



# Storage Design Strategies to Ease Production (STEP) Prize

Informational Webinar

August 2026

# Agenda

- 1 American-Made Program Overview
- 2 Office of Electricity Overview
- 3 Storage Design STEP Prize Overview
- 4 The HeroX Platform
- 5 Q&A

This webinar is being recorded and will be made available on HeroX after the event.



# American-Made Program

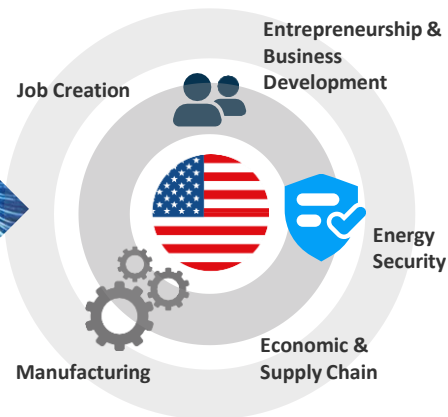
Lance Holly



# AMERICAN MADE

U.S. DEPARTMENT OF ENERGY

The American-Made program is your **fast track to energy innovation**. Funded by the U.S. Department of Energy, we incentivize innovation through prizes, collegiate competitions, vouchers, and opportunities to work with our network of experts, helping science and technology solutions go **further, faster**.





# supercharge

A REVOLUTION OF **BOLD IDEAS**

**Fast track** your ideas to accelerate energy innovation



**100+**

Prizes &  
competitions



**550+**

Network  
members



**1200+**

Teams  
funded

AMERICAN  
**MADE**

U.S. DEPARTMENT OF ENERGY



# DOE's Office of Electricity

Caitlin Callaghan



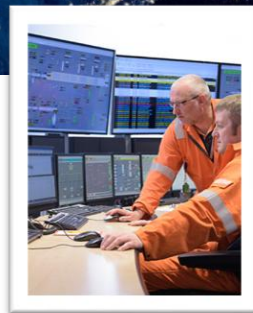
# Office of Electricity

## Mission

To stabilize, optimize, and grow the electricity system to ensure the grid delivers affordable, reliable, and secure energy to the American people.

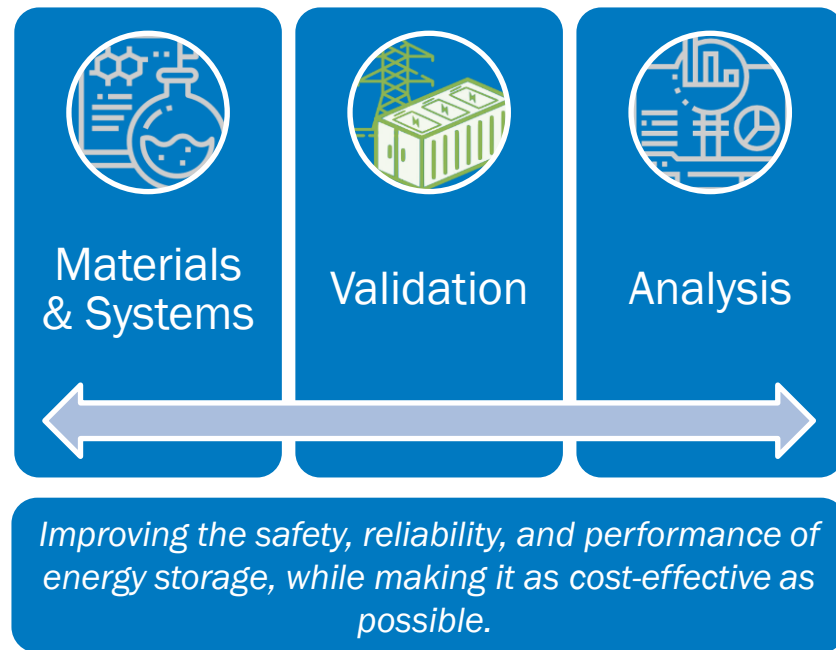
## Vision

A seamless electricity system, capable of meeting all energy demands, powering the U.S. on a pathway of prosperity, national security, and energy dominance.



# OE's Energy Storage Program

- Preparing the “next generation” of energy storage technologies to provide system reliability, security, and affordability.
- Advancing research to identify safe, low-cost, and earth-abundant elements for cost-effective energy storage solutions.
- Providing innovative tools improves storage reliability and safety, analysis, and performance validation.





