

Sprint Challenge Brief:

Next-Generation Technologies For Long Term Energy Storage

BACKGROUND

The need to commercialize technologies which deliver long-term energy storage (in excess of 10 hours) is stronger than ever. Governments and corporations are interested in the next generation of technologies capable of releasing energy that has been stored for extended periods of time.

In particular, a number of TechConnect clients are interested in:

- Advancements in lithium-ion battery technology
- Alternative battery chemistries including:
 - Magnesium
 - Potassium
 - Sodium
 - Zinc
- Solid-state batteries
- Advanced thermal energy storage approaches: hot or cold
- Hybrid storage systems

All proposed approaches must provide environmental and/or sustainability advantages over existing technologies such as:

- Increases in:
 - Duration
 - Efficiency
 - Capacity
 - Operational lifespan
 - Years AND/OR
 - Charge/Discharge cycles
 - Usage of recycled materials
 - Recyclability of components
- Reductions in:
 - Toxic chemicals used
 - Usage of rare earth and/or critical minerals
 - Safety hazards

All capacities and use cases are in scope. Additionally, all technical maturities are in scope, provided that a credible pathway to commercialization exists.

Respondents to this Sprint will be considered for engagement by multiple TechConnect clients, representing a variety of industries and applications. Furthermore, select respondents may also be invited to demo, present, or showcase their proposed technology at the upcoming [TechConnect World Conference](#) in July 2023. Respondents are not obligated to participate in the Conference and non-participation will not negatively impact any potential engagement with any TechConnect clients. Event participation fees may apply. There is no cost to submit a response.

The goal of this sprint is to facilitate contact and interactions between the Sprint sponsor and commercial entities (including Start-ups) or technology developers or research organization/university in this space. Submissions from all viable subject matter experts are of interest including those from academia and commercial entities.

REQUIREMENTS

Solvers submitting an Entry are encouraged to highlight capabilities in their Submission that meet criteria including:

- Type of technology
 - Anticipated performance metrics
 - Anticipated operational lifespan
 - Anticipated use case(s)
 - Sustainability
 - Advantages versus alternatives
 - Technical maturity
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BUSINESS OPPORTUNITY FOR SOLVERS

All complete and eligible Entries will be included in an exclusive Innovation Opportunity Report that will be presented to our client. Solvers with well-matched capabilities may be contacted directly by either TechConnect Ventures or the client to discuss potential partnership opportunities, including – but not limited to – demonstrations, consulting, contract research, licensing, and more. Top-rated Entries may also be invited to register or participate in an upcoming TechConnect Ventures event or pitch program.

PARTICIPATION RULES & GUIDELINES

Solvers are encouraged to review the [Rules](#) and [Guidelines](#) provided on the Sprint page for details about participation, including submission criteria, eligibility information, and more.

QUESTIONS? Contact Executive Director, Nick Kacsandi at info@techconnectventures.com