



Individual Source Reduction Plan

California Producer Guidance

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Contents

Tables.....	3
Figures	3
Understanding California’s Goals and the Individual Source Reduction Plan	4
Chapter 1: Source Reduction Obligations.....	5
Source Reduction Targets.....	5
Source Reduction Reporting Process.....	7
ISR Plans Versus ISR Agreements	10
Source Reduction Measurement	11
Chapter 2: Source Reduction Pathway Calculations.....	15
Pathways to Source Reduction.....	15
Preparing Source Reduction Calculations Across Pathways.....	17
Source Reduction Activity Equations A to C.....	17
Pathway 1: Reuse/Refill	18
Pathway 2: Elimination.....	26
Pathway 3: Switching to Alternative, Non-Plastic Materials.....	28
Pathway 4: Right-sizing, Concentrating, Lightweighting, and Shifting to Bulk Packaging	29
Pathway 5: PCR Content as Alternative Compliance.....	31
Chapter 3: Individual Source Reduction (ISR) Plan Guidance	33
Producer Requirements for ISR Plans	33
Preparing an ISR Plan.....	33
Submitting an ISR Plan.....	38
References.....	38
Appendix A: Acronyms.....	39
Appendix B: Material Categories in California.....	40
Appendix C: Example Source Reduction Packaging Changes	47
Reuse/Refill Formats.....	47
Elimination Formats.....	50
Shifting Material Formats	52
Right-Sizing, Concentration and Bulk Formats.....	53



Tables

Table 1: Source reduction requirements for CAA.....	5
Table 2: Source reduction reporting steps and timelines.....	10
Table 3: Source reduction activity equations mapped to source reduction use cases	18
Table 4: The Act's definitions of reusable and refillable	20
Table 5: Statutory requirements for CAA.....	22
Table 6: Example parent equivalent sold in child packaging for refill-at-home models.....	25
Table 7: Source reduction by right-sizing, concentration, bulk, lightweighting definitions	30
Table 8: Material category list in California.....	46

Figures

Figure 1: Overview of source reduction reporting process	7
Figure 2: Source reduction measured as a difference in plastic weight compared to 2023....	11
Figure 3: Source reduction measured as a difference in plastic components compared to 2023.....	11
Figure 4: Example calculation of net difference in plastic and components	12
Figure 5: Allocation process from net source reduction to allocated net source reduction...	14
Figure 6: Calculation of the proportion of source reduction activity for one pathway	14
Figure 7: Example calculation of the proportion of source reduction activity allocated to one pathway.....	15
Figure 8: Example calculation for the allocation of net reduction to source reduction pathways	15
Figure 9: Example "actions" that correlate to source reduction pathways.....	16
Figure 10: Child-to-parent relationship in refill-at-home models	23
Figure 11: Example of reuse calculation for source reduction attribution.....	25
Figure 12: Example elimination calculation for source reduction attribution.....	27
Figure 13: Example of elimination calculation for source reduction attribution	28
Figure 14: Example of switching to alternative materials calculation for source reduction attribution	29
Figure 15: Example of right-sizing calculation for source reduction attribution.....	31
Figure 16: Example of ISR Plan inputs for prior source reduction, baseline PCR and aggregate plastic weight and components.....	35
Figure 17: Example of ISR Plan inputs for aggregate plastic weight and components.....	36
Figure 18: Source reduction activity projections for ISR Plan	37
Figure 19: Source reduction activity allocations for ISR Plan.....	38



Understanding California's Goals and the Individual Source Reduction Plan

California's Plastic Pollution Prevention and Packaging Producer Responsibility Act (the "Act"), codified as California Public Resources Code (PRC) §§ 42040–42084, requires producers to fund and improve the end-of-life management of single-use packaging and plastic single-use food serviceware (referred to as covered material). PRC section 42050 establishes enforceable goals that producers must achieve by 2032, including:

- Source-reducing plastic covered material by 25%, both by weight and number of plastic components, from the baseline year of 2023. This includes shifting at least 10% of all single-use plastic packaging and food serviceware supplied to California's market to reusable/refillable alternatives or eliminating it altogether, compared to the 2023 baseline.
- Recycling not less than 65% of single-use plastic packaging and single-use plastic food serviceware supplied to California's market.
- Ensuring that 100% of single-use packaging and single-use plastic food serviceware supplied to California's market is either recyclable or eligible to be labeled as compostable.^{1,2}

The proposed regulatory text ("the Regulations") under the statutory authority of the Act further elaborates on these requirements. This guidance document refers to information in draft regulations that, at the time of guidance publication in February 2026, have not yet been promulgated nor codified into the California Code of Regulations (CCR).

On Jan. 8, 2024, California's Department of Resources Recycling and Recovery (CalRecycle) approved Circular Action Alliance (CAA) as the single Producer Responsibility Organization (PRO) to help producers meet their legal obligations and targets. CalRecycle enforces the Act, adopts regulations, and issues its own guidance. To further aid producers in meeting their reporting requirements and overall compliance, CAA publishes guidance.

What CAA is required to do under the Act:

- Collect information from producers about their supply of covered materials into California, including the supply of specific categories of plastic and plastic components

¹ CalRecycle, 2025. Building California's Circular Economy: Plastic Pollution Prevention and Packaging Producer Responsibility Act Implementation. Report to the Legislature. May 2025.

<https://www2.calrecycle.ca.gov/Docs/Web/130194>

² PRC section 42050.

https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=30.&title=&part=3.&chapter=3.&article=2.



- Collect producers' Individual Source Reduction (ISR) Plans, where each producer must outline its plans to reduce plastic covered material by weight and number of plastic components
- Submit a report summarizing this data to CalRecycle

This guidance document explains and outlines the requirements of the ISR Plans. For more information on the California reporting terminology, see **Preparing to Report Your California Supply Data**.³ Where possible, CAA aligns terminology⁴ across states (e.g., the Act refers to a program plan as both a "producer responsibility plan" and a "PRO plan," while this document uses "program plan").

This document has three chapters: Chapter 1 explains the legal requirements for source reduction, Chapter 2 explains source reduction pathway calculations that producers will use in multiple required source reduction reports, and Chapter 3 gives practical guidance to help producers complete their ISR Plans. A forthcoming addendum to this guidance will cover source reduction annual reporting.

Chapter 1: Source Reduction Obligations

This chapter explains California's source reduction targets, producer and CAA reporting requirements, and timelines for reporting.

Source Reduction Targets

PRC section 42057(a) includes a progression of targets to be achieved as set out in **Table 1**.

	Target year (measured Jan. 1 of each year)		
	2027	2030	2032
Source reduction targets	10%	20%	25%
Reuse, refill (all target years) and elimination (2032 target year only only) ⁵ targets	2% minimum	4% minimum	10% minimum
Reuse/refill investments	Amount to be determined by PRO, informed by CalRecycle needs assessment		

Table 1: Source reduction requirements for CAA

³ Published September 2025 and available in CAA's Producer Portal:

https://circularactionalliance.org/s/Preparing-to-Report-Your-California-Supply-Data-CA_Final.pdf

⁴ For more CAA-specific definitions, see CAA's reporting policy: <https://circularactionalliance.org/s/CAA-Reporting-Policy-Version-1-June-2025.pdf>

⁵ According to PRC section 42057(a), plastic component elimination may only count toward the 2032 reuse, refill and elimination (RRE) target. For the 2027 and 2030 targets, elimination will be allocated to non-RRE source reduction.



CAA will track progress toward the Act's targets in its annual report to CalRecycle. This report will cover producers' activities in the data year⁶ immediately prior to each target year. For example, producers will report their 2026 data in the spring of 2027, and CAA will use this data and information to submit its 2027 annual report to CalRecycle. That report will detail progress toward the Jan. 1, 2027, source reduction target. CalRecycle will assess achievement of the 2027 targets based on producer data from 2026.

Producer source reduction reporting deadlines

Each producer must submit an ISR Plan to CAA. As of this guidance document's publication in February 2026, CAA has not set a definitive ISR Plan deadline because CalRecycle has not adopted final Regulations. However, ISR Plans will be due no later than Aug. 1, 2026.

Each producer must also submit its first source reduction annual reporting by May 31, 2026, covering the 2025 data year.⁷

Although CalRecycle requires producers to report to CAA on specific covered material categories (CMCs), the source reduction targets set out in the Act apply to the aggregate of all plastic covered material by weight and number of components.

CAA will report the following figures, which include aggregated (across all registered producers) and disaggregated (per producer, as reported in their ISR Plans) information, to CalRecycle:

- Source reduction outcomes based on the aggregation of all plastic supplied by all producers
- Plastic weight and number of components in source reduction pathways (i.e., reuse/refill, elimination, switching to Bring-Your-Own-Container (BYOC), right-sizing/concentration/bulk formats, and shifting to non-plastic covered material)
- Post-consumer recycled (PCR)⁸ content use compared to virgin plastic material use (the Act allows producers to satisfy a limited portion of their source reduction obligations through PCR use, as outlined in the **PCR Content as Alternative Compliance** section)

Incentive mechanism and individual producer source reduction targets

CAA recognizes that a producer's ability to source reduce depends on many factors, including the producer's prior source reduction activities, industry, and packaging use cases. CAA is developing an incentive mechanism that may include bonuses for producers that source reduce more than mandated and maluses for those that source reduce less. CAA plans to publish its incentive mechanism on May 1, 2026, but this date is subject to change depending on the effective date of the Regulations.

⁶ "Data year" means the year in which the producer supplied covered material.

⁷ CAA will need to include the first annual source reduction reporting in 2026 (on 2025 supply data) in its California program plan as per PRC section 42051.1(h). The plan shall include the source reduction data specified in subdivision (c) of section 42057 of the PRC.

⁸ The Association of Plastic Recyclers (APR) refers to PCR as "post-consumer resin." This document will use PCR to refer to post-consumer recycled content and post-consumer resin interchangeably.



Source Reduction Reporting Process

Producers must submit two one-time source reduction reports and subsequent annual reports on an ongoing basis. **Figure 1** shows all required source reduction reporting, including: (1) 2023 baseline reporting, (2) producer ISR Plans, and (3) ongoing annual source reduction reporting, which feeds into CAA's annual reports to CalRecycle.

