# Proposed Battery-Embedded Waste Recycling Fee

## Department of Resources Recycling and Recovery

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## **Covered Battery-Embedded Waste Recycling Fee**

- CalRecycle must establish a covered battery-embedded waste recycling fee, based on the reasonable regulatory costs to administer CEW recycling, on or before October 1, 2025, and on or before October 1 annually thereafter, pursuant to PRC section 42464(b)(3).
  - Beginning January 1, 2026, the fee shall be imposed upon the purchase of a new or refurbished BEP.
  - The fee shall be remitted to CDTFA pursuant to the Fee Collection Procedures Law.
  - Beginning August 1, 2028, CalRecycle, in collaboration with DTSC, may establish more than one fee based on categories of covered battery-embedded products.

Follow along using the Regulatory Text Document



## **Summary of Manufacturer Requirements to Notify Retailers**

- SB 1215 established new requirements for manufacturers of "covered batteryembedded products" to send notices to all retailers in California selling those products.
- On or before July 1, 2025, and every year thereafter, a manufacturer of a covered battery-embedded product is required by law to send a notice to all retailers in California selling those products.
  - The notice must identify the covered battery-embedded product(s) manufactured by that manufacturer that are subject to SB 1215 and those that are exempt from the BEP definition.
  - All covered battery-embedded products included in a notice sent to retailers must be identified by brand and model number.
- The notice must inform retailers that the covered battery-embedded product(s) included in the notice are subject to a covered battery-embedded waste recycling fee.
- Manufacturers must send copies of the notices to CalRecycle.

## **Covered Battery-Embedded Waste Recycling Fee Subaccount**

- All covered battery-embedded waste recycling fees collected from sales of covered electronic devices will be deposited into the Covered Battery-Embedded Waste Recycling Fee Subaccount.
- The fee must be set to ensure there are sufficient funds in the Covered Battery-Embedded Waste Recycling Fee Subaccount to implement SB 1215.

## **Estimate of Initial Expenditures - Challenges**

- Full scope of battery-embedded products (BEP) not understood.
- Existing collection and processing data are not available from approved participants.
- Level of future recycler participation (BEP recycling payment claims) is unknown.

## **Estimate of Initial Expenditures - Strategy**

- The best available benchmark is historical volume of Covered Electronic Waste (CEW) claimed by recyclers.
- While this volume represents different product types, it does reflect existing processes within the electronics recycling industry.

## **Estimate of Initial Expenditures – Cost Components**

#### 1. CEW volume:

 2024 CEW recycling payments claimed multiplied by BEP payment rate (Established by Statute)

#### 2. Administrative Costs:

- CalRecycle State Operations
- Allocations to other departments (CDTFA, DTSC)

#### 3. Initial reserve amounts:

- Economic uncertainty buffer
- Mandated prudent reserve (PRC section 42464(h)(2))

| BEP Payment Rates (Per Pound) |    |      |  |  |  |  |
|-------------------------------|----|------|--|--|--|--|
| Recycling                     | \$ | 0.75 |  |  |  |  |
| Collection                    | \$ | 0.40 |  |  |  |  |
| Total                         | \$ | 1.15 |  |  |  |  |

## **Estimated Expenditures**

 Initial revenue target estimate is about \$105 Million, based on expected costs.

| Item   |            | Amount      |
|--|------------|-------------|
| 2024 Reported CEW Volume (pounds), multiplied by | 64,000,000 |             |
| Total Combined Fee (per pound)                   | \$         | 1.15        |
| Total BEP-Recycling Payment Estimate             | \$         | 73,600,000  |
| Additional Administrative Costs                  |            |             |
| State Operations*                                | \$         | 9,500,000   |
| Other Allocations*                               | \$         | 6,539,000   |
| Margin for Economic Uncertainty                  | \$         | 10,000,000  |
| Prudent Reserve (5%)                             | \$         | 5,000,000   |
|  |            |             |
| Total  | \$         | 104,639,000 |

<sup>\*</sup>Estimated from Electronic Waste Recovery and Recycling Account (Fund 3065), Projected 3-year average to FY 25-26

### **Estimate of Initial Revenue - Overview**

Revenue 

covered battery-embedded waste recycling fee (BEP fee) as determined by CalRecycle.

