



U.S. DEPARTMENT OF
ENERGY

Office of
Science

Informational Webinar:

Energy Innovation Hub Program: Research to Enable Next-Generation Batteries and Energy Storage Funding Opportunity Announcement (FOA)

DE-FOA-0002923

FOA Issue Date	January 26, 2023
Submission Deadline for Pre-Applications	March 9, 2023 at 5:00PM Eastern Time A Pre-Application is required
Pre-Application Response Date	April 3, 2023
Submission Deadline for Applications	May 18, 2023 at 11:59PM Eastern Time

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Office of Basic Energy Sciences
February 8, 2023

Disclaimer: This presentation summarizes the contents of the FOA. Nothing in this webinar is intended to add to, take away from, or contradict any of the requirements of the FOA. If there are any inconsistencies between the FOA and this presentation or statements from DOE personnel, the FOA is the controlling document.

Batteries and Energy Storage Hub FOA: Key Elements

- ▶ FOA solicits NEW applications only
- ▶ Eligible Applicants: All types of domestic entities, including for example, universities/colleges, non-profit organizations, for profit organizations, DOE National Laboratories (see Sec. III of the FOA)
 - ❖ Other Federal agencies or their FFRDCs may participate as partners (not lead institution)
- ▶ All applications are expected to involve multi-disciplinary research teams; multi-institutional applications are allowed (single application must be submitted by the lead institution)
- ▶ FOA encourages applications led by, or in partnership with, Minority Serving Institutions (MSIs)*, including Historically Black Colleges and Universities (HBCUs), that are underrepresented in the BES portfolio and applications including individuals from groups historically underrepresented in STEM

* SC has posted a list of institutions with their Carnegie Classifications, designations as Minority-Serving Institutions (including Historically Black Colleges and Universities), and Emerging Research Institutions (as defined in the CHIPS and Science Act of 2022) at <https://science.osti.gov/grants/Applicant-and-Awardee-Resources/Institution-Designations>. This list is offered as a convenience and is not exhaustive

Batteries and Energy Storage Hub FOA: Scientific Scope (See Sec. I of the FOA)

- ▶ Energy Innovation Hub-scale projects to provide the scientific foundations for new energy storage technologies critical to the DOE mission to provide clean energy sources for the grid and transportation from intermittent and stationary renewable sources (e.g., wind, solar, etc.).
- ▶ Prioritization given to basic scientific research leading to scalable energy storage technologies that could significantly impact decarbonization of the economy and/or enable transformation of the electrical grid to clean, renewable energy.
- ▶ Focus is on basic science to seed and accelerate new, next generation technologies beyond today's generation of batteries, which are dominated by lead acid and Li-ion.
- ▶ Basic science is also expected to be relevant to next generation technology options being supported at higher technology development levels by DOE.
- ▶ Proposed research must align with Priority Research Directions (PRDs) identified in the [Basic Research Needs Workshop for Next-Generation Electrochemical Energy Storage](#) (2017), consistent with the future technology needs for electrochemical energy storage in the [DOE Energy Storage Grand Challenge](#).

Batteries and Energy Storage Hub FOA: Scientific Scope (See Sec. I of the FOA)

- ▶ Most research activities in proposed projects should address the PRDs identified in the 2017 [Basic Research Needs for Next Generation Electrochemical Energy Storage Workshop](#).
- ▶ Up to three primary PRDs that are most addressed by the research may be clearly listed on the Cover Page of the Pre-applications and the Proposal Narrative as specified.
- ▶ Applications that do not address at least one PRD from the 2017 [Basic Research Needs for Next Generation Electrochemical Energy Storage Workshop](#) may be declined without review.
- ▶ Applications must build upon, and go beyond, the accomplishments in this field to date, including those of BES-funded research ([core research programs](#), [EFRCs](#), [JCESR](#)) and relevant international efforts.
- ▶ An award made under this FOA is expected to be highly collaborative with other research efforts in batteries and electrochemical energy storage, including any other award that may be made under this FOA as well as the broader electrochemical energy storage scientific community.
- ▶ With the goals to advance fundamental research and improve competitiveness of the United States, the proposed projects should energize the wider scientific/technical electrochemical energy storage communities and serve as national resources, conveners, and leaders.