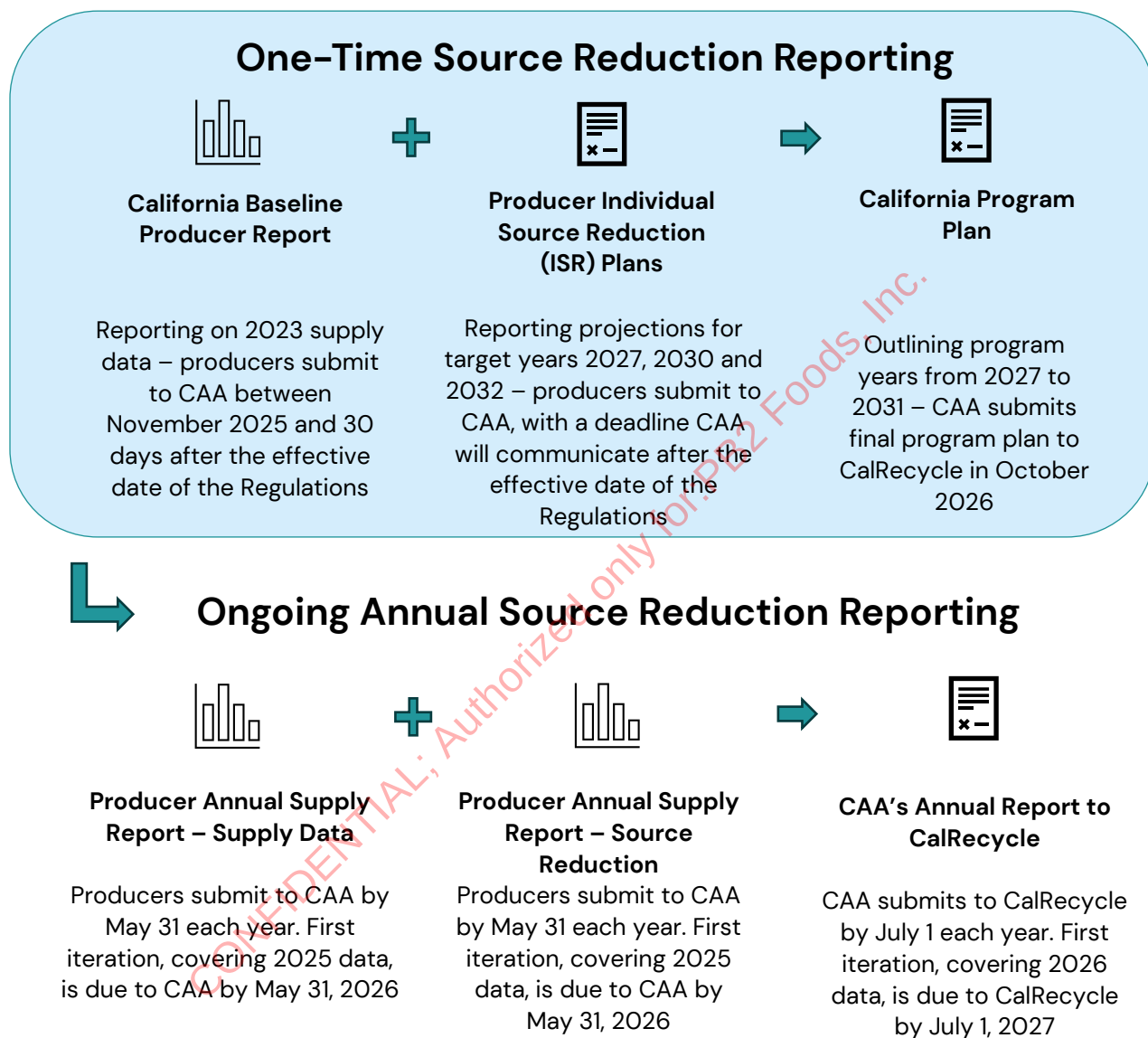


Figure 1: Overview of source reduction reporting process



The program years⁹ in California are the five years following program plan approval, which are the calendar years 2027 to 2031.

For more information on the 2023 baseline reporting, see **Preparing to Report Your California Supply Data**.¹⁰ The 2023 baseline reporting is a prerequisite to the ISR Plan reporting.

Required producer source reduction reporting in 2026

California's registered producers will be required to submit their **ISR Plans**, as well as their first **annual source reduction reporting**, in 2026. The ISR Plan is a report in which producers forecast their expected source reduction outcomes against the Act's targets. ISR Plans enable CAA to determine whether source reduction targets of 25% by 2032 (using 2031 supply data) will be met, with interim targets in 2027 and 2030.

ISR Plan

In their ISR Plans, producers must forecast how much plastic (by weight and components) they plan to reduce each year and attribute their source reduction activity (by weight and components) toward each of the source reduction pathways. Producers will be able to include written explanations about how they calculated their forecasted data (i.e., their methodology), as well as descriptions of their source reduction actions. More information on these plans can be found in the **ISR Plan** section below.

Annual reporting

Producers will need to include the following in their annual reporting on source reduction progress, which is due May 31 each year beginning in 2026:

- The producer's Standard Supply Report¹¹ of covered materials based on the previous year's supply data, separated out by CMC.
- The producer's source reduction activity and outcomes for the program year. This includes:
 - The actual plastic weight and components the producer supplied in the previous year
 - A calculation of the producer's total source reduction achievement from the baseline year
 - A calculation of how much source reduction activity fits into each source reduction pathway

⁹ "Program year" means the year or period for which a producer's financial obligations are calculated and when program compliance obligations may apply. Any applicable fees or dues for producers are calculated based on the corresponding data year.

¹⁰ Published September 2025 and available on CAA's Producer Guidance page and portal:

https://circularactionalliance.org/s/Preparing-to-Report-Your-California-Supply-Data-_CA_Final.pdf

¹¹ For more information, see CAA's reporting policy: <https://circularactionalliance.org/s/CAA-Reporting-Policy-Version-1-June-2025.pdf>



This aggregated data will inform CAA’s annual reporting to CalRecycle and CAA’s implementation of the program. CAA will provide full details on annual source reduction reporting in an addendum to this guidance, to be published in Spring 2026.

Source reduction reporting timelines

CAA requires producers to submit several reports to inform the development of its 2027–2032 California program plan. Producer reporting during this period and the cadence for plan submission and the first set of program fees, is set out in **Table 2**.

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Step	Action	Timing
Step 1	Producers submit California Baseline Producer Report (2023 Data Year) to CAA	Reports due between November 2025 and 30 days after effective date of the Regulations
Step 2	CAA publishes illustrative fees and overview of source reduction incentive mechanism in California	Published May 1, 2026, but this date is subject to change depending on the effective date of the Regulations
Step 3*	Producers submit ISR Plans to CAA	CAA will publish this deadline within 30 days of the effective date of the Regulations, but at the very latest, ISR Plans will be due no later than Aug. 1, 2026
Step 4	Producers submit first source reduction annual reporting on plastic weight and number of components attributed to the source reduction pathways, to CAA	Due by May 31, 2026
Step 5	CAA submits California program plan to Packaging Producer Responsibility Advisory Board	Submitted by June 15, 2026
Step 6	CAA submits finalized California program plan to CalRecycle	Submitted by Oct. 13, 2026
Step 7	CAA publishes fees for 2027 California program year (based on 2025 supply)	Published by Oct. 1, 2026
Step 8	CAA invoices producers for 2027 California program year	Invoices delivered by January 2027
Step 9	Producers submit ongoing annual reporting covering the results of source reduction efforts	Due by May 31 each year (aligned with annual reporting of supply data)

Table 2. Source reduction reporting steps and timelines

ISR Plans Versus ISR Agreements

Producers must enter into enforceable agreements with CAA, formalizing how they will meet their source reduction targets. CAA will share additional information about the

* Because the timing for ISR Plan submission is uncertain, this step could come later in the sequence.



process for ISR Agreements in the coming months, including a timeline for producer submission of the agreement.

Compliance conditions of ISR Plans and Agreements

CAA's ability to reach the Act's source reduction targets depends largely on each producer's source reduction efforts.

The Act requires producers to submit an ISR Plan to CAA, and CAA must in turn submit these ISR Plans to CalRecycle. This information will be subject to disclosure under the California Public Records Act, Division 10, but producers may request that the information be considered a trade secret exempt from public disclosure, pursuant to Section 18980.14 of the Regulations.

CAA's ISR Plan report form contains fields for producers to designate which portion of their ISR Plans contain information that constitute market-sensitive trade secret data, and to explain the basis for the designation. CAA will submit this information along with the ISR Plans to CalRecycle. However, CalRecycle – not CAA – will decide whether the information will be disclosed or withheld.

Source Reduction Measurement

To calculate source reduction under the Act,¹² subtract the plastic weight and components supplied in the data year preceding the target year, from the amount supplied in the 2023 baseline year. Divide the difference by the amount supplied in the 2023 baseline year. Multiply the resulting value by 100, which provides a percentage that can be measured against the targets (**Figure 2** and **Figure 3**).

By Weight (in pounds):

$$\frac{(\text{Plastic weight in BASELINE YEAR}) - (\text{Plastic weight in SUPPLY YEAR PRIOR TO TARGET YEAR})}{(\text{Plastic weight in BASELINE YEAR})}$$

Figure 2: Source reduction measured as a difference in plastic weight compared to 2023

By Components (in components):

$$\frac{(\text{Plastic components in BASELINE YEAR}) - (\text{Plastic components in SUPPLY YEAR PRIOR TO TARGET YEAR})}{(\text{Plastic components in BASELINE YEAR})}$$

Figure 3: Source reduction measured as a difference in plastic components compared to 2023

If the amount supplied in the data year preceding the target year is less than the amount supplied in 2023, the result is a percentage reduction achieved against the 2023 baseline, indicating net source reduction. If the amount supplied in the data year preceding the

¹² As per PRC section 42057(a)



target year is greater than the amount supplied in 2023, the result is a percentage increase in supply, yielding no net source reduction.

For example, if there were 6.6 billion pounds and 170 billion components of plastic supplied into California's marketplace in 2023, and those figures are reduced to 4.9 billion pounds and 120 billion components supplied in data year 2031, the result is a net source reduction of 26% by weight and 29% by components for target year 2032 (**Figure 4**).

$$\frac{(6.6 - 4.9 \text{ billion pounds})}{(6.6 \text{ billion pounds})} = 26\% \text{ reduction (by weight)} \quad \frac{(170 - 120 \text{ billion components})}{(170 \text{ billion components})} = 29\% \text{ reduction (by components)}$$

Figure 4: Example calculation of net difference in plastic and components

Net source reduction versus source reduction activity

As the measurement approach outlines, CAA will be held to **"net" source reduction**. This is the net reduction of plastic weight and number of components that are reported to CAA in the target years compared to what was supplied in the 2023 baseline year. To achieve net source reduction from the baseline, producers will have to reduce the plastic they supply compared to what they supplied in 2023, without any allowance for adjustment (due to growth in product sales, for example).

