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Agenda Invests in R&D to Lower Costs of Consumer Battery Recycling That Will Support a Strong Domestic Critical Materials Supply Chain

WASHINGTON, D.C. — The U.S. Department of Energy (DOE) today announced more than \$192 million in new funding for recycling batteries from consumer products, launching an advanced battery research and development (R&D) consortium, and the continuation of the Lithium-Ion Battery Recycling Prize, which began in 2019. With the demand for electric vehicles (EVs) and stationary energy storage projected to increase the lithium battery market by as much as ten-fold by 2030, it is essential to invest in sustainable, reduced-cost recycling of consumer batteries in support of a secure, resilient, and circular domestic supply chain for critical materials. Today's announcement supports the Biden-Harris Administration's goal to have EVs make up half of all vehicle sales in America by 2030 and builds on the nearly \$3 billion announced to date from President Biden's Bipartisan Infrastructure Law for EV and battery technologies.

"The United States is leading the way in developing advanced battery technologies that will power our clean energy future and boost our global competitiveness," said **U.S. Secretary of Energy Jennifer M. Granholm**. "Thanks to President Biden's Investing in America agenda, these investments in battery production and recycling will ensure the U.S. has a secure and sustainable domestic supply chain and strengthens our economy."

As of April 2023, more than 3.6 million plug-in electric vehicles have been sold in America, with more than half of those sold since President Biden took office. Battery costs have fallen more than 90% since 2008, and energy density and performance have increased rapidly.

President Biden's Investing in America agenda is growing the American economy from the bottom up and middle-out – from rebuilding our nation's infrastructure, to creating a manufacturing and innovation boom powered by good-paying jobs that don't require a four-year degree, to building a clean-energy economy that will combat climate change and make our communities more resilient.

Consumer Electronics Battery Recycling Funding Opportunity

DOE's \$125 million Consumer Electronics Battery Recycling, Reprocessing, and Battery Collection funding opportunity is an essential part of the \$7 billion authorized by the Bipartisan Infrastructure Law to grow and secure

America's battery supply chain. Topic areas funded through this opportunity will:

- Develop and implement education and/or behavior change campaigns to increase participation by consumers in existing battery recycling programs,
- Improve the economics of recycling consumer electronics batteries to spur greater market demand for battery recycling,
- Assist states and local governments in establishing or enhancing battery collection, recycling, and reprocessing programs,
- Help retailers implement programs to collect, sort, store, and transport consumer electronics batteries.

Projects selected for this funding must advance diversity, equity, inclusion, and accessibility; contribute to energy equity; and invest in America's workforce. This funding – which will be administered by DOE's **Vehicle Technologies Office** and **Office of Manufacturing and Energy Supply Chains** – supports goals and targets detailed in the Federal Consortium for Advanced Batteries' (FCAB) **National Blueprint for Lithium Batteries**. Learn more about this funding opportunity **here**. Concept papers are due August 17, 2023, and the deadline for full applications is November 29, 2023.

Advanced Battery R&D Consortium

The rapid growth of EV manufacturing and adoption across vehicle classes will require new solutions for challenges associated with raw materials and critical minerals. Substantial R&D is required for new or alternative battery chemistries that can achieve lower cost and use more abundant materials.

The Advanced Battery R&D Consortium funding opportunity will provide up to \$60 million to convene major manufacturers of electric drive vehicles in the U.S., universities, National Laboratory partners, mineral and material suppliers, and other key battery stakeholders to address critical battery needs for the next phase of wide scale EV commercialization.

The consortium seeks to advance battery R&D that is relevant and responsive to the needs of EV manufacturers, and to further develop a domestic battery supply chain and recycling capabilities that are essential to meeting the rapidly growing demand for EV batteries. The consortium will be integral to DOE's efforts to develop advanced transportation technologies that will help decarbonize the transportation sector and significantly reduce the nation's dependence on foreign oil.

Applications must include a community benefits plan that addresses how diversity, equity, and inclusion objectives will be incorporated. Applications for **this funding opportunity** are due by September 8, 2023.

The Lithium-Ion Battery Recycling Prize

First launched in January 2019, the Battery Recycling Prize has to date awarded \$5.5 million for innovative solutions to collecting, sorting, storing, and transporting spent and discarded lithium-ion batteries. In recognition of its ongoing importance in informing larger battery recycling efforts, DOE is announcing \$7.4 million to fund a new Breakthrough Contest, as well as Phase IV of the Prize.

The Breakthrough Contest will incentivize the development of solutions that meet the overall Battery Recycling Prize goal. The Breakthrough Contest is open to industry entrepreneurs – including new or former Prize participants – and will bolster participation from new competitors while providing additional support to **Phase III winning teams**. Phase IV: Demonstration of Impact will challenge participants to prove how effectively their solutions contribute to moving spent or discarded batteries from consumers to recyclers across all commercial uses.

The **Battery Recycling Prize** incentivizes American entrepreneurs to develop and demonstrate technologies that, when scaled, have the potential to profitably capture 90% of all discarded or spent lithium-based batteries in the United States for recovery of key materials for re-introduction into the U.S. supply chain.