Batteries and Energy Storage Hub FOA

Award Information (See Sec. II of the FOA)

- ▶ **Estimated funding:** DOE anticipates that, subject to the availability of future year appropriations, a total of up to \$125 million in current and future fiscal year funds will be used to support awards under this FOA
- ▶ **Period of performance:** DOE anticipates making awards with a project period of up to 5 years
- ▶ **Maximum/minimum award size:** DOE anticipates that award sizes will range from \$8 million per year to \$15 million per year (applications may request support in the range from \$10 million to \$15 million per year)
- ▶ **Expected number of awards and award size:** Up to 3 awards are expected. The number of awards will depend on the number of meritorious applications and the availability of appropriated funds.
- ▶ **Types of award instruments:** DOE anticipates awarding cooperative agreements, National Laboratory authorizations, or interagency agreements under this FOA

Batteries and Energy Storage Hub FOA: Pre-applications (See Sec. IV.B of the FOA)

- ▶ Pre-applications are **required**, with a limit of **1 per lead institution**
- ▶ Pre-application must include a **Letter of Institutional Support** (one page maximum) that must be signed by an official of the lead organization who has authority to commit institutional support for the application.
- ▶ Federal Program Managers may evaluate all or some portion of pre-applications to determine their **competitiveness relative to next generation batteries and electrochemical energy storage**. Any such review will be conducted by no fewer than three federal program managers based on the following criteria:
 - ❖ Responsiveness to the objectives and requirements of the FOA
 - ❖ Scientific and technical merit
 - ❖ Appropriateness of the proposed research approaches
 - ❖ Likelihood of scientific impact
- ▶ This will be a **comparative review** with priority given to **scientifically innovative and forward-looking fundamental research with the highest likelihood of success as an application**
- ▶ Applicants with the highest rated pre-applications will be encouraged to submit applications; Applications that have not been encouraged by DOE will be declined without merit review

Batteries and Energy Storage Hub FOA: Key Dates

- ▶ Pre-application due date: March 9, 2023, by 5:00PM Eastern Time
 - ❖ Pre-applications must be submitted by an authorized institutional official via the DOE Portfolio Analysis and Management System (PAMS)
- ▶ Pre-application response date: April 3, 2023
 - ❖ DOE will notify all pre-applicants about whether or not they are encouraged to submit an application
 - ❖ DOE expects to limit the number of full applications to approximately 10, with the exact number based on the quality and number of pre-applications submitted
- ▶ Application due date: May 18, 2023, by 11:59PM Eastern Time
 - ❖ Applications that have not been encouraged by DOE may be declined without merit review
 - ❖ Applications must be submitted via www.grants.gov
- ▶ DOE anticipates that awards will be made in Fiscal Year 2023

Checklist for avoiding common errors: Pre-applications

(not a comprehensive list of all FOA requirements)

- ▶ **Scope:** Basic research consistent with the scope described in Sec. I of the FOA; no applied research or technology development/deployment. Preapplication must explicitly address at least 1 (and up to 3) PRDs from the 2017 BRN Workshop
- ▶ **Letter of Institutional Support:** Pre-application must include a letter of institutional support signed by an official of the lead organization who has the authority to commit institutional support for the application
 - ❖ For DOE National Laboratory applicants, the official who signs the Letter should be the Laboratory Director
 - ❖ For other applicants, the official who signs the letter should be someone who has authority over research activities for the entire institution, such as VP for Research, Chief Technology Officer, or the equivalent
- ▶ Pre-application must include a listing of individuals who should not serve as merit reviewers of a subsequent application
 - ❖ Detailed instructions for how to craft such a listing are provided in Section VIII.A.10 of the FOA
 - ❖ Excel template available here: <https://science.osti.gov/grants/Policy-and-Guidance/Agreement-Forms>
 - ❖ List should be converted to PDF and attached to the pre-application (not part of page limit)
- ▶ Submit pre-application **via PAMS**, not via www.grants.gov (due Mar. 9 by 5pm ET)
- ▶ **Late submissions** of pre-applications are rarely accepted (see Sec. IV.F.4 of the FOA)

Checklist for avoiding common errors: Applications

(not a comprehensive list of all FOA requirements)

- ▶ **Scope/Budget:** The scope of work (i.e., total work effort as indicated by the budget) to be performed by lead institution must be greater than that of any other institution involved in the application
- ▶ Project Director must be the same as on the pre-application
- ▶ **Biographical sketch** and list of **current/pending support**
 - ▶ Required for each senior/key personnel; carefully follow instructions in FOA
 - ▶ No longer provided as attachments to the research narrative; instead, attached to the Research and Related Senior/Key Person Profile form in the application (see Sec. VIII.A.9-11 of the FOA)
- ▶ Submit application via www.grants.gov, not via PAMS (due May. 18 by 11:59pm ET)
- ▶ **Late submissions** of applications are rarely accepted (see Sec. IV.F.4 of the FOA)

Where to find more information

- ▶ FOA: <https://science.osti.gov/bes/Funding-Opportunities>
- ▶ This webinar is being recorded; slides and the recording will be posted on the FOA page above
- ▶ Questions about the FOA must be submitted via the FedConnect portal:
<https://www.fedconnect.net/>
 - ❖ Register with FedConnect and respond as an interested party to submit questions, and to view DOE responses to all questions

Questions & Answers

Please submit questions using Zoom Q&A window, which should be accessible at the bottom of your zoom window

If your question is not answered today, or you have additional questions, please submit via www.FedConnect.net

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