

# **Electric Vehicle Battery Recycling: Policy Updates**

PREPARED FOR: House Committee on Climate, Energy, and Environment DATE: April 26, 2023 BY: Shauna Petchel, LPRO Analyst

### Overview

### Electric vehicle (EV) battery recycling Recent federal actions State actions: Washington and California



# **Electric Vehicle Battery Recycling**



#### **EV** batteries

- Require minerals sourced from mining or recycling <sup>a</sup>
- Battery life expectancy 12 to 15 years in moderate climates <sup>b</sup>



#### **Growing EV sector**

- 62,455 zero-emission vehicles in Oregon as of December 2022 °
- May make up half of new car sales worldwide by 2035 <sup>d</sup>



#### **Emerging issues**

- Recycled batteries as domestic source for lithium, cobalt
- Limited domestic infrastructure for materials management at end of life

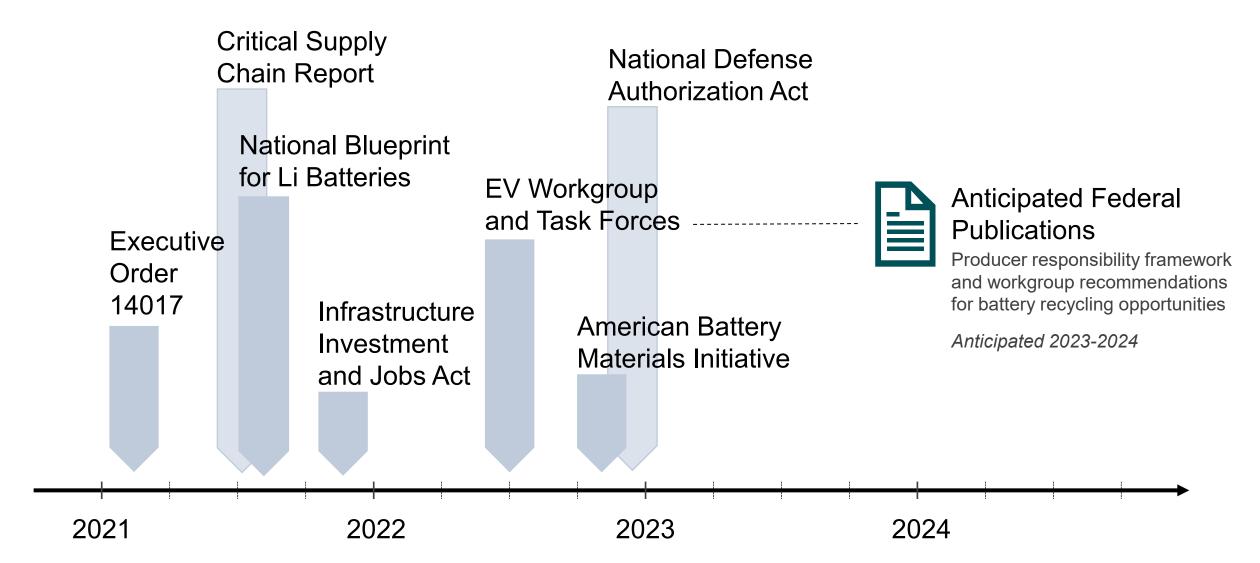


<sup>a</sup> Brian Kingston, "Building a North American electric vehicle supply chain," Brookings, February 28, 2023.
 <sup>b</sup> "Electric Vehicle Benefits and Considerations," U.S. Dept. of Energy Alternative Fuels Data Center, last accessed March 15, 2023.
 <sup>c</sup> "Oregon Electric Vehicle Dashboard," Oregon Department of Energy, last accessed April 25, 2023. https://www.oregon.gov/energy/Data-and-Reports/Pages/Oregon-Electric-Vehicle-Dashboard.aspx
 <sup>d</sup> Goldman Sachs Research (February 10, 2023). <u>https://www.goldmansachs.com/insights/pages/electric-vehicles-are-forecast-to-be-half-of-global-car-sales-by-2035.html
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## **Recent Federal Actions**



## **Neighbor State Activity**

	Actions (in part)	Status (4/25/23)
Washington SB 5144-2	<ul> <li>Requires Department of Ecology to submit recommendations on EV battery recycling by November 2023 (preliminary) and April 2024 (final)</li> </ul>	Awaiting Governor's signature
California SB 615	<ul> <li>Requires end-of-life management of all EV batteries with emphasis on reuse and repurpose prior to recycling</li> <li>Outlines responsibilities of EV manufacturers, dealers, dismantlers, repairers, and users</li> <li>Most requirements effective January 2025</li> </ul>	Referred to Committee on Appropriations with a do-pass recommendation as amended



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## Thank you

For questions: shauna.petchel@oregonlegislature.gov https://www.oregonlegislature.gov/lpro

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