

Notice of Intent No. DE-FOA-0002679

Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0002680

The Office of Energy Efficiency and Renewable Energy (EERE) intends to issue, on behalf of the Vehicle Technologies Office, a Funding Opportunity Announcement (FOA) entitled “Bipartisan Infrastructure Law (BIL) Electric Drive Vehicle Battery Recycling and Second Life Applications”.

The Biden Administration has laid out a bold agenda to address the climate crisis and build a clean and equitable energy economy that achieves carbon pollution free electricity by 2035, and puts the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050¹ to the benefit of all Americans.

Batteries are a critical element to decarbonizing our economy and national competitiveness—for grid storage, for the resilience of homes and businesses, and for electrification of the transportation sector. President Biden’s [Executive Order on America’s Supply Chains](#) directed Department of Energy (DOE) to produce a report identifying the risks in the current and forecasted battery supply chain landscape and policy recommendations to address them. The [Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth 100-Day Reviews under Executive Order 14017](#) report assesses vulnerabilities and opportunities across four key products including high-capacity batteries. The [National Blueprint for Lithium Batteries](#), a report developed by the Federal Consortium for Advanced Batteries², lays out five critical goals and key actions to guide federal agency collaboration to secure the nation’s long-term economic competitiveness and create good-paying jobs for American workers, while supporting the Biden Administration’s decarbonization goals.

The Infrastructure Investment and Jobs Act ([Public Law 117-58](#)), also known as the Bipartisan Infrastructure Law (BIL), is a once-in-a-generation investment in infrastructure, which will grow a more sustainable, resilient, and equitable economy through enhancing U.S. competitiveness in the world, creating good jobs, ensuring stronger access to these economic benefits for underserved communities. The BIL appropriates more than \$62 billion to DOE³ to deliver a more equitable clean energy future for the American people by

¹ Executive Order 14008, “Tackling the Climate Crisis at Home and Abroad,” January 27, 2021.

² The Federal Consortium for Advanced Batteries (FCAB) provides a framework for cooperation and coordination among federal agencies having a stake in developing advanced battery technology and establishing a domestic supply of lithium batteries. The FCAB is led by the Departments of Energy, Defense, Commerce, and State and includes many organizations across the government.

³ U.S. Department of Energy. November 2021. “DOE Fact Sheet: The Bipartisan Infrastructure Deal Will Deliver For American Workers, Families and Usher in the Clean Energy Future.” <https://www.energy.gov/articles/doe-fact-sheet-bipartisan-infrastructure-deal-will-deliver-american-workers-families-and-0>

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- Investing in American manufacturing and workers.
- Expanding access to energy efficiency and clean energy for families, communities, and businesses.
- Delivering reliable, clean, and affordable power to more Americans.
- Building the technologies of tomorrow through clean energy demonstrations.

The BIL will **invest more than \$7 billion in the batteries supply chain over the next five years.** This includes sustainable sourcing and processing of the critical minerals used in battery production without new extraction or mining all the way through end-of-life battery collection and recycling.

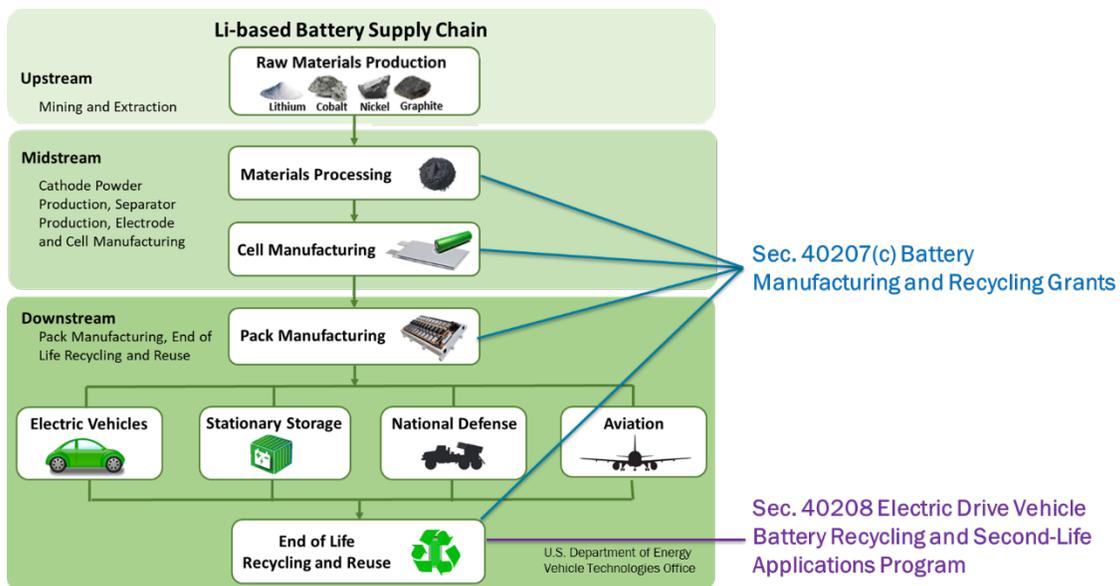
The anticipated FOA and any related activities support BIL section 40208. Electric Drive Vehicle Battery Recycling and Second-Life Program aimed at research, development, and demonstration of

- **second-life applications** for electric drive vehicle batteries that have been used to power electric drive vehicles; and
- **technologies and processes** for final recycling and disposal of the [electric drive vehicle batteries].

