

#### Bipartisan Infrastructure Law (BIL): DOE Transportation related Opportunity Overview

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ORNL is managed by UT-Battelle LLC for the US Department of Energy



## Bipartisan Infrastructure Law: DOE Summary

- Funding allocation over the next **five years**
- The Bipartisan Infrastructure Law will stand up (60) new DOE programs, including
  - (16) demonstration and (32) deployment programs
  - Expanding funding for (12) existing Research, Development, Demonstration, and Deployment (RDD&D) programs
- Total DOE funding allocation of over \$60 billion
- <u>https://www.energy.gov/bil/bipartisan-infrastructure-law-programs</u> for BIL related information
- <u>https://eere-exchange.energy.gov/</u> for all EERE opportunities

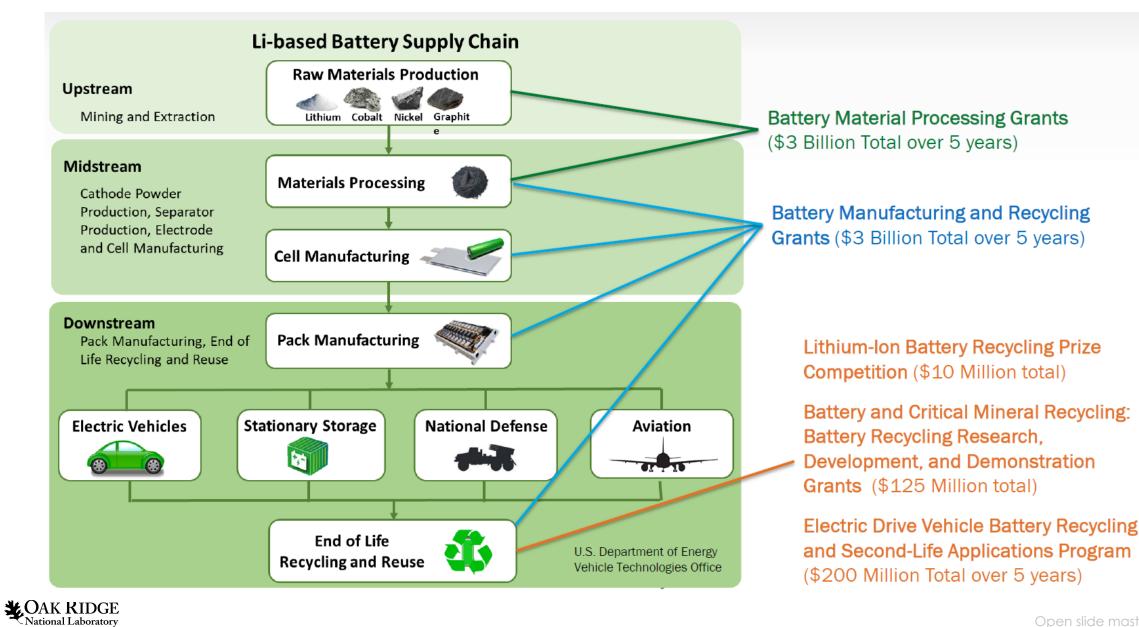


# Funding Program Highlights:

Program Name (DOE)	Funding Amount	Next Milestones	
Regional Clean Hydrogen Hubs	\$8 billion	<ul> <li>Notice of Intent (NOI) released 6/6</li> <li>Funding Opportunity Announcement (FOA) in August/Sept</li> </ul>	
Battery Materials Processing	\$3 billion	<ul><li>FOA Announced 5/2</li><li>Applications due 7/1</li></ul>	
Battery Manufacturing/Recycling	\$3 billion	<ul><li>FOA Announced 5/2</li><li>Applications due 7/1</li></ul>	
Electric Drive Vehicle Battery Recycling/Second-Life Applications Program	\$200 million	<ul><li>FOA Announced 5/2</li><li>Applications due 7/1</li></ul>	
Clean Hydrogen Manufacturing Recycling RD&D Program	\$500 million	<ul> <li>Funding Opportunity Announcement (FOA) in August/Sept</li> </ul>	
Clean Hydrogen Electrolysis Program	\$1 billion	<ul> <li>Funding Opportunity Announcement (FOA) in August/Sept</li> </ul>	
DOT/DOE Joint Office of Energy and Transportation	\$300 million	<ul> <li>Current focus on National Electric Vehicle Infrastructure (NEVI) Program</li> </ul>	

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## Bipartisan Infrastructure Investment: Batteries



#### Bipartisan Infrastructure: Batteries

Section	Name	Funding (\$M)	Description	Spending profile
40207(b)	Battery Processing and Manufacturing: Battery Material Processing Grants	3000	Established within Office of Fossil Energy, grant program for battery materials/minerals processing (assumed to cover upstream separation (but not extraction/mining?) and refining of raw materials used in battery manufacturing. \$50M minimum for demonstration scale; \$100M minimum for commercial scale; \$50M for retrofit facility.	\$600M each FY (22-26) until expended
40207(c)	Battery Processing and Manufacturing: Battery Manufacturing and Recycling Grants	3000	Grants for battery components, advanced battery manufacturing and recycling. \$50M minimum for demonstration scale; \$100M minimum for commercial scale; \$50M for retrofit facility.	\$600M each FY (22-26) until expended
40207(f)	Battery and Critical Mineral Recycling	125	DOE in coordination with EPA awards multi-year grants for R,D&D to reuse and recycle batteries, including using recycled critical minerals in new products/batteries (\$60M); Grants to States and local governments 50% cost-shared for battery collection, recycling, and reprocessing programs (\$50M); Grants to battery retailers for collection/take-back program (\$15M).	\$125M for FY22-26 period
40208(1)	Electric Drive Vehicle Battery Recycling and Second-Life Applications	200	Amends EISA Sec. 641 Energy Storage Competitiveness, Section (k) on secondary uses, to carry out R,D&D on second-life applications for EV batteries and processes for final recycling. Competitive grants for increasing recycling rate and second use, maximizing critical mineral recovery and reuse.	



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## Bipartisan Infrastructure: Hydrogen

Section	Name	Funding (\$M)	Description	Spending profile
40314	Clean Hydrogen Manufacturing Recycling R,D&D Program	500	New Section 815 after amendment of various sections of Title VIII of EPACT 2005 (Hydrogen), R,D&D for clean hydrogen production, processing, delivery, storage, and manufacturing with priority on clean hydrogen equipment manufacturing projects and on recycling of raw materials used in hydrogen components such as electrolyzers and fuel cells.	\$100M each FY (22-26) until expended
40314	Clean Hydrogen Electrolysis Program	1000	New Section 816 after amendment of various sections of Title VIII of EPACT 2005 (Hydrogen), to reduce hydrogen to <\$2/kg by 2026; covers low and high temperature electrolyzers, reversible fuel cells, new catalysts, processing seawater, storage, hybrid systems, etc.	\$200M each FY (22-26) until expended
40314	Regional Clean Hydrogen Hubs	8000	This section amends new EPACT 2005 Section 813 (42 U.S.C. 16151) establishes minimum 4 regional hubs meeting clean H2 standard of 2kg CO2/kg H2 and demonstrate diversity in energy resources (FE, RE, NE) and end-use (transportation, power, buildings heat, and industy).	\$1600M each FY (22-26)



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