CAA recognizes that the net reduction figure alone will not reflect the total scope of producer source reduction efforts, because producers may grow their sales during the program plan period, offsetting source reduction efforts. For source reduction reporting, CAA has created an additional measurement, called **source reduction activity**. Separate from a net measurement, **source reduction activity** considers a producer's total activity to reduce plastic weight and number of components. As an example of the distinction, a producer could make significant design changes to source reduce but then increase product sales year over year. The net calculation only considers the final difference in plastic use between the years. The source reduction activity calculation provides a closer measurement of the producer's specific actions toward source reduction.

CAA will report to CalRecycle both net source reduction and source reduction activity by pathway. But because the activity by pathway measurement considers total source reduction, and the net measurement considers only the net difference compared to 2023, a producer's total source reduction pathway activity reported may exceed its net source reduction figure. For this reason, CAA has created a process to allocate source reduction activities to the net figure. This ensures pathway activities reported to CalRecycle do not exceed the net figure. Under this process, producers will:

- Calculate the difference between what they supplied to the market in any given year compared to what they would have supplied to the market if a specific source reduction activity had not taken place



- Report these results as a contribution to each source reduction pathway in their ISR Plans, as well as future annual source reduction reporting

A visual representation of this process can be found in **Figure 5**:

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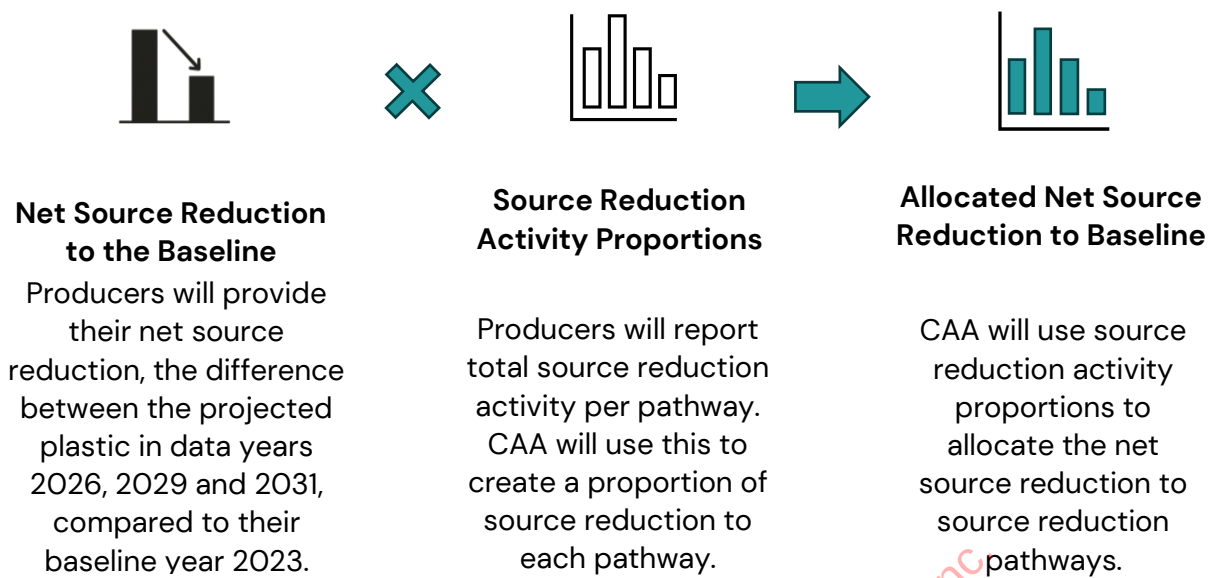


Figure 5: Allocation process from net source reduction to allocated net source reduction

Note: If no net source reduction is achieved, no allocation would take place. Further information on how to calculate source reduction activity will be discussed later in this document, in the **Attributing Source Reduction to Source Reduction Pathways** section.

Allocating source reduction

Producers should begin the source reduction allocation process by identifying the proportion of one pathway toward the total source reduction activity. The proportion should be expressed as the amount of source reduction activity per pathway over the total amount of source reduction activity. **Figure 6** provides this equation.

$$\text{Source reduction pathway proportion} = \left(\frac{\text{Amount of source reduction activity per pathway}}{\text{Total amount of source reduction activity across all pathways}} \right)$$

Figure 6: Calculation of the proportion of source reduction activity for one pathway

For example, **Figure 7** shows that if a producer reports 1,000 pounds of reuse/refill source reduction activity and 4,000 pounds total source reduction activity, the producer's reuse/refill allocation is:



$$\text{Allocation of source reduction per pathway (reuse/refill)} = \left(\frac{1,000 \text{ pounds}}{4,000 \text{ pounds}} \right) = \frac{1}{4} \text{ of source reduction to be allocated to reuse/refill pathway}$$

Figure 7: Example calculation of the proportion of source reduction activity allocated to one pathway

To allocate this activity toward net reduction (by weight or components), the proportion of source reduction achieved through each source reduction pathway is then multiplied by the net source reduction in the reporting year. The net source reduction is derived by taking the difference of total plastic weight and number of components between the baseline year values and the target year amounts.

Utilizing the prior example, if in one year a producer reported $\frac{1}{4}$ allocation of reuse/refill source reduction activity and saw a total of 3,500 pounds net source reduction, the total amount of reuse/refill source reduction would be allocated as 875 pounds of reuse/refill source reduction. The producer would then do the same for components. **Figure 8** demonstrates the calculated allocation per pathway for this example.

$$\text{Allocation of source reduction per pathway} = \left(\frac{1,000 \text{ pounds}}{4,000 \text{ pounds}} \right) \times 3,500 \text{ pounds reported as net source reduction} = 875 \text{ pounds reported as net source reduction towards the reuse/refill pathway}$$

Figure 8: Example calculation for the allocation of net reduction to source reduction pathways

This process will be repeated for each source reduction pathway, for each target year, to identify the final contributions one producer makes toward each pathway in terms of net source reduction. If no net reduction in tons and number of components is achieved, no allocation takes place as the producer did not make any net source reductions.

Chapter 2: Source Reduction Pathway Calculations

Producer ISR Plans and CAA's annual reporting to CalRecycle must detail the calculation and allocation of source reduction to the five pathways. This section provides context as to how producers may sort their various source reduction actions into pathways, as well as how to calculate the source reduction activities producers will attribute to pathways within their ISR Plans.

Pathways to Source Reduction

PRC section 42057(a)(2) defines five pathways to source reduction:

1. Shifting from single use to refillable/reusable packaging or food serviceware



2. Eliminating a plastic component altogether (without replacing it with something else)
3. Shifting from plastic to non-plastic covered material
4. Concentrating, lightweighting and shifting to bulk/large format (shortened below to “right-sizing, etc.”)
5. Increasing the use of PCR¹³

PRC section 42057(d) requires the reporting of plastic weight and component reductions to be attributed to one of the five pathways.¹⁴ One “action” of change toward source reduction, shall be attributed to one pathway. For example, if a component is removed and not replaced with anything, it can be called elimination, and the collective number of components reduced from that change (across all unit sales of that packaging type) can be allocated to the elimination pathway.

Figure 9 shows an example of a bottle packaging unit that has four individual **source reduction actions** taken upon it, each representing a source reduction pathway. This example will be used throughout this document to demonstrate how producers can track their source reduction activities for ISR Plan reporting.



Figure 9: Example “actions” that correlate to source reduction pathways

Multiple source reduction actions taken on the same packaging format

Multiple “actions” may be taken on the same packaging design, and each may count toward an individual pathway. For example, if a bottle design change is made to tether the cap to a ring, two components become one and the one component is eliminated (not replaced by anything). If the entire bottle, cap and ring design is “right-sized” (i.e., made smaller or lightweighted), the resulting reduction in plastic weight and/or plastic components would be attributed to the “right-sizing, etc.” source reduction pathway.

CAA recognizes that it is possible that some packaging design changes could be attributed to more than one source reduction pathway (e.g., material switching might also result in lightweighting). In those cases, producers have discretion to attribute plastic weight and

¹³ As per PRC section 42057(c)(6).

¹⁴ As per PRC section 42057(c).

number of components reduction activity to the most appropriate pathway based on their judgement.

Preparing Source Reduction Calculations Across Pathways

There are three primary ways to account for actions that result in source reduction, each of which corresponds to a mathematical equation:

1. Via design changes to packaging
2. Via discontinuation of packaging formats
3. Via the shift to reusable/refillable or BYOC formats

Source Reduction Activity Equations A to C

CAA has formulated three equations (A, B and C) that correlate with the three accounting methods above, to aid producers in calculating source reduction activities. Each equation is tied to the type of action driving the source reduction, covering changes related to design, sales count, and a shift from single-use to reusable/refillable or BYOC formats. They are presented in order of least to most complexity and can be utilized across the source reduction pathways.

Equation A calculates the net differences between one year's packaging design and the baseline year's packaging design, in both weight and number of plastic components per unit. Equation A is intended to calculate source reduction driven by packaging design-related strategies only, including lightweighting, component elimination, shifting to alternative materials, shifting to bulk formats and more.

$$\text{Source Reduction Activity (Design Changes)} = \sum \left\{ \left(\text{Plastic weight \& components in unit of packaging in BASELINE year (in 2023)} - \text{Plastic weight \& components in unit of packaging reported for TARGET YEAR} \right) \times \text{Unit sales reported for TARGET YEAR} \right\}$$

Equation A: Source reduction activity resulting from packaging design change

Equation B calculates source reduction activity resulting from the partial or complete reduction of the supply of a product in California.

$$\text{Source Reduction Activity (Sales Changes)} = \sum \left\{ \text{Plastic weight \& components in unit of packaging in BASELINE YEAR (in 2023)} \times \left(\text{Unit sales in BASELINE YEAR (2023)} - \text{Unit sales reported for TARGET YEAR} \right) \right\}$$

Equation B: Source reduction activity due to a reduction in sales

Equation C calculates the amount of material that shifted from single-use plastic to reusable/refillable or BYOC formats.



$$\text{Source Reduction Activity (Reuse/Refill)} = \sum \left\{ \begin{array}{l} \text{Plastic weight \& components in unit of single use packaging in BASELINE YEAR (in 2023)} \\ \times \text{Unit sales reported for TARGET YEAR in REUSABLE PACKAGING} \end{array} \right\}$$

Equation C: Measuring source reduction activity associated with a shift to reusable and refillable formats

The following sections address each source reduction pathway separately, describing the requirements and providing some examples of the types of packaging design and sales changes that would count as source reduction activity. The appropriate use of Equations A, B, and C by pathway is demonstrated throughout.

