proposed data center in Hermantown, MN](#)

Manjeet Rege, professor of software engineering and data science at UST, talks about the potential benefits of a data center in Hermantown, mentioning jobs in the short and long-term and tax revenue for the local community. He also notes that the location is great for a data center due to the cooler temperature, making air cooling more efficient, a stable regional power grid, and Minnesota’s central geographic location.

[Rooftop Solar for Commercial Real Estate](#)

“Rooftop solar site leases function much like a long-term tenant occupying otherwise unused space,” said Matt Shortsleeve, SVP of Policy & Marketing at Solect Energy, in a statement. “For many property owners, it represents a practical way to generate stable income without capital investment or additional operational complexity.”

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Legislative Updates

[House and Senate pass bipartisan bill to fund SBIR/STTR programs through 2031](#)

Authorization for the SBIR and STTR programs have been lapsed since October 2025, but both the House and Senate have passed bills to reauthorize the programs through September 30, 2031. This bill has been sent to the president for his signature, which when signed will become law.

Opportunities and Solicitations

[Energy Department Announces \\$293 Million in Funding to Support Genesis Mission National Science and Technology Challenges](#)

“The U.S. Department of Energy (DOE) today announced funding to advance the Genesis Mission’s efforts to tackle the nation’s most complex science and technology challenges. This includes a \$293 million Request for Application (RFA), “The Genesis Mission: Transforming Science and Energy with AI.” Through this RFA, DOE invites interdisciplinary teams to leverage novel AI models and frameworks

to address over 20 national challenges spanning advanced manufacturing, biotechnology, critical materials, nuclear energy, and quantum information science.”

[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](#).

General News cont. from Page 1

[Air Force Selects Mainspring Linear Generator for Multi-Fuel Testing at California Base](#)

Using direct conversion processes, Mainspring’s linear generators convert multiple fuel types into electricity through a low-temperature, flameless reaction. During this pilot project, the Air Force wants to test the generators on several types of fuel including, methane gas, hydrogen, propane, biofuels, syngas, and ammonia to “match data on energy density, fuel access and environmental impacts.”

[Minnesota Leaders Celebrate Ribbon Cutting of Homegrown CO2 Heat Pump Technology in St. Paul](#)

Among state, local, and business leaders was Congresswoman Betty McCollum, St. Paul Mayor Kaohly Her, and Representative Larry Kraft, celebrating the installation of the CO2 Heat Pump, developed by Flow Environmental Systems, at the Local 455 Steamfitters/Pipefitters Union Training Center in Saint Paul, MN. This new pump “uses natural CO2 refrigerant to deliver ultra-high-efficiency heating and cooling across one of the widest operating temperature ranges on the market. [...]

“We’re celebrating a workforce that is ready for the future but committed to making sure that what happens in the future is going to be sustainable, environmentally friendly, and good for consumers,” said Congresswoman McCollum.”



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

UPCOMING EVENTS

Date	Event	Organizer	Location
April 19–22, 2026	Navy League Sea-Air-Space	Navy League	National Harbor, MD
April 21, 2026	Clean Energy Business Day	Clean Energy Economy MN	MN State Capitol
April 21–22, 2026	BNEF Summit	Bloomberg	New York, NY
April 21–24, 2026	CxEnergy2026	CxEnergy	Chicago, IL
May 2, 2026	Minnebar20	Minnestar	Minnesota
May 4–6, 2026	Advancing Defense Power and Energy Technologies	BEST START	Minneapolis and St. Paul, MN
May 4–6, 2026	Microgrid Knowledge Conference 2026	Microgrid Knowledge	Orlando, FL
June 2–4, 2026	EEI 2026	Edison Electric Institute	Las Vegas, NV
Aug. 4–6, 2026	DOW Center Frontier Trends Summit	Data Center Frontier	Reston, VA
Sept. 23–25, 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
Nov. 16–19, 2026	RE+ 26	RE+ Events	Las Vegas, NV