# Storage Design STEP Prize



# Prize Overview

The Storage Design Strategies to Ease Production (STEP) Prize is a \$500,000 two-phase competition explicitly designed to **identify and foster innovative solutions for novel energy storage technologies.**

**What is “novel”?** *(see the Prize Rules for more details)*

- Not yet widely commercialized or deployed
- Materially distinct from established storage approaches
- Still facing unresolved manufacturability or supply chain challenges

The prize aims to equip developers with the tools to mitigate future market deployment and adoption challenges, thereby **accelerating the commercialization of robust, resilient, and economically viable next-generation energy storage solutions for the grid.**

# Prize Phases and Awards

The Storage Design STEP Prize employs a two-phase structure to **incentivize innovators to integrate robust manufacturability and supply chain strategies directly into the design of novel energy storage technologies.**

In Phase 1, competitors will **identify and conceptualize solutions** for known or anticipated production challenges specific to their innovative energy storage designs.

Up to three **Phase 1 Champions** will receive \$20,000 each in cash prizes, and up to nine **Phase 1 Finalists** will receive \$10,000 each in cash prizes. All Phase 1 winning teams achieve eligibility to compete in Phase 2.

# Prize Phases and Awards

In Phase 2, competitors will make progress in **developing and validating their proposed solutions**, demonstrating their potential to overcome manufacturing and supply chain barriers.

Up to two **Phase 2 Champions** will receive \$100,000 each in cash prizes, and up to three **Phase 2 Finalists** will receive \$50,000 each in cash prizes.

Phase 2 is only open to Phase 1 winners.

# STEP Prize Timeline



U.S. DEPARTMENT  
of **ENERGY**

Office of Electricity

AMERICAN  
**MADE**  
U.S. DEPARTMENT OF ENERGY

# Read the Rules!

Official Rules for the Storage Design  
STEP Prize can be found on the prize's  
HeroX page:

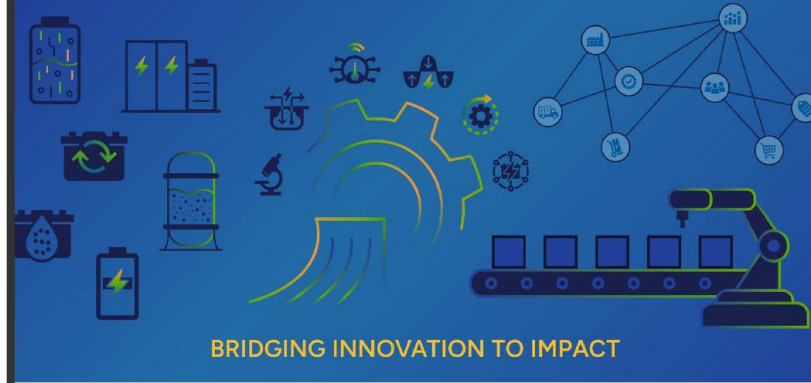
<https://www.herox.com/storagedesignSTEP-prize/resources>

## Competitor Eligibility: Section 2.6

## Non-Exhaustive List of Example Solution Areas: Section 2.5

## Submission Materials: Section 3.3

## Judging Criteria: Section 3.4



# Storage Design Strategies to Ease Production (STEP) Prize Official Rules

**JULY 2026**

NLR/OT-6A42-101135



# Phase 1 Overview



# Phase 1 Submission Objective

- Identify and clearly articulate the **key manufacturability and supply chain challenges** inherent to the competitor's novel or less conventional energy storage design, informed by lessons learned from mature technologies.
- Demonstrate early integration of Design-for-Manufacturability (DFM) and supply chain resilience principles by **proposing conceptual, production-oriented solutions**—not just describing the innovation itself.
- Establish a strong foundation for commercialization by **showing a credible pathway toward scalable, resilient, and economically viable production of the proposed technology**.

# Phase 1 Submission Materials

A complete submission package for Phase 1 should include the following items:

- Cover page with general information
- Competitor background
- Technical narrative
- Summary slide (will be made public)
- Online public introduction video (will be made public).

*All submission materials, excluding the online public video, must be submitted as PDF documents.*

# Submission Package Details



## Cover Page

List basic information about your submission, including:

- Project title
- Competitor name
- Short project description
- Full URL to 90-second introduction video
- Main point of contact
- Additional project members
- Other partners
- City, state, and nine-digit ZIP code
- Word count information

*The Cover Page, Competitor Background, and Technical Narrative will be combined as a single document for submission.*

# Submission Package Details



## Competitor Background

Provide information about the competitor's familiarity and experience with similar projects.