As each equation may be used in various instances across the pathways, **Table 3** provides an overview of some example use cases identified across pathways.

Source Reduction Equation	Use Cases for Source Reduction
Equation A design-enabled changes	• Lightweighting • Component elimination • Concentrations (in cases that are not refill-at-home) • Bulk formats • Shifts to alternative materials
Equation B sales-enabled changes	• Elimination due to sales reductions • Complete elimination of a SKU (taking it off the California market)
Equation C shifts to reusable/refillable formats	• Shift to producer-managed reusable/refill packaging or food serviceware > allocated to the reuse/refill pathway • Shift to consumer-owned reusable/refillable good (i.e., BYOC, not packaging) > allocated to BYOC elimination pathway

Table 3: Source reduction activity equations mapped to various source reduction use cases

Pathway 1: Reuse/Refill

Reuse and refill are activities that cause an item to be used more than once for the same or for a similar purpose. There are many common definitions for reuse/refill, including those created by the Ellen MacArthur Foundation.¹⁵ However, the Act's definition of

¹⁵ Ellen MacArthur Foundation, 2019. Reuse. Rethinking Packaging. Available at: <https://www.ellenmacarthurfoundation.org/reuse-rethinking-packaging>



reusable/refillable systems is unique and limits which activities may be “counted” toward the reuse/refill and elimination (RRE) targets.

Reuse/refill definitions under the Act

Table 4 provides the Act’s definition of reuse/refill and reusable/refillable.¹⁶ These definitions establish a list of design and management criteria that must be met for an item to be considered reusable/refillable in compliance with the Act’s RRE targets. The Regulations expand on these definitions, explaining that in the case of two identical items where one meets the criteria to be reusable/refillable and the other does not, the item that does not fit the criteria will be considered a covered material (i.e., a single-use package or plastic food serviceware).¹⁷ CalRecycle has the authority to determine whether an item is covered material (e.g., whether a claim of an item being exempt as a reusable/refillable package or food serviceware qualifies as exempt).¹⁸

PRC section 42041(af)
(af) “Reusable” or “refillable” or “reuse” or “refill,” in regard to packaging or food serviceware, means either of the following:
(1) For packaging or food serviceware that is reused or refilled by a producer, it satisfies all of the following:
(A) Explicitly designed and marketed to be utilized multiple times for the same product, or for another purposeful packaging use in a supply chain.
(B) Designed for durability to function properly in its original condition for multiple uses.
(C) Supported by adequate infrastructure to ensure the packaging or food serviceware can be conveniently and safely reused or refilled for multiple cycles.
(D) Repeatedly recovered, inspected, and repaired, if necessary, and reissued into the supply chain for reuse or refill for multiple cycles.
(2) For packaging or food serviceware that is reused or refilled by a consumer, it satisfies all the following:
(A) Explicitly designed and marketed to be utilized multiple times for the same product.
(B) Designed for durability to function properly in its original condition for multiple uses.
(C) Supported by adequate and convenient availability of and retail infrastructure for bulk or large format packaging that may be refilled to ensure the packaging or food serviceware can be conveniently and safely reused or refilled by the consumer multiple times.

¹⁶ See 14 CCR section 18980.1(a)(25) for further clarification on the definition of reuse/refill and reusable/refillable.

¹⁷ See 14 CCR section 18980.2.1(a)(2).

¹⁸ See 14 CCR section 18980.2.1(c).



Table 4: The Act's definitions of reusable and refillable¹⁹

The statute and the Regulations establish that for packaging or food serviceware to be considered reusable or refillable, the producer must take deliberate and measurable action to cause those items to be reused or refilled. Improvised reuse activities undertaken by consumers are not sufficient to qualify an item as reusable/refillable (e.g., a consumer reusing packaging at home for purposes that were not planned by the producer).

Appendix C provides examples of reusable/refillable formats.

Reuse/refill criteria

There are different criteria that must be met for packaging and food serviceware to be considered reusable/refillable under the Act, depending on whether the items are managed by the producer or consumer between uses:

- **Packaging or food serviceware managed by the producer** includes items that are returned to the producer (or its service provider) for cleaning, inspection, refill, and resupply into the marketplace. This is commonly called “returnable” packaging/food serviceware or “pre-fill” packaging.
- **Packaging or food serviceware managed by the consumer** includes items kept by the consumer between uses and reused/refilled by the consumer using the same producer's product. This is commonly called “refill-at-home” or “refill-on-the-go” packaging or food serviceware.

In both cases, to qualify as reusable/refillable, the items must be:

- Designed and marketed as reusable/refillable
- Designed for durability (i.e., for multiple uses)
- Used multiple times
- Managed with adequate and convenient infrastructure^{20,21}

However, to be considered reusable/refillable by the consumer or producer, the following criteria must also be met:

- For consumer-managed packaging or food serviceware (i.e., refill-at-home or reuse/refill on the go), the items must be reused/refilled with the same product²²
- For producer-managed packaging or food serviceware (i.e., returnable packaging) the items must be reused/refilled with the same product or used for another

¹⁹ As per PRC section 42041(af).

²⁰ See PRC section 42041(af) and 14 CCR section 18980.1(a)(25).

²¹ See 14 CCR section 18980.2.1(a)(3)(A) for reusable/refillable by the producer and 14 CCR section 18980.2.1(a)(3)(B) for reusable/refillable by the consumer.

²² See PRC section 42041(af)(2)(A) for the definition of reusable and refillable packaging managed by the consumer.



purposeful packaging in the supply chain (i.e., packaging used for another product or another producer's product, such as in a pooled packaging system)²³

In producer-managed systems, it is up to the producer to retain evidence that supports their claims that the packaging/food serviceware they supply is reusable/refillable.

Common areas of confusion when qualifying reusable/refillable formats

The Act's definition of reusable/refillable systems is unique. For this reason, some systems that are commonly considered refill models – including some of those named by the Ellen MacArthur Foundation – do not qualify as reuse/refill models under PRC section 42041(af).²⁴

For example:

- The sale of products into consumer-owned or BYOC formats (e.g., at a refillery or from bulk bins) is not considered a refill model under the Act. Instead, it is considered a BYOC elimination model (Equation C, given it is a BYOC format), and should be reported in the "BYOC" pathway.
- The removal of a plastic component that is not replaced with another material is also considered an elimination model (Equation A, given it is a design-driven change).
- The switch from supplying individual servings (e.g., sachets) to a bulk dispensing model (e.g., beverages, condiments in a cafeteria setting) is not considered a refill model. Instead, it is considered a shift to "bulk or large format packaging" and thus should be reported within the "right-sizing, etc." pathway (Equation A).
- Concentration sometimes refers to concentrated formulas where smaller liquid quantities require less packaging for the same effective product. This would be "concentration" and be measured as a design change (Equation A). However, concentration may instead result in a shift to a refill model if the concentrated product is intended to be rehydrated in an originally producer-provided packaging. This would be reported in the reuse/refill pathway (Equation C).
 - If the concentrated product is compatible with and can be reasonably linked to a parent unit (i.e., it is to be rehydrated in a producer-provided parent package), then it is a refill-at-home model and reported in the reuse/refill pathway (Equation C).
 - If it is rehydrated into a consumer-owned durable item (e.g., a ceramic soap dispenser or washing machine), then it is an elimination of the need for packaging, (Equation C), and should be reported in the "elimination" pathway.
 - If it does not need packaging to be rehydrated (e.g., it is a solid product like a dishwasher tablet), then it is considered a shift to a "concentration" model

²³ See PRC Code section 42041(af)(1)(A) for the definition of packaging/food serviceware managed by the producer.

²⁴ Ellen MacArthur Foundation, 2019. Reuse. Rethinking Packaging. Available at: <https://www.ellenmacarthurfoundation.org/reuse-rethinking-packaging>



and thus should be reported within the “right-sizing, etc.” pathway (Equation A).

Elimination (as a result of component elimination), material switching, and concentration are different source reduction pathways and may not be counted towards the reuse/refill source reduction pathway. Where a producer is claiming an activity to be reuse/refill or elimination (which would therefore count towards the RRE targets discussed below), it will be important for the producer to document how the activity meets the definition of reuse/refill or elimination.

RRE source reduction targets

Table 5 provides an overview of the Act’s RRE targets. These targets must be met on both the overall tonnage and number of components. The reduction is measured against the supply reported for the 2023 baseline year. These targets must be met by Jan. 1 of each target year, which means they must be met based on the supply of the prior year (i.e., 2026 supply for the 2027 target). Only those reuse/refill activities that shift single-use plastic packaging to reusable/refillable formats may count toward the RRE targets. Reuse/refill activities that shift non-plastic single-use materials (e.g., wooden pallets) toward reusable/refillable alternatives may not be counted toward the RRE targets. Similarly, changing the design of non-covered material²⁵ (e.g., shifting beverage containers subject to the California Redemption Value to reuse/refill) may not be counted toward the RRE targets.

	Target Year (as of Jan. 1 of the year)		
	2027	2030	2032
Reuse, refill & elimination targets	2% minimum	4% minimum	10% minimum
Reuse/refill investments	Amount determined by CAA, with CalRecycle needs assessment taken into consideration		

Table 5: Statutory requirements for CAA

In their ISR Plans, producers are required to identify how they intend to achieve their portion of the RRE target.

Reusables as excluded, non-covered material

While producers must report and pay fees on all single-use covered material (including any single-use packaging that enables refill-at-home models), reusable/refillable packaging and food serviceware are excluded as covered material. As such, producers will not pay fees on the supply of these materials.