- Revenue = BEP Total Sales in California (\$) multiplied by BEP fee (%)
  - Step 1 Estimate total sales of BEP in California
  - Step 2 Set fee to generate ≥ target revenue (\$105 million)

## **Estimate of Initial Revenue - Challenges**

- Full product universe of BEPs not yet fully defined.
- No data exists on sales volumes of BEP.
- Reliable BEP data is challenging to obtain because BEPs are not currently categorized or tracked based on the statutory definition of covered products.

## **Estimate of Initial Revenue - Strategy**

- CalRecycle staff utilized multiple strategies and combined multiple sources of data.
- Reasonable but conservative assumptions about product inclusions and volumes were made.
- Goal was to not overestimate revenue.

### **Estimate of Initial Revenue - BEP Sales Value**

- Method 1 Sales estimates of select electronics that appear to meet definition of BEP.
- Method 2 Consumer spending survey data combined with category BEP estimates.
- Combining multiple method estimates improves reliability.
- Averaged estimates from each method to project revenue and calculate appropriate fee.

## **Method 1 – High BEP Categories**

#### **Overview**

- Method 1 focused on a select group of product categories with:
  - High % BEP
  - Available market research data
  - Technologically homogenous

### Strength

Focuses on most reliable and impactful data

#### Weakness

- A large volume of products were left unknown.
- Multiple sources of data were aggregated, adding to variance.

## **Method 2 - Personal Consumption Survey Data**

#### **Overview**

- Personal Consumption Expenditures (PCE) data from the U.S. Bureau of Economic Analysis.
  - Annual survey to estimate individual spending.
  - Percentage of BEP per category were based on retail observational research and analysis.

### **Strength**

- Based on a reliable and well-established economic survey providing validity.
- Encompasses all spending categories.

#### Weakness

 BEP % estimates based on retail observations and may not fully reflect product variance.

<u>U.S. Bureau of Economic Analysis (BEA)</u>, "Table 2.4.5. Personal Consumption Expenditures by Type of Product" (February 27, 2025).

## **BEP Spending Estimate Summary**

| Approach           | E  | BEP Spending   | Possible Fee | Re | venue Estimate | Minimum Fee | Mini | mum Revenue |
|--------------------|----|----------------|--------------|----|----------------|-------------|------|-------------|
| Method 1           | \$ | 11,908,625,079 | 1.0%         | \$ | 119,086,251    | 0.89%       | \$   | 105,986,763 |
| Method 2           | \$ | 12,686,644,643 | 1.0%         | \$ | 126,866,446    | 0.84%       | \$   | 106,567,815 |
| Combined (Average) | \$ | 12,297,634,861 | 1.0%         | \$ | 122,976,349    | 0.87%       | \$   | 106,374,542 |

- Methods average about \$12B in spending on BEP and differ by less than \$800M (about 6% of the average).
- A 1% BEP fee or less may generate the target revenue.
- However, this analysis assumes full compliance, which may be difficult at program outset.
  - → Initial consumer fee recommendation should be adjusted higher to account for this uncertainty.

## **Compliance Assumptions**

#### Historical Comparison

- CEW (video display device) collection began January 1, 2005. Fee revenue was about 80% of projected sales over the first 6 months.
- California Battery (Lead-Acid) Fee began April 1, 2017. Retail participation was about 52% during the first year of the program.
- BEPs are significantly more variable and uncertain than video display devices, creating challenges that will reduce compliance and revenue.

#### Smartphone Impact

- Battery-embedded smartphones represent over 65% of expected BEP sales revenue.
- Compliance for Smartphones should be much higher than other BEP.
  - → A revenue model was created that accounts for these factors.