- Describe the competitor's relevant background
- Highlight relevant past experiences with projects similar to this prize
- Provide information about the competitor's organization(s)
- Identify resources available to support the proposed technology solution

*The Cover Page, Competitor Background, and Technical Narrative will be combined as a single document for submission.*

# Submission Package Details



## Technical Narrative

Address each of the following questions. The individual answers to the questions do not have a word limit; however, the aggregate response to these questions must not **exceed 3,000 words**, not including exhibits or their captions, or references. Teams may also include up to five supporting exhibits (e.g., images, tables, or figures/graphs).

1. **Solution Description:** What is your energy storage technology? In what ways is your technology novel from conventional options? What supporting evidence, such as data, prototypes, or prior testing, can you share to demonstrate the technical feasibility of your solution?
2. **Solution Analysis:** What are the specific manufacturing and/or supply chain challenges inherent to your energy storage technology's design concept? What strategic design solutions do you propose to mitigate these challenges, demonstrating an understanding of DFM and supply chain resilience principles?
3. **Likelihood of Success/Impact:** What is the potential impact of your design solutions on improving manufacturing ease, reducing total production expenses, and enhancing supply chain security, material sourcing, and sustainability for your energy storage technology?
4. **Commercialization:** How would you further develop or commercialize your energy storage technology solution?

## Use of Generative Artificial Intelligence (AI) Technology + References

# Submission Package Details



## Confidential Technical Narrative

If a competitor's submission includes confidential information, the competitors must submit two versions of the Technical Narrative:

- Version #1: must be non-confidential
- Version #2: must have confidential information clearly marked

The online submission form has fields for the non-confidential document (Version #1, required), and the confidential document (Version #2, optional).

# Submission Package Details



## Summary Slide

Develop a public-facing, one-slide submission summary that introduces the competitor and mission.

Competitors are free to present the information in any layout. Text must be readable on a standard printed page and a conference room projection.



### TIPS and TRICKS

- The slide is a natural starting point for reviewers, so consider how you want to make your first impression
- Too much text can overwhelm – high-level summaries are good!

# Submission Package Details

## Online Public Introduction Video (90 sec)



### Suggested content:

- Introduce your novel energy storage solution and its intended use case
- Highlight the specific manufacturability challenges your design addresses
- Explain how your design enhances supply chain resilience and sustainability
- Introduce the competitor (individual or team)



### TIPS and TRICKS

- Focus on content
- Don't get bogged down with flashy production values
- Post to YouTube or Vimeo
- Make sure your link is publicly accessible

# Summary: Phase 1 Submission

## A recap of required materials:

- Cover Page, Competitor Background, and Technical Narrative
  - Version #1: Non-confidential document; combined as a single document
  - Version #2: *If applicable*, confidential document (optional, with confidential info clearly marked); combined as a single document
- Summary slide (will be made public)
- Online public introduction video (will be made public)

**All materials must be submitted on the HeroX platform before Thursday, October 8, 2026 at 5 p.m. ET!**



# The HeroX Platform



# How to Register and Compete

## Storage Design Strategies to Ease Production (STEP) Prize

Two-phase competition created to identify & foster innovative solutions for less conventional and/or less mature energy storage technologies

Energy, Environment & Resources

Government

Technology

Stage:  
Pre registration

Prize:  
\$500,000

FOLLOW CHALLENGE

HeroX Prize Page:

<https://www.herox.com/storagedesignSTEP-prize>

- Select “Follow Challenge” then click “Solve This Challenge”
- Sign in or create a HeroX account
- Agree to Terms of Use
- Confirm your email address
- Accept the Challenge-Specific Agreement

Submit your materials before the Phase deadline.

(Submissions can be saved and returned to at any time prior to the deadline, even if they have been submitted.)



## Storage Design Strategies to Ease Production (STEP) Prize

Two-phase competition created to identify & foster innovative solutions for less conventional and/or less mature energy storage technologies

Energy, Environment & Resources

Government

Technology

Stage:  
Pre registration

Prize:  
\$500,000

FOLLOW CHALLENGE

# Follow, Read, Submit!

On [HeroX](https://www.herox.com), you can:

- Follow the page to receive important updates from prize administrators
- Read the Official Rules document
- Access resources like optional templates and today's webinar
- Post questions to the forum and read frequently asked questions
- Submit your application materials

<https://www.herox.com/storagedesignSTEP-prize>

# Reminders

- **Read the rules** to learn more about the prize, check eligibility, and find more details about submission materials
- **Submit all materials** via HeroX by **October 8, 2026 at 5 p.m. ET**
- **Send any questions** to our team at [storageSTEPprize@nlr.gov](mailto:storageSTEPprize@nlr.gov)



# Thank You!

## Q&A

Please post your question(s) to the webinar Q&A chat.  
Responses to questions will be made available on the  
HeroX site.