²⁵ Products not considered covered material under the Act



Understanding refill-at-point-of-use models: Parent versus child packaging

Under PRC section 42041(e), both residential (business-to-consumer) and commercial (business-to-business) single-use packaging are covered materials. This can make traditional reuse/refill explanations complicated. “Refill-at-home” models are commonly understood to be models where a consumer reuses producer-supplied packaging at home. Under the Act, the “consumer” is the final end-user, which could be a residential consumer at home or a commercial user (e.g., at retail).²⁶ For clarity, this document will refer to what the Ellen MacArthur Foundation terms the “refill-at-home” and “refill-on-the-go” models as the “refill-at-point-of-use” model.²⁷

In refill-at-point-of-use models, consumers retain packaging at point-of-use that is then refilled. Under the Act, it is only the packaging or food serviceware that is reused/refilled that is considered reusable/refillable and exempt as a covered material. This has implications for producers of some refill-at-point-of-use models in understanding how to measure and report on the single-use plastics they are displacing through reuse/refill models.



Figure 10: Child-to-parent relationship in refill-at-home models

Figure 10 provides an example parent and child refill-at-point-of-use model in which:

- The parent packaging is the producer-provided “host” packaging that is reused/refilled at point-of-use. This is the packaging that the consumer directly “handles” to consume the product, and it is the packaging that may be reused/refilled once the original packaging is empty. This means that it is the parent packaging that is displaced with every additional refill or component (e.g., nozzle) reused, and which is exempt as a covered material under the Act.
- The child packaging is auxiliary producer-provided packaging the consumer uses to transport the product from retail to its point-of-use, and then to transfer it into the parent packaging. To be considered “child” packaging, it cannot serve the same function as the parent packaging (i.e., the parent packaging must be necessary to dispense the product at-point-of-use after decanting). The child packaging is often, but not always, single-use packaging that remains a covered material under the Act.

²⁶ See 14 CCR section 18980.2.1(1)(B).

²⁷ Ellen MacArthur Foundation, 2019. Reuse. Rethinking Packaging. Available at: <https://www.ellenmacarthurfoundation.org/reuse-rethinking-packaging>



Examples of child packaging include large/bulk format packaging, packaging containing concentrated product that must be rehydrated at point-of-use, and packaging sold without a dispensing nozzle.

Calculating reuse/refill as a reduction activity

As discussed in the **Preparing Source Reduction Calculations Across Pathways** section, reuse/refill source reduction must be calculated as the plastic weight and number of components (of single-use packaging) “displaced” by a reuse or refill model. However, calculating the amount of plastic displaced can be challenging and varies depending on the reuse/refill model. For example:

- For refill-at-point-of-use, the number of times the parent package is reused must be estimated. This will be used to calculate source reduction activity via Equation C.
- For returnables (i.e., packaging or food serviceware returned to and managed by a producer) that are managed through a pooled system, monitoring of the sales and use cycles of the returnables will be used to calculate the amount of single-use plastic that was reduced via Equation C.

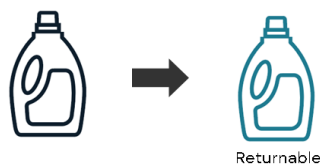
Calculating reuse/refill via return-on-the-go models

The following example highlights a producer calculating source reduction activity by switching from single-use packaging to a reuse system.

In the 2023 baseline year, the producer supplies 1,000 units of a product in single-use packaging. Each package is made from 0.11 pounds of plastic and includes three plastic components. The producer plans to switch from single-use to reusable packaging for 2026, projecting to supply 800 units of product sold in reusable packaging that year.

The producer’s ISR Plan must calculate how much single-use covered material the producer plans to reduce in 2026 through this change. **Figure 11** provides the full calculation that could be used to determine the amount of single-use plastic displaced through switching to a pooled packaging returnables system.





Source reduction (weight) = (0.11 pounds)(800 units) = **88 pounds of source reduction activity toward the reuse/refill pathway**

Source reduction (components) = (3 components)(800 units) = **2,400 components of source reduction activity toward the reuse/refill pathway**

Figure 11: Example of reuse calculation for source reduction attribution

Calculating parent equivalent sold in refill

Producers using “parent and child” packaging refill models should complete a volumetric analysis, in which we use the volume of product contained within the child packaging to estimate how many parent units were displaced. This will indicate the amount of parent packaging that may contribute to the source reduction activity calculation. In the case of concentrates, the hydrated volumes (i.e., what is expected to be the full product volume utilized by consumers) should be used for the volumetric analysis.

For the total units of child packaging reported, a correlated amount of parent packaging units can be attributed to the refill-at-point-of-use system. This analysis is necessary because consumers may be purchasing the parent as a single-use container, or they may be purchasing it to act as a parent in a refill system. The volumetric analysis allows CAA to understand the amount of parent units that should be attributed to the refill-at-point-of-use model and to the reuse/refill pathway as source reduction activity. CAA will not require this calculation in its reporting but may audit for such calculations should validation be required.

Table 6 provides an example of the volumetric analysis enabling the parent equivalent sold in child packaging to be calculated. In the example, although 80,000 parent units were supplied to the market, only 50,000 units of the parent can be linked to the refill-at-point-of-use system. To use Equation C for refillables, the number of parent equivalent units sold in child packaging should be entered as the “unit sales of refillables” value.

Designation	Total Supply Units in CA	Volume Per Unit, in Fluid Ounces	Total Supplied Volume of Product, in Fluid Ounces (Volume per unit x Number of units)	Number of Parent Units That Can Be Refilled Via Child Packaging Volume (total Child volume supplied ÷ volume / unit Parent package)
Parent	80,000	12	Not applicable	50,000 = 600,000 child fluid ounces / 12 fluid ounces per parent unit
Child	10,000	60	600,000 child fluid ounces = 10,000 units x 60 fluid ounces per child unit	Not applicable

Table 6: Example parent equivalent sold in child packaging for refill-at-home models



Pathway 2: Elimination

Elimination is a source reduction pathway that is defined as the removal of a plastic component without replacing it with any plastic or non-plastic material.²⁸ This is effectively the removal of plastic packaging or food serviceware entirely or removing non-essential plastic components from packaging or food serviceware. It is important to note that switching materials (e.g., replacing a plastic component with a non-plastic component) does not constitute elimination. Material switching is covered under a separate source reduction pathway.

There are three ways to accomplish elimination:

- Through a “design” change to packaging or food serviceware (e.g., removal of a plastic component). Equation A would be used to calculate the source reduction achieved in this case.
- Through a decline in supply (e.g., decline in sales) of a product within California. Equation B would be used to calculate the source reduction achieved in this case.
- Through the sale of products into consumer-owned or BYOC formats (e.g., at a refillery or from bulk bins). Under the Act, this is considered elimination rather than a reuse/refill model. Equation C would be used to calculate the source reduction achieved in this case, but this should be reported in ISR Plans within the “BYOC” pathway in reporting.

Some additional examples of packaging changes counting toward the elimination pathway are elaborated upon in Appendix C.

Calculating component elimination source reduction activity

The following example highlights a producer calculating source reduction activity by eliminating a component.

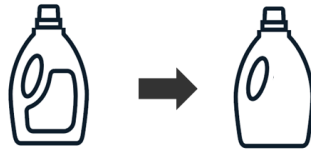
In the 2023 baseline year, the producer supplies a product in single-use plastic packaging. Each unit includes 0.11 pounds of plastic with three plastic components, and the producer sells 1,000 units into the market that year.

In 2026, the producer converts to a new packaging design that omits the label, representing one fewer plastic component. This results in a new plastic bottle that uses 0.10 pounds of plastic. The producer estimates 2026 sales of the new bottle design will total 1,000 units.

This packaging design change would utilize Equation A to measure source reduction activity as denoted in **Figure 12**.

²⁸ See PRC Code section 42041(j).





Source reduction _(weight) = (0.11– 0.10 pounds)(1000 units) = **10 pounds of source activity toward the elimination pathway**

Source reduction _(components) = (3 – 2 components)(1000 units) = **1000 components of source reduction activity towards the elimination pathway**

Figure 12: Example elimination calculation for source reduction attribution

Calculating sales decline–related elimination source reduction activity

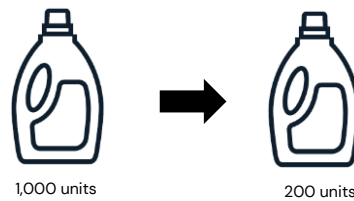
The following example highlights a producer calculating source reduction activity by reducing sales to the California market.

In the 2023 baseline year, the producer supplies a product in single-use plastic packaging. Each unit includes 0.11 pounds of plastic with three plastic components, and the producer sells 1,000 units to the California market in the baseline year. In 2026, the producer reduces sales of this product to the market, projecting sales to decline to 200 units.

This sales-related change would utilize Equation B to measure source reduction activity as denoted in **Figure 13**.

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Source reduction (weight) = (0.11 pounds)(1,000-200 units) = **88 pounds of source reduction activity toward the elimination pathway**

Source reduction (components) = (3 components)(1,000-200 units) = **2,400 components of source reduction activity toward the elimination pathway**

Figure 13: Example of elimination calculation for source reduction attribution

Pathway 3: Switching to Alternative, Non-Plastic Materials

There are many non-plastic covered materials supplied to the California market. A switch from a material captured in a plastic CMC to a material captured in a non-plastic CMC²⁹ would be counted as a switch to an alternative material for source reduction.

However, the switch must be to a non-plastic material that is deemed recyclable or compostable on the CMC list. Switches to materials considered non-recyclable or non-compostable would not count toward this pathway.

This pathway covers switches from plastic to materials such as glass, metal, paper, and compostable materials, provided the material meets recyclability rules and de minimis conditions.

Calculating switches to alternative material source reduction activity

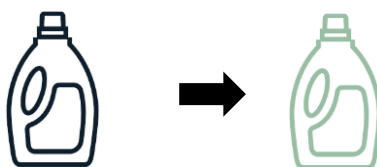
The following example highlights a producer calculating source reduction activity achieved by switching from a plastic material to a non-plastic, recyclable material.

In the 2023 baseline year, the producer supplies a product in single-use plastic packaging. Each unit contains 0.11 pounds of plastic with three components, and the producer sells 1,000 units to the California market in the baseline year. In 2026, the producer converts to a new design, which uses 0.17 pounds of glass without plastic components and 0.01 pounds of plastic for a lid. The package uses one plastic component. The producer estimates 2026 sales will total 800 units.

This material switching design change would utilize Equation A to measure source reduction activity as denoted in **Figure 14**.

²⁹ Note: although non-plastic, these weights are still covered material and should be accounted for across your supply volumes totaled and reported to CAA.





