June 2025

California Environmental Protection Agency (CalEPA)

ZEV Role: CalEPA oversees a variety of boards, departments, and offices, including the California Air Resources Board (CARB), which work to restore, protect, and enhance California's environment, to ensure public health, environmental quality, and economic vitality. This plan focuses on non-CARB related work, as CARB has their own Agency Action Plan.

Equity Focus: Leverage analysis tools and outreach to strategically focus agency actions on high-impact projects and policies.

2024 Highlights and Lessons Learned

- The California Communities Environmental Health Screening Tool (CalEnviroScreen) is often used to determine the state's disadvantaged communities when selecting equity-focused projects for a variety of climate topics, including clean transportation and ZEVs. In 2024, the Office of Environmental Health Hazard Assessment (OEHHA) began the process of co-designing an update to CalEnviroScreen with environmental justice community-based organizations. This process has included the prioritization of data for the update and co-development of a community engagement plan.
- In 2024, the Department of Resources Recycling and Recovery (CalRecycle) began the process for developing the regulations of Senate Bill (SB) 1215, which amends the Electronic Waste Recycling Act of 2003 by adding battery-embedded products to California's Covered Electronic Waste Recycling Program.

ZEV Market Development Objectives

1. **Promote and Enable Systems for Battery and Battery-embedded Product Reuse, Repurposing, and Recycling (CalRecycle):**

   Key Collaborators:
   CalEPA, Department of Toxic Substances Control (DTSC), California Energy Commission (CEC)

   Key Results & Actions:

A. **Recycling:** CalEPA, CalRecycle, and DTSC were part of the Lithium-ion Car Battery Recycling Advisory Group, which was created in 2018 following a mandate from Assembly Bill (AB) 2832 and convened its work in 2022. (Complete)

2024 Targeted Key Results: DTSC and CalRecycle continued to answer industry and regulatory questions about used battery management.

Outcomes: There were no specific outcomes in 2024 because the process has been informal since the group concluded its work in 2022. Responding to industry and regulatory questions remains a continuous process.

B. **Second Life of Batteries:** Classification, transportation, disposal of used batteries. (Ongoing)

1. **2024 Targeted Key Results:** AB 2440, the Responsible Battery Recycling Act of 2022, requires producers of common household batteries to create a program for producers to collect and recycle their products once consumers are done using them. The focus in 2024 was on public engagement.

   Outcomes: CalRecycle continued engagement through 2024 through battery stewardship public workshops and the Battery Stewardship GovDelivery listserv, which sends e-mail notifications about upcoming workshops and program updates. The following events took place in 2024:
   - July 11, 2024 – Battery Stewardship Informal Regulatory Concept Workshop
     - Focused on definitions, state agency fees, enforcement-related provisions, and request for data to support economic analysis
     - Event materials: Agenda, public meeting notice, discussion document, and presentation slides
   - April 3, 2024 – Battery Stewardship Informal Regulatory Concept Workshop
     - Focused on submittals, stewardship plans, and annual reports
     - Event materials: Agenda, public meeting notice, discussion document, and presentation slides

   2025 Targeted Key Results: CalRecycle held an informal rulemaking workshop on May 29, 2025 to solicit public comments on a full draft of the proposed regulations and begin formal rulemaking. CalRecycle anticipates adopting regulations in 2026. The anticipated timeline following adoption is as follows:

- 120 days after regulations are effective – CalRecycle will appoint an advisory body
- 12 months after regulations are effective – program operators submit a stewardship plan to CalRecycle
- 24 months after regulations are effective – program operators must have an approved stewardship plan
- 12 months after plan approval – program operators must fully implement the approved stewardship plan

2. **2024 Targeted Key Results:** SB 1215 (2022) amends the Electronic Waste Recycling Act of 2003 by adding battery-embedded products to California's Covered Electronic Waste Recycling Program.

   Governor Newsom signed SB 1215 into law to reduce battery fires and injuries to sanitation workers and to ensure that battery-embedded products are collected for recycling rather than ending up in the waste stream. Reusing and recycling as many materials sold in California as possible is vital to the state's larger effort to build a circular, remanufacturing economy that turns pollution sources into new materials.

   Outcomes: CalRecycle engaged with the public and other interested parties to develop regulatory concepts to add battery embedded products to California's Covered Electronic Waste Recycling Program, and to establish a covered electronic waste (CEW) recycling fee for covered battery-embedded products. Regulations will become effective January 1, 2026.

