



Lane County Public Works Department Waste Management Division

SUSTAINABLE BATTERY MANAGEMENT: A LEGISLATIVE PROPOSAL

Lane County is advocating for the Association of Oregon Counties to lead in the introduction of a bill to the 2025 Oregon Legislature to establish an Extended Producer Responsibility (EPR) framework for consumer batteries. Lane County's request is echoed by the following counties:

- Washington County TBD
- Marion County TBD
- Metro TBD
- Clackamas County TBD
- Douglas County TBD
- Deschutes County TBD

BACKGROUND

Nationally, the electrification of transportation, advances in battery storage, and the ubiquity of products that contain batteries (e.g., electronic devices, greeting cards, vape pens, toys, etc.) are contributing to an increase in demand for batteries. Rapidly growing demand requires a secure supply of batteries and associated raw material supply chains. The [International Energy Agency](#) reports that in 2023, battery manufacturing reached 2.5 TWh, adding 780 GWh of capacity, 25% higher than in 2022. Meeting these demands requires a significant ramp up in mining, refining, and recycling activities. The National Blueprint for Lithium Batteries 2021-2030 highlights the importance of recycling lithium-ion cells to mitigate material scarcity, enhance environmental sustainability, and support a more secure and resilient, domestic, material supply chain that is circular in nature.

INCREASED FIRE, DAMAGES, INJURY, INSURANCE COSTS, RATES, AND POLLUTION

Lithium battery fires are on the rise nationally. The [National Waste and Recycling Association](#) (NWRA) estimates that more than 5,000 fires occur annually at recycling facilities and the problem is directly linked to batteries entering the waste and recycling streams. Batteries pose risks to the entire solid waste and recycling system, from service providers that collect waste and recycling, to processors and, landfills. Safe and responsible battery collection and recycling also lead to increased costs for rate payers. In some states, there are programs to collect and recycle batteries, but many consumers don't know why or how to participate in them: Today, less than 15% of rechargeable batteries (and a much smaller amount of single use) are recycled.

Due to increased fire risk in material recovery facilities, landfills, and trucks, the cost to insure these facilities and equipment has also gone up. The NWRA reports that the rate of catastrophic losses has risen by 41% over the last five years. As insurance providers begin to understand the impacts from battery fires, insurance rates have increased from less than 20 cents per \$100 insured property value to as much as \$10 per \$100 insured. The risk of fires and the cost to insure against them is expected to rise in the coming years as the use of lithium-ion batteries continues to grow exponentially.

The increasing number of batteries disposed of in landfills also increases the heavy metal contents in landfill leachate, with dire consequences for local streams and rivers when the wastewater is treated and discharged.

SOLUTION

Introducing a battery EPR bill in the 2025 legislative session in Oregon to adequately fund programs that safely and responsibly collect and recycle batteries will be critical next step to protecting vital infrastructure from fires, improving worker health and safety, reducing insurance costs, and prevent the release of toxic battery chemicals into the environment. Developing robust recycling and secondary use policies that aid in creating sustainable supply chains for battery manufactures will contribute to growing domestic battery production and reducing reliance on foreign supply chains.

Oregon Revised Statutes [459.015](#) clearly delegates primary responsibility for adequate solid waste management to local government. In Oregon, 19 of 36 counties operate landfills and have regulatory frameworks for the collection of solid waste. Counties were instrumental in creating Oregon’s first extended producer responsibility (EPR) framework via HB 2626 in 2007. Since then, additional EPR bills have been passed for paint, mattresses, and food packaging. These laws help protect county operations by sharing the costs and end-of-life management of toxic or otherwise problematic materials with their producers.

[Eleven states](#) have passed EPR laws on batteries, the first being Vermont in 2014. In 2023, Washington State enacted its battery EPR law which also covers a broad scope of single use and rechargeable batteries but was the first state to include e-mobility device batteries (e.g., bikes, scooters, wheelchairs), with statutory provisions to study the management of large-format batteries and batteries embedded in electronic products. In 2024, New Jersey enacted the Electric and Hybrid Vehicle Management Act, becoming the first state to include in its EPR battery law electric and hybrid vehicle propulsion batteries (batteries that propel vehicles).

RESOURCES

1. United State Environmental Protection Agency - Landfill Data by State <https://www.epa.gov/lmop/lmop-landfill-and-project-database>
2. Resource Recycling. 2024 Policy Update: Electronics and battery recycling bills <https://resource-recycling.com/recycling/2024/04/16/policy-update-electronics-and-battery-recycling-bills/>
3. National Conference of State Legislatures: Batteries. <https://www.ncsl.org/environment-and-natural-resources/extended-producer-responsibility#batteries>
4. Call2Recycle. Recycling Laws by State 2023. <https://www.call2recycle.org/recycling-laws-by-state/>
5. United States Department of Energy National Blueprint for Lithium Batteries 2021-2030. <https://www.energy.gov/eere/vehicles/articles/national-blueprint-lithium-batteries>
6. Waste 360 April 2024 Fire Report. https://www.waste360.com/waste-recycling/april-2024-fire-report-we-cannot-be-complacent?utm_medium=email&_hsenc=p2ANqtz-9FtSNdiAYgCGsITXQage0fvOSTOIRPs4PgK9v7_SpY_KWcSmu8DhL2h4xqsC-cl6mmQ3mCfHICywVlgH3fvPoD6tylNOWrr7_YZ7S64mt2vP6zGps&_hsmi=301957867&utm_content=301958086&utm_source=hs_email
7. National Waste & Recycling Association [Webinar: In-Depth Report on Waste & Recycling Facility Fires in the US/CAN.](https://wasterecycling.org/webinars/lithium-ion-fires-are-everywhere-an-in-depth-report-on-waste-recycling-facility-fires-in-the-us-can/)
8. Federal Emergency Management Agency. Electronic Cigarette Fires and Explosions in the United States (2009-2016). https://www.usfa.fema.gov/downloads/pdf/publications/electronic_cigarettes.pdf
9. WasteDive: High number in facility fires in 2022 prompts renewed look at battery recycling efforts. <https://www.wastedive.com/news/high-number-of-facility-fires-in-2022-prompts-renewed-look-at-battery-recyc/645682/>
10. United State Consumer Product Safety Commission: Stop Use of Unit Pack Power E-bike Batteries Due to Fire Hazards. <https://www.cpsc.gov/Newsroom/News-Releases/2024/CPSC-Warns-Consumers-to-Stop-Using-Unit-Pack-Power-UPP-E-bike-Batteries-Due-to-Fire-and-Burn-Hazards-Risk-of-Serious-Injury-and-Death>
11. National Transportation Safety Board: Safety Risks to Emergency Responders from Lithium-Ion Battery Fires in Electric Vehicles 2022. <https://www.nts.gov/safety/safety-studies/Pages/HWY19SP002.aspx>