Source reduction (weight) = $(0.11 - 0.01 \text{ pounds})(800 \text{ units}) = 80 \text{ pounds of source activity toward the "switches to alternative materials" pathway}$

Source reduction (components) = $(3 - 1 \text{ components})(800 \text{ units}) = 1,600 \text{ components of source reduction activity toward the "switches to alternative materials" pathway}$

Figure 14: Example of switching to alternative materials calculation for source reduction attribution

An additional example of source reduction via the switching materials pathway is included in **Appendix C**.

Pathway 4: Right-sizing, Concentrating, Lightweighting, and Shifting to Bulk Packaging

The source reduction pathway covering right-sizing, concentration, and shifting to bulk or large format is a catch-all source reduction pathway for many types of packaging changes that would result in a reduction in plastic. Definitions of these various reduction terms are available in **Table 7**. This pathway is referred to throughout this document as the "right-sizing, etc." pathway.

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Term	Definition
Concentration	Concentrate or concentration refers to reducing the amount of packaging needed for a product by reformulating the product to facilitate smaller quantities of the product being used for the same purpose as the previous, larger quantity. ³⁰
Right-sizing	Right-size or right-sizing means reducing the amount of material used to package an item by reducing unnecessary space or eliminating unnecessary components of the packaging. ³¹
Bulk	Bulk or large format packaging means packaging for a large amount of a product in a large packaging unit, offsetting the need for multiple smaller packaging units for the same amount of product. ³²
Lightweighting	Lightweighting means reducing packaging weight (e.g., by using thinner material). It does not include changes that make a recyclable or compostable covered material non-recyclable, non-compostable, or less likely to be recycled or composted. ³³

Table 7: Source reduction by right-sizing, concentration, bulk and lightweighting definitions

This reduction would be accomplished by concentrating products, reducing packaging size or weights, or shifting to bulk formats in which more product is delivered to consumers with less packaging. In practice, this pathway reduces unnecessary packaging through reduction in head space, package thickness or overall size of packaging.

Examples of this pathway include lightweighting bottles by adding ribs to support thinner walls, reducing the height of the bottle's neck, and reducing cap height. All such changes result in using less material overall per unit, driving source reduction activity.

Differences between bulk or concentrated formats and reuse/refill formats

It may be unclear whether some formats count as a bulk format or are part of a refillable system. If a producer does not supply and market a parent format that meets the criteria for reusable/refillable, it is considered a bulk format (see **Reuse/Refill Pathway** section for more details on parent and child definitions).

Calculating 'right-sizing, etc.' source reduction activity

The following example highlights a producer calculating source reduction activity achieved by lightweighting packaging to reduce the amount of plastic included.

In the 2023 baseline year, the producer supplies a product in single-use plastic packaging. Each unit contains 0.11 pounds of plastic with three plastic components, and the producer sells 1,000 units into the market. In 2026, the producer converts to a new design, which uses 0.10 pounds of plastic (the lid) and contains three plastic components. The producer estimates 2026 sales will total 800 units.

³⁰ As per PRC section 42041(d).

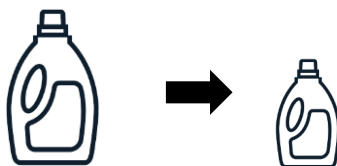
³¹ As per PRC section 42041(ag).

³² As per PRC section 42041(b).

³³ As per PRC section 42041(m).



This right-sizing design change would utilize Equation A to measure source reduction activity as denoted in **Figure 15**.



Source reduction _(weight) = (0.11 – 0.10 pounds)(800 units) = **8 pounds of source reduction activity towards the “right-sizing, etc.” pathway**

Source reduction _(components) = (3 – 3 components)(800 units) = **0 components of source reduction activity towards the “right-sizing, etc.” pathway**

Figure 15: Example of right-sizing calculation for source reduction attribution

Pathway 5: PCR Content as Alternative Compliance

The use of PCR content in packaging is not a formal source reduction pathway, meaning it is not directly counted as net source reduction to the baseline year. However, PRC section 42057(2)(B) acknowledges the use of PCR content may involve offsetting the use of virgin plastic and replacing it with third-party-certified PCR material, which CAA may attribute as source reduction in a limited way.

PCR counted towards source reduction is limited via the **Alternative Compliance Formula (ACF)** to no more than 8% of the plastic covered material sold, offered for sale, or distributed in California by participant producers.³⁴ The ACF must be approved by CalRecycle in CAA’s program plan and offers source reduction credit on a sliding scale based on the ratio of virgin plastic to PCR.

The credit for source reduction is based on the increase in PCR compared to the baseline year. CAA is required to provide “sufficient” data on PCR usage that is included in the calculation.³⁵ To meet this requirement, CAA will require third-party certification from producers. Producers will self-attest to these certifications in ISR Plans and source reduction annual reporting and should keep documentation of certification in case audited by CAA. In 2026, CAA will share its ACF approach with producers, which will only take effect if and when CalRecycle approves it in the program plan.

³⁴ As per PRC section 42057(a)(2)(B)(i).

³⁵ See 14 CCR section 18980.3.4(b)(2).



PCR alternative compliance formula

PCR content can be counted towards source reduction as alternative compliance. The ACF will accurately and reliably assess the reduction, by weight and number of components, in the use of virgin plastic through incorporation of PCR. It will compare the amount of PCR used in a target year to the amount used in the 2023 baseline year. The program plan shall include more detailed descriptions of the formula, including all assumptions, estimates, and supporting information.³⁶

Producers will report data that enables CAA to perform the measurement as per the ACF. The program plan will elaborate upon how it will identify the producers for which there is sufficient data and apply the formula only with respect to those producers.

CAA will report PCR to CalRecycle in its annual report,³⁷ sharing the amount of PCR used compared to virgin plastic in covered material. The PCR Alternative Compliance pathway allows for up to 8% of source reduction to be counted within each target year 2027, 2030, and 2032. Participant producers may indicate an intent to use more than 8% PCR, and, if CAA's aggregate PCR is below 8%, they may receive credit for it. If CAA's aggregate PCR is above 8%, then the value of PCR will be subject to the ACF.

Individual producers may have a higher percentage credit, but their contribution to the overall market credit is proportional. The full implications of PCR on individual producer targets and bonuses will be determined in CAA's program plan. CAA will provide guidance on PCR targets and bonuses to producers ahead of submission of first ISR Plans.

PCR certification

Producers can replace virgin resin with PCR if they provide the proper certification, which CalRecycle has designated as Association of Plastic Recyclers (APR) PCR Certification in the Regulations. Section 18980.3.4 of the Regulations allows CAA to propose a different certification to acknowledge PCR content in plastics for source reduction, subject to CalRecycle's approval. However, the Regulations allow only one certification to be used during the program plan.

Section 18980.3.4. of the Regulations details:

"...postconsumer recycled content used in covered material can be validated by the Association of Plastic Recyclers through its APR Postconsumer Resin Certification Program for purposes of validating the comparison described in paragraph (1). Alternatively, the plan may propose a different third party to perform the validations."³⁸

³⁶ As per 14 CCR section 18980.3.4(b).

³⁷ As per PRC section 42057(c)(6).

³⁸ As per 14 CCR section 18980.3.4(b)(4).



To comply with this requirement, CAA advises producers' ISR Plans to include the content that would be certifiable to the APR PCR Certification program to be reported for the program years 2026, 2029, and 2031.

PCR within source reduction reporting

Within the ISR Plan, producers will be asked to provide two types of PCR information.

First, they will be asked to provide the amount of PCR they supplied to the California market in the baseline year 2023 that was certified to the APR PCR Certification program at the time.³⁹ This amount will not be attributed to source reduction as alternative compliance, as it was part of the baseline.

Secondly, producers will project out the amount of APR-certified PCR they plan to supply to the California market. The ISR Plan will ask for the PCR amount, in pounds, for all plastics within each supply data year corresponding to target years 2027, 2030 and 2032.

Chapter 3: Individual Source Reduction (ISR) Plan Guidance

This chapter explains how to compile and submit an ISR Plan. It is intended for producer representatives who are responsible for gathering data, preparing reporting outputs and supporting the business in developing its source reduction strategy.

Producer Requirements for ISR Plans

Producers registered with CAA California are required to submit ISR Plans to CAA.⁴⁰ In these plans, producers will forecast their expected net source reduction and source reduction activities over the course of the program years. CAA must submit these plans to CalRecycle with CAA's program plan. The aggregate data from these plans will also help CAA calculate anticipated source reduction as a PRO. Annual source reduction reporting will mirror the structure of ISR Plan reporting but will require data on actual source reduction achieved, rather than projected source reduction.

Preparing an ISR Plan

CAA has created a workbook, available on CAA's Producer Portal, to help producers prepare the data required for their ISR Plans. The workbook is provided solely for informational and convenience purposes – completing it does not constitute submitting a report. All official reporting must be completed and submitted exclusively through CAA's Producer Portal. CAA does not receive, collect, or review any data entered into the workbook. Producers must manually input values into the CAA Producer Portal ISR Plan report.

³⁹ Please see **Preparing an ISR Plan** for more information on how to report PCR that was certified to the APR PCR Certification program in 2023.

⁴⁰ As per PRC Section 42057(d)



In their ISR Plans, producers will need to explain how they intend to pursue source reduction through one or more source reduction pathways, and project how much source reduction activity they expect to achieve via the chosen pathways. This provides a blueprint for annually reporting their progress to CAA.⁴¹

In both the preparation workbook and the ISR Plan report, **all values should be entered as positive numbers, or as 0**. Producers are reporting the amount of plastic and number of components they are removing from their packaging. Producers cannot enter negative numbers into the input fields, and CAA will not report negative numbers to CalRecycle. If a producer does not achieve source reduction, CAA will report the figure as 0.

There are 12 sections to the ISR Plan report, which are presented in four distinct parts below. All inputs are required fields in line with PRC section 42057(d).

Part 1. Prior source reduction and 2023 baseline

The first part of the ISR Plan addresses prior source reduction, PCR content in covered material at the baseline year, and the 2023 baseline weight and number of components reported to CAA.