As part of this whole-of-government approach, this FOA seeks to encourage the meaningful engagement with, and participation of, underserved communities and underrepresented groups including Tribes. Consistent with Executive Order 14008, the FOA will be designed to ensure that 40% of the benefits of the overall investments provided through the FOA will be delivered to underserved and overburdened communities in accordance with the Justice40 Initiative. In addition, per BIL section 40208, the FOA will be designed to ensure that priority will be given to projects that support the development or demonstration of projects in economically distressed areas and those that provide workforce opportunities in communities that have lost jobs due to the displacements of fossil energy jobs.

The high-capacity battery supply chain consists of five main steps including: 1) raw material production, 2) materials processing including material refinement and processing, 3) battery material manufacturing and cell fabrication, 4) battery pack and end use product manufacturing, and 5) battery end-of-life and recycling. The graphic below shows how these five steps relate to the BIL investments in the battery supply chain.

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It is anticipated that the FOA would provide approximately \$60 million to fund research, development, and demonstration, of electric drive vehicle battery recycling and second use applications. This notice of intent supports reuse, second use, and innovative recycling processing to achieve scale-up and profitability.

It is anticipated that the FOA may include the following Areas of Interest:

Area of Interest 1 – Recycling Processing and Reintegration into the Battery Supply Chain

The objective of this area of interest is to accelerate the development of recycling processes and the requalification of that material into the battery supply chain to support domestic supply chain resiliency. Innovative processes should utilize end of life lithium batteries as feedstocks. The proposed processes may use manufacturing scrap materials in addition to end of life feedstocks. The process output should be qualified for reintegration into the battery supply chain. The anticipated topic size is \$40M. (40208 (3)(D)(II)(aa and hh))

Area of Interest 2 – Second Use Scale-Up Demonstration Projects

The objective of this area of interest is to establish demonstration projects to understand and validate real-world performance of and potential for deploying spent EV batteries including applications outside of the automotive industry. Technologies of interest include but are not limited to the capability to quickly and accurately grade battery state of health and solutions to dynamically balance second-use battery cells. The anticipated topic size is \$20M. (40208 (3)(D)(II) (gg))

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EERE envisions awarding multiple financial assistance awards in the form of grants. The estimated period of performance for each award will be approximately 3-4 years.

All prime recipients receiving funding under this anticipated FOA must be incorporated (or otherwise formed) under the laws of a state or territory of the United States and have a physical location for business operations in the United States. If a foreign entity applies for funding as a prime recipient, it must designate in the Full Application a subsidiary or affiliate incorporated (or otherwise formed) under the laws of a state or territory of the United States to be the prime recipient. The Full Application must state the nature of the corporate relationship between the foreign entity and domestic subsidiary or affiliate. Waivers to these requirements will not be accepted.

This Notice is issued so that interested parties are aware of the EERE's intention to issue this FOA in the near term. All of the information contained in this Notice is subject to change.

EERE plans to issue the FOA on or about April-May 2022 via the EERE Exchange website <https://eere-exchange.energy.gov/>. If Applicants wish to receive official notifications and information from EERE regarding this FOA, they should register in EERE Exchange. When the FOA is released, applications will be accepted only through EERE Exchange.

TEAMING PARTNER LIST: DOE is compiling a Teaming Partner List to facilitate the formation of new project teams for this potential FOA. The Teaming Partner List allows organizations who may wish to participate on an application to express their interest to other applicants and to explore potential partnerships.

- Updates to the Teaming Partner List will be available in the EERE Exchange website. The Teaming Partner List will be regularly updated to reflect new teaming partners who have provided their organization's teaming partner information.
- **SUBMISSION INSTRUCTIONS:** Any organization that would like to be included on this list should submit the following information: Organization Name, Contact Name, Contact Address, Contact Email, Contact Phone, Organization Type, Area of Technical Expertise, Brief Description of Capabilities, and Area of Interest. Interested parties should email the information to DE-FOA-0002680@netl.doe.gov with the subject line "Teaming Partner Information."
- **DISCLAIMER:** *By submitting a request to be included on the Teaming Partner List, the requesting organization consents to the publication of the above-referenced information. By enabling and publishing the Teaming Partner List, DOE is not endorsing, sponsoring, or otherwise evaluating the qualifications of the individuals and organizations that are self-identifying themselves for placement on this Teaming Partner List. DOE will not pay for the provision of any information, nor will it compensate any applicants or requesting*

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organizations for the development of such information.

In anticipation of the FOA being released, Applicants are advised to complete the following steps, which are **required** for application submission:

- Register and create an account in EERE Exchange at <https://eere-exchange.energy.gov/>. This account will allow the user to register for any open EERE FOAs that are currently in EERE Exchange. It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission.

Questions related to the registration process and use of the EERE Exchange website should be submitted to: EERE-ExchangeSupport@hq.doe.gov

- Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number (including the plus 4 extension, if applicable) at <http://fedgov.dnb.com/webform>
- Register with the System for Award Management (SAM) at <https://www.sam.gov>. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. Please update your SAM registration annually.
- Register in FedConnect at <https://www.fedconnect.net/>. To create an organization account, your organization's SAM MPIN is required. For more information about the SAM MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_Ready_Set_Go.pdf
- Register in Grants.gov to receive automatic updates when Amendments to a FOA are posted. However, please note that applications will not be accepted through Grants.gov. <http://www.grants.gov/>. All applications must be submitted through EERE Exchange.
- Due to the unique and unprecedented nature of the BIL, EERE will accept questions concerning this Notice (DE-FOA-0002680@netl.doe.gov). Submitted questions and answers will be posted in EERE Exchange website.

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