# **American-Made Energy Storage Innovations Prize Round 2 Submission**

**[Individual competitor or team name]**

[Project Title]

[Individual competitor’s or team’s city, state, and nine-digit ZIP/area code)]

[short project description (3 sentences maximum)]

**Video**
[Full URL to 90-second video]

**Project member(s)**
[(names, contacts, affiliations, and links to their professional online profiles)]

**Other partners**
[if any, such as advisors (names, contacts, affiliations, links to their professional online profiles)]

**Word Count of Competitor Background**
[500 words maximum including headers, not including the cover page, captions, tables, figures/graphs, references]

**Word Count of Technical Concept Paper**[3,000 words maximum including headers, not including the cover page, captions, tables, figures/graphs, references]

**Number of tables, figures/graphs**[Up to 5 allowed across both the Team Background and Technical Concept Paper sections]

# **Competitor Background**

[500 words maximum including section headers, but not including the captions, tables, and figures/graphs. Including the contents of the Technical Concept section, you may include **up to five supporting images, tables, or figures/graphs**. DOE encourages all teams to consider diversity, equity, and inclusion initiatives and applications as they form their teams and submissions; however, this will not be scored in the submission review.

Suggested content:

* Describe the individual competitor’s or team’s relevant background.
* Highlight relevant past experiences with projects similar to this prize.
* Provide information about the individual competitor’s or team’s organization(s).
* Identify resources available to support the proposed technology solution.]
1. Technical Concept Paper

[3,000 words maximum including headers, not including captions, tables, figures/graphs, or references.]

## Solution Description

[Suggested content: Respond to Question 1- What is your innovative solution and its less conventional use case?

* A thorough technical description of the energy storage problem/opportunity, the use case, and the solution.
* A description of how the solution addresses a less conventional use case and with characterization of the market, community, sector, or other group that the solution addresses.
* A description of the technology and use case(s) with detailed diagrams and schematics, as appropriate.
* Details such as required operational characteristics, devices, power ratings, project lifetime, information and performance data from previous simulations, lab-scale tests, or demonstrations.]

## Solution Analysis

[Suggested content: Respond to Question 2 - What are the expected benefits and costs of your solution and how does your solution support DOE’s goals for providing affordable, equitable, resilient, and reliable energy or other DOE priorities (e.g., sustainable domestic supply chain)?

* A discussion of the benefits and the costs of your energy storage solution over the lifetime of the solution.
* Social, economic, and technical considerations including a levelized cost of storage (LCOS) estimation. For more information on LCOS calculation, please reference the LCOS methodology from DOE’s Advanced Research Projects Agency-Energy (ARPA-E). ([https://arpa-e.energy.gov/sites/default/files/documents/files/DAYS\_ ProgramOverview\_FINAL.pdf](https://arpa-e.energy.gov/sites/default/files/documents/files/DAYS_%20ProgramOverview_FINAL.pdf)).
* An estimate of the total addressable market for your solution.
* Discussion of the overall approach for determining benefits and costs.
* Discussion of any qualitative benefits and costs for which the competitor is unable to estimate dollar values.
* A description of your solution’s value proposition and other benefits and how they align with DOE priorities. ]

## Challenges

[Suggested Content: Respond to Question 3- What challenges are associated with the development and execution of your solution?

* Analysis of technical, social, policy, and other barriers and challenges.
* Proposed activities including additional research, development, and demonstration (RD&D) to address the challenges.
* Description of key risks related to development and execution of your solution, along with approaches to mitigate the risk.]

## Commercialization

[Suggested Content: Respond to Question 4- How would you further develop or commercialize your solution?

* Highlight how anticipated next steps will build upon progress made so far.
* Description of the types of project partners needed to continue technology development and demonstration.
* Highlight how additional investment would help further development.]

# **References**

[not included in 3,000 word limit; citation format is not specified; please use in-text citations]