To prepare this section, producers will take the following steps in the ISR Plan report (**Figure 16**)

- (1) Provide the amount of net source reduction achieved between supply in 2013 and the supply in 2022.
 - i. Producers will do so by inputting their plastic supply weights and number of components in supply data years 2013 and 2022. The portal will calculate a difference in these numbers to identify the net source reduction achieved prior to 2023.⁴²
 - ii. If producers do not have records dating back to 2013 and are unable to provide this data, then producers should input zero in both the 2013 and 2022 fields. This will indicate the producer is unable to quantify net source reduction during these years.
- (2) Provide the weight of PCR content, that was certified to the APR PCR Certification program, the producer included in the covered material it supplied to the California market in the 2023 baseline year. This amount will not be eligible to help producers meet their source reduction targets per the alternative compliance formula (see **Pathway 5: PCR Content as Alternative Compliance** section). **Note:** In 2023, the APR PCR Certification program was endorsement-based. APR endorsed third-party certification bodies to conduct validations to their own separate standards. Since then, APR has modified the program, developing its own PCR certification standard, which certification bodies audit against. As of February 2026, elements of the draft

⁴¹ As per PRC section 42057(d)(2).

⁴² As per PRC Section 42057(f)(1), in the source reduction plan, the PRO shall give producers credit for source reduction achieved from the 2013 calendar year to the 2022 calendar year, inclusive.



Regulations remain unclear. Until final Regulations are enacted, CAA advises producers to input this value as the sum of PCR certified to the four certifications APR endorsed in 2023: SCS Recycled Content Standard, UL 2809 Recycled Content Validation, GreenCircle Certified Recycled Content Certification, and AM Testing.

(3) Producers will provide their 2023 baseline data, as previously reported to CAA.⁴³

1 How much source reduction did you achieve from 2013 to 2022? Please report the total plastic weights and numbers of components, inclusive of post-consumer recycled (PCR) content, on the California market in 2013 and 2022.

Notes: Net source reduction is calculated as net reduction before 2023; Section 42057 (d) of the PRC details reporting requirements; Reduction may be reflected in a credit determined by the CAA program plan, but it does not impact the 2023 baseline. If producers do not have records dating back to 2013 and are unable to provide this data, then producers should indicate '0' in both the 2013 and 2022 fields. This will indicate the producer is unable to quantify net source reduction during these years.

Total plastic weight (pounds)		Total number of plastic components	
Calendar year 2013	150,000 pounds	Calendar year 2013	200,000 components
Calendar year 2022	120,000 pounds	Calendar year 2022	220,000 components

Inputs must be reported as a positive value, or 0.

2 How much PCR plastic, that was certified under the Association of Plastic Recyclers (APR) PCR Certification program, did you use in the 2023 calendar year in California?

Notes: In 2023, the APR PCR Certification program was endorsement-based. APR endorsed third-party certification bodies to conduct validations to their own separate standards. Since then, APR has overhauled the program, developing its own PCR certification standard, which certification bodies audit against. As of February 2026, CAA is working with CalRecycle to clarify some discrepancies with how the 2023 endorsement system fits into the draft Regulation text defining qualifying third-party certifications. CAA advises producers to input this value as the sum of PCR certified to the certifications APR endorsed in 2023.

PCR certified to the APR PCR Certification program in 2023	
Calendar year 2023	500 pounds

Inputs must be reported as a positive value, or 0.

3 Your 2023 California baseline is:

Total plastic weight (pounds)	Total components (number)
108500	265000

Notes: This data is pulled from the California Baseline Producer Report (2023 Data Year). It does not reflect values entered in (1) and (2), because source reduction achieved in 2013-2023 cannot be utilized towards the baseline.

Figure 16: Example of ISR Plan inputs for prior source reduction, baseline PCR and aggregate plastic weight and components

Part 2. Projecting plastic weight, number of components and PCR

The second part of the ISR Plan directs producers to provide projected plastic weight and number of components, as well as plastic PCR content in covered material, to be put on the California market in the years 2026–2031. To complete this section, producers will take the following steps (Figure 17):

- (4) Provide total plastic weights and components the producer plans to supply in California for target years 2027, 2030, and 2032, corresponding to supply data years 2026, 2029, and 2031, respectively.
- (5) Provide the amount of PCR content in covered material the producer plans to supply in California each target year, corresponding to the relevant supply data year. PCR content must align with the certifications outlined in the ISR Plan workbook.

⁴³ CalRecycle, September 2025. "Source Reduction Reporting Guidance." Available at: <https://www2.calrecycle.ca.gov/Docs/Web/131541>



4 Please report the total plastic weights and numbers of components projected to be supplied by your company in California in 2026, 2029 and 2031.

Aggregate plastic weight and number of components per year

Reporting year	2027	2030	2032
Supply data year	2026	2029	2031
Projected total plastic weight	110,000	120,000	82,240
Projected total number of plastic components	280,000	270,000	250,000

Inputs must be reported as a positive value, or 0.

Free response field:

4a Please describe the methodology used to calculate projected weight and components of plastic (e.g., assumed growth rates, California-specific supply)

5 As part of alternative compliance, PCR certified to the APR PCR Certification program can count towards source reduction. Please input the total projected PCR plastic weight that can be counted toward

Reporting year	2027	2030	2032
Supply data year	2026	2029	2031
Total APR-certified PCR	8,000	5,100	7,000

Inputs must be reported as a positive value, or 0.

Figure 17: Example of ISR Plan inputs for aggregate plastic weight and components

Part 3. Projecting source reduction activity across pathways

The third part of the ISR Plan asks producers to project their various source reduction activities across source reduction pathways. To prepare this section, producers will take the following steps (**Figure 18**):

- (6) Producers will allocate the amount of source reduction achieved to the source reduction pathways (reuse/refill, elimination, BYOC, switches to alternative materials, and right-sizing/concentrates/bulk formats).
- (7–11) Producers will provide free response descriptions of source reduction efforts made in each source reduction pathway.

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6 Please report the plastic weight and number of components you plan to reduce in California in data supply years 2026, 2029 and 2031, broken out by your source reduction activity per pathway. The pathways are reuse/refill, Bring-Your-Own-Container (BYOC), elimination, switches to alternative materials, and "right-sizing, etc."

Aggregate Source Reduction - by weight and number of components per pathway

Notes: The percentage per pathway will be utilized later to proportionally allocate your net source reduction. Additionally, even if producers are not able to achieve net source reduction, CAA wants to fully communicate in its annual reports what participant producers have been able to accomplish across source reduction pathways. As such, even if you report no net source reduction overall, please still report your aggregate source reduction per pathway.

Reporting year	2027	2030	2032	
Supply data year	2026	2029	2031	
Reuse/refill	2,000	5,000	4,000	pounds
BYOC	120	140	150	pounds
Elimination	1,500	6,000	17,316	pounds
Switches to alternative materials	2,003	5,681	3,633	pounds
Right-sizing, etc.	1,615	4,555	3,125	pounds

Reporting year	2027	2030	2032	
Supply data year	2026	2029	2031	
Reuse/refill	6,000	15,000	18,100	components
BYOC	1,000	1,400	1,500	components
Elimination	4,010	10,000	12,110	components
Switches to alternative materials	2,060	5,175	6,000	components
Right-sizing, etc.	4,930	12,325	14,790	components

Inputs must be reported as a positive value, or 0.

Free response fields:

7 Please describe your planned or projected "reuse/refill" efforts in data supply years 2026, 2029 and 2031.

8 Please describe your planned or projected "BYOC" efforts in data supply years 2026, 2029 and 2031.

9 Please describe your planned or projected "elimination" efforts in data supply years 2026, 2029 and 2031.

10 Please describe your planned or projected "switches to alternative materials" efforts in data supply years 2026, 2029 and 2031.

11 Please describe your planned or projected "right-sizing, etc." efforts in data supply years 2026, 2029 and 2031.

Figure 18: Source reduction activity projections for ISR Plan

For information on how to calculate source reduction activity per pathway, see the **Preparing Source Reduction Calculations Across Pathways** section below.

Part 3. Summary: Allocation of source reduction activities

The third part of the ISR Plan is a summary of the total source reduction activities entered by the producer, the total net source reduction expected based on producer reporting in target years, and the reallocation of source reduction based on this net source reduction (as explained in the **Allocation of Source Reduction** section above). These fields are automatically calculated for the producer based on Part 1 and 2 input data. No additional input data is required.

This section will show the following fields (**Figure 19**):

(12a) **Aggregate Source Reduction Activity:** This field will total the amount of weight and number of components reported per pathway to create a total source reduction activity by weight and components for that producer.

(12b) **Estimated Net Source Reduction:** This field will display the difference between the 2023 baseline and the weights/components projected to each target year, providing the net source reduction achieved (i.e., what CAA can count toward source reduction).



(12c) Estimated Allocations of Source Reduction: This field will apply an allocation percentage to the net source reduction total, based on the source reduction activity per pathway divided by the total source reduction activity. This will redistribute the net source reduction expected per pathway.

12 Based on the source reduction you reported, below are the aggregate sums of reduction by weight and number of components projected in data supply years 2026, 2029 and 2031.

Aggregate Source Reduction – by weight and number of components

12a Aggregate source reduction activity: Based on the reductions planned, the projected reductions would be as follows.

Notes: This is the sum of all the source reduction activities you reported above. It represents how much total source reduction you plan to achieve each year.

Reporting year	2027	2030	2032
Supply data year	2026	2029	2031
Projected total reduction by sum of source reduction activity weights	7,238	21,376	28,224
Projected total reduction by sum of source reduction activity components	18,000	43,900	52,500

12b Estimated net source reduction: Based on the plastic weight and number of components projected in each target year, these are the amounts of net source reduction expecting to be achieved.

Notes: This represents your total source reduction as identified above, applied to your estimated supply in each target year. This is your estimated net source reduction. If your total plastic weight or number of components increases between the baseline and target year, and your total source reduction does not offset this increase, this means no net source reduction was achieved, and the output will show as 0.

Reporting year	2027	2030	2032
Supply data year	2026	2029	2031
Projected net reduction by difference in weight	-	-	26,260
Projected net reduction by difference in components	-	-	15,000

12c Estimated source reduction pathway allocations: CAA calculates a percentage allocation representing how much each source reduction pathway contributed to your net source reduction. First, the amount of each pathway activity (question 6) is divided by your total source reduction activity (question 12a). CAA then applies the resulting percentage to your net source reduction (question 12b), producing the following estimated amounts that each activity contributed to your net source reduction.

Notes: More details on the allocation methodology is available in Guidance. If you did not achieve net source reduction as detailed above, the resulting amount per pathway will also show as 0.