   2025 Targeted Key Results: The timeline for SB 1215 implementation in 2025 is as follows: CalRecycle is holding regulatory workshops in 2025 to solicit input on the regulations. CalRecycle is also collaborating with the California Department of Tax and Fee Administration (CDTFA), DTSC, and the California Department of Food and Agriculture (CDFA) on the regulatory development.
   - On or before July 1, 2025, manufacturers of covered battery-embedded products must list covered products and exempt products in an annual notice to California retailers and CalRecycle.
   - On or before October 1, 2025, CalRecycle will establish a CEW recycling fee for covered battery-embedded products. CDTFA will develop its system for collecting the fee from retailers starting in 2026.
   - Effective January 1, 2026, CalRecycle shall establish, through regulations, a process for CEW recyclers to submit payment claims starting in April 2026 for covered battery-embedded waste.

2. **Disadvantaged Communities Identification and Protection of Public Health (OEHHA):**

Key Collaborators: CalEPA, CARB, California Public Utilities Commission (CPUC)

Key Results & Actions:

A. **Determine the state's disadvantaged communities** using the California Communities Environmental Health Screening Tool (CalEnviroScreen). (Ongoing)

2025 Targeted Key Results: OEHHA is actively working on the next update of CalEnviroScreen. In 2024 and 2025, OEHHA is contracting with environmental justice community-based organizations (CBOs) to co-design the update. This process has included the prioritization of data for the update and co-development of a community engagement plan.

The next update to CalEnviroScreen, version 5.0, will be reflective of community input, while continuing to have a strong scientific foundation.

As of May 2025, $9.2 billion of the state's $12.8 billion in California Climate Investments projects have benefited priority populations, which include disadvantaged communities identified using CalEnviroScreen.

B. **Biomass and Organics to Hydrogen or Electricity:** Develop systems to promote and enable the connection of waste resources to California's energy system, including in alignment with the State's Low Carbon Fuel Standard, and identify contaminants to protect public health. (Ongoing)

2024 Targeted Key Results: OEHHA works with CARB and CPUC to develop biomethane pipeline standards. OEHHA's role is to identify contaminants of concern and determine the health risk to workers and end users.

Outcomes: OEHHA, CARB, and CPUC are on a 5-year schedule to update biomethane standards. AB 1900 (2012) requires the CPUC to develop standards for certain constituents found in biogas in collaboration with OEHHA and CARB. In 2024, OEHHA continued this work by exploring possible constituents in biomethane made from woody biowaste, called biosynthetic natural gas. Woody biowaste includes but is not limited to forest, agricultural, and urban wastes. OEHHA and CARB also established several contracts to obtain data related to constituents in biomethane. The results will be used in the next update to the AB 1900 report due by 2028.

2025 Targeted Key Results: OEHHA will continue to work with CARB and CPUC to manage external contracts focused on detecting and quantifying constituents in biomethane. OEHHA will use the contract data to develop health protective levels for biomethane constituents. OEHHA will also work with CARB and CPUC staff to prepare public workshops for engagement with interested parties. Finally, the results will also be used in the next AB 1900 report update due by 2028.

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3. **Classification, Transportation, Management, and Disposal of Used Batteries (DTSC):**

Key Collaborators: CalRecycle

Key Results & Actions:

2024 Targeted Key Results: DTSC continues to provide resources to help waste handlers and the public understand how to dispose of used batteries. DTSC's Permitting Division has spoken with industry about prospective battery recycling facilities and the required authorizations and timeframes.

Outcomes: The DTSC batteries webpage was updated in December 2024.

2025 Targeted Key Results: Ensure webpage remains up to date through 2025. DTSC is also addressing alternative energy waste (including lithium-ion batteries) as part of its upcoming Hazardous Waste Management Plan (Plan), which is due every three years beginning in 2025. The 2025 Plan identifies areas of research for end-of-life lithium-ion batteries, such as those used in ZEVs, to prioritize their reuse, repurposing, and recycling at end of life. The Board of Environmental Safety (BES) is holding public hearings across the state to gather feedback on the Draft Hazardous Waste Management Plan.

DTSC is tracking efforts underway by the U.S. Environmental Protection Agency to provide guidance to consumers, businesses, and state government on safety standards, labeling, collection, and reuse/recycling opportunities for second life batteries, including future amendments to the federal universal waste standards.