## **Battery-Embedded Waste Recycling Fee Recommendation**

 Model Accounts for realistic program implementation challenges. Assumes 80% retailer compliance for battery-embedded smartphones, and 15% compliance for all other BEP over the first year.

| Smart Phone | Smart Phone     | Other BEP  | Other BEP     | Proposed Fee | Expected      |
|-------------|-----------------|------------|---------------|--------------|---------------|
| Compliance  | Spending        | Compliance | Spending      | 1.5%         | Revenue*      |
| 80%         | \$6,705,774,806 | 15%        | \$587,312,453 | 1.50%        | \$106,114,420 |

- A fee structure that retailers are already familiar with is charging a fee that is a percentage of the sale price of the product.
- BEP fee set at 1.5% of retail sale price is expected to generate revenue that meets or exceeds target revenue.

  \*Includes 3% retailer fee allocation

### **Conclusions**

- CalRecycle proposes the Battery Embedded Waste Recycling Fee be set at 1.5% of the retail sale price of the BEP.
- Sales and compliance for battery-embedded smartphones will have an outsized impact on revenue.
  - Outreach efforts should focus on retail compliance for batteryembedded smartphones and similar devices.
  - If retail compliance for battery-embedded smartphones is at least 75%, a 1.5% fee should be adequate. If compliance approaches 50% or below, a fee at or above 2% may be necessary.
- Manufacturer and retailer compliance is critical.
- CalRecycle will evaluate the Battery-Embedded Waste Recycling Fee annually.

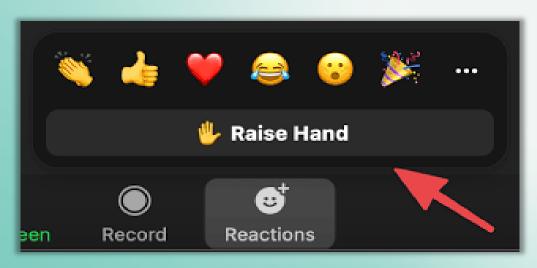
#### **Section 18660.40 Fee Amounts**

The covered electronic waste recycling fee paid by a consumer upon the purchase of a new or refurbished covered electronic device pursuant to Section 42464 of the Public Resources Code shall be the following amounts:

- (d) On or after January 1, 2026, 1.5 percent of the retail sales price for each covered battery-embedded product sold for use in this state by a retailer.
  - (1) There is a rebuttable presumption that a covered battery-embedded product is purchased for use in this state if either of the following is true:
    - (A) The covered battery-embedded product is purchased from a retailer physically located in this state.
    - (B) The address to which the retailer ships the purchased covered battery-embedded product is located in this state.
- (2) This section applies to the purchase of covered battery-embedded products only. It does not apply to any determination regarding whether Covered Electronic Waste (CEW), as defined in Section 18660.5(a)(18) of Title 14 of the California Code of Regulations, is generated from a California Source, as defined in Section 18660.5(a)(12) of Title 14 of the California Code of Regulations.

## **Submitting Comments and Feedback**

- To make a comment in-person, please line up at the microphone.
- To make an oral comment via Zoom, please raise your hand and the host will unmute you.



- Submit written feedback after the workshop by June 6, 2025, via:
  - CalRecycle's public comment portal: <u>Covered Battery-Embedded</u> <u>Products Informal Rulemaking</u> <u>Comment Period</u>
  - Email: regulations@calrecycle.ca.gov with subject line "SB 1215 Implementing Regulations."





Sign-up for information related to the Covered Electronic Waste Recycling Program.

Sign up for information related to all CalRecycle Proposed Regulations.

More information is forthcoming and will be distributed through our GovDelivery system.



Email comments and feedback on today's content to



Regulations@CalRecycle.ca.gov.

Workshop Public Comment
Portal: Covered Battery-Embedded Products
Informal Rulemaking Comment Period

This comment portal will close on June 6, 2025.