Reporting year	2027	2030	2032
Supply data year	2026	2029	2031
Reuse/refill	-	-	3,722
BYOC	-	-	140
Elimination	-	-	16,111
Switches to alternative materials	-	-	3,380
Right-sizing, etc.	-	-	2,908

Reporting year	2027	2030	2032
Supply data year	2026	2029	2031
Reuse/refill	-	-	5,171
BYOC	-	-	429
Elimination	-	-	3,460
Switches to alternative materials	-	-	1,714
Right-sizing, etc.	-	-	4,226

Figure 19: Source reduction activity allocations for ISR Plan

Submitting an ISR Plan

CAA California participant producers will submit their ISR Plans through CAA's Producer Portal. During the reporting process, CAA will request the input values identified in the ISR Plan workbook. CAA also reserves the right to request information confirming calculations are valid and that the various source reduction pathway criteria are met.

The ISR Plan submission will mirror the process outlined in the ISR Plan workbook.

References

- Plastic Pollution Prevention and Packaging Producer Responsibility Act (codified under PRC § 42040-42084)
- Plastic Pollution Prevention and Packaging Producer Responsibility Act Regulations (Regulations)



Appendix A: Acronyms

CCR: California Code of Regulations

EPR: Extended Producer Responsibility

ISR Plan: Individual Source Reduction Plan

ISR Agreement: Individual Source Reduction Agreement

PRC: Public Resources Code

PRO: Producer responsibility organization

PCR: Post-consumer recycled

R/R: Reuse/refill

R/R & E: Reuse, refill and elimination

SB 54: Plastic Pollution Prevention and Packaging Producer Responsibility Act (the Act)

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Appendix B: Material Categories in California⁴⁴

CalRecycle Material ID	Material Class	Reporting Category	Recyclable	Compostable	Plastic or Nonplastic CMC
25_G1N	Glass	25_G1N – Glass – Bottles and Jars w/o plastic component	Y	N	Nonplastic
25_G1P	Glass	25_G1P – Glass – Bottles and Jars w/ plastic component	Y	N	Plastic
25_G2N	Glass	25_G2N – Glass – Other Forms w/o plastic component	N	N	Nonplastic
25_G2P	Glass	25_G2P – Glass – Other Forms w/ plastic component	N	N	Plastic
25_G3N	Glass	25_G3N – Glass – Small – Two or more sides measuring 2” or less w/o plastic component	Y	N	Nonplastic
25_G3P	Glass	25_G3P – Glass – Small – Two or more sides measuring 2” or less w/ plastic component	Y	N	Plastic
25_C1N	Ceramic	25_C1N – Ceramic – All Forms w/o plastic component	N	N	Nonplastic
25_C1P	Ceramic	25_C1P – Ceramic – All Forms w/ plastic component	N	N	Plastic
25_C2N	Ceramic	25_C2N – Ceramic – Small – Two or more sides measuring 2” or less w/o plastic component	N	N	Nonplastic
25_C2P	Ceramic	25_C2P – Ceramic – Small – Two or more sides measuring 2” or less w/ plastic component	N	N	Plastic
25_M1N	Metal	25_M1N – Aluminum – Non-aerosol Container w/o plastic component	Y	N	Nonplastic
25_M1P	Metal	25_M1P – Aluminum – Non-aerosol Container w/ plastic component	Y	N	Plastic

⁴⁴ CalRecycle, September 2, 2025. “Update to Covered Material Categories (CMCs).” Available at: <https://www2.calrecycle.ca.gov/Docs/Web/131535>



25_M2N	Metal	25_M2N – Aluminum – Foil sheets w/o plastic component	Y	N	Nonplastic
25_M2P	Metal	25_M2P – Aluminum – Foil sheets w/ plastic component	Y	N	Plastic
25_M3N	Metal	25_M3N – Aluminum – Foil Molded Containers w/o plastic component	Y	N	Nonplastic
25_M3P	Metal	25_M3P – Aluminum – Foil Molded Containers w/ plastic component	Y	N	Plastic
25_M4P	Metal	25_M4P – Aluminum – Aerosol Can w/ plastic component	Y	N	Plastic
25_M5N	Metal	25_M5N – Aluminum – Other Forms w/o plastic component	Y	N	Nonplastic
25_M5P	Metal	25_M5P – Aluminum – Other Forms w/ plastic component	Y	N	Plastic
25_M6N	Metal	25_M6N – Tin/Steel/Bimetal – Non-aerosol Container w/o plastic component	Y	N	Nonplastic
25_M6P	Metal	25_M6P – Tin/Steel/Bimetal – Non-aerosol Container w/ plastic component	Y	N	Plastic
25_M7P	Metal	25_M7P – Tin/Steel/Bimetal – Aerosol Can w/ plastic component	Y	N	Plastic
25_M8N	Metal	25_M8N – Tin/Steel/Bimetal – Other Forms w/o plastic component	Y	N	Nonplastic
25_M8P	Metal	25_M8P – Tin/Steel/Bimetal – Other Forms w/ plastic component	Y	N	Plastic
25_M9N	Metal	25_M9N – Other Nonferrous – All Forms w/o plastic component	Y	N	Nonplastic
25_M9P	Metal	25_M9P – Other Nonferrous – All Forms w/ plastic component	Y	N	Plastic
25_M10N	Metal	25_M10N – Other Ferrous – All Forms w/o plastic component	Y	N	Nonplastic



25_M10P	Metal	25_M10P - Other Ferrous - All Forms w/ plastic component	Y	N	Plastic
25_M12N	Metal	25_M12N - Metal - Small - Two or more sides measuring 2" or less w/o plastic component	Y	N	Nonplastic
25_M12P	Metal	25_M12P - Metal - Small - Two or more sides measuring 2" or less w/ plastic component	N	N	Plastic
25_PF1N	Paper/Fiber	25_PF1N - Paper/Fiber - Kraft Paper - All Forms w/o plastic component	Y	Y	Nonplastic
25_PF1P	Paper/Fiber	25_PF1P - Paper/Fiber - Kraft Paper - All Forms w/ plastic component	Y	N	Plastic
25_PF14N	Paper/Fiber	25_PF14N - Paper/Fiber - Molded Fiber - All Forms w/o plastic component	Y	Y	Nonplastic
25_PF14P	Paper/Fiber	25_PF14P - Paper/Fiber - Molded Fiber - All Forms w/ plastic component	N	N	Plastic
25_PF15P	Paper/Fiber	25_PF15P - Paper/Fiber - Aseptic Cartons	N	N	Plastic
25_PF5P	Paper/Fiber	25_PF5P - Paper/Fiber - Gable-top Cartons	N	N	Plastic
25_PF7P	Paper/Fiber	25_PF7P - Paper/Fiber - Multi-Material Laminate - Other Forms w/ plastic component	N	N	Plastic
25_PF8N	Paper/Fiber	25_PF8N - Paper/Fiber - Waxed Cardboard w/o plastic component	N	Y	Nonplastic
25_PF8P	Paper/Fiber	25_PF8P - Paper/Fiber - Waxed Cardboard w/ plastic component	N	N	Plastic
25_PF9N	Paper/Fiber	25_PF9N - Paper/Fiber - Cardboard w/o plastic component	Y	Y	Nonplastic
25_PF9P	Paper/Fiber	25_PF9P - Paper/Fiber - Cardboard w/ plastic component	Y	N	Plastic
25_PF10N	Paper/Fiber	25_PF10N - Paper/Fiber - Paperboard - All Forms w/o plastic component	Y	Y	Nonplastic



25_PFI0P	Paper/Fiber	25_PFI0P – Paper/Fiber – Paperboard – All Forms w/ plastic component	Y	N	Plastic
25_PFI7P	Paper/Fiber	25_PFI7P – Paper/Fiber – Multi-Material Laminate – Paperboard with a Plastic Coating/Lining	N	N	Plastic
25_PFI1N	Paper/Fiber	25_PFI1N – Paper/Fiber – White Paper – All Forms w/o plastic component	Y	Y	Nonplastic
25_PFI1P	Paper/Fiber	25_PFI1P – Paper/Fiber – White Paper – All Forms w/ plastic component	Y	N	Plastic
25_PFI2N	Paper/Fiber	25_PFI2N – Paper/Fiber – Other/Mixed Paper – All Forms w/o plastic component	Y	Y	Nonplastic
25_PFI2P	Paper/Fiber	25_PFI2P – Paper/Fiber – Other/Mixed Paper – All Forms w/ plastic component	Y	N	Plastic
25_PFI6N	Paper/Fiber	25_PFI6N – Paper/Fiber – Small – Two or more sides measuring 2” or less w/o plastic component	N	Y	Nonplastic
25_PFI6P	Paper/Fiber	25_PFI6P – Paper/Fiber – Small – Two or more sides measuring 2” or less w/ plastic component	N	N	Plastic
25_P1P	Plastic – Rigid	25_P1P – PET (1) – Bottles, Jugs, and Jars (Clear/Natural)	Y	N	Plastic
25_P2P	Plastic – Rigid	25_P2P – PET (1) – Bottles, Jugs, and Jars (Pigmented/Color)	Y	N	Plastic
25_P38P	Plastic – Rigid	25_P38P – PET (1) – Other Rigid Containers, Cups, Lids, Plates, Trays, Tubs	Y	N	Plastic
25_P39P	Plastic – Rigid	25_P39P – PET (1) – Other Rigid Items	Y	N	Plastic
25_P6P	Plastic – Rigid	25_P6P – HDPE (2) – Bottles, Jugs and Jars (Clear/Natural)	Y	N	Plastic
25_P7P	Plastic – Rigid	25_P7P – HDPE (2) – Bottles, Jugs and Jars (Pigmented/Color)	Y	N	Plastic
25_P8P	Plastic – Rigid	25_P8P – HDPE (2) – Pails & Buckets	Y	N	Plastic



25_P40P	Plastic – Rigid	25_P40P – HDPE (2) – Other Rigid Items	Y	N	Plastic
25_P11P	Plastic – Rigid	25_P11P – PVC (3) – Rigid Items	N	N	Plastic
25_P13P	Plastic – Rigid	25_P13P – LDPE (4) – Bottles, Jugs and Jars	N	N	Plastic
25_P14P	Plastic – Rigid	25_P14P – LDPE (4) – Other Rigid Items	N	N	Plastic
25_P17P	Plastic – Rigid	25_P17P – PP (5) – Bottles, Jugs and Jars	Y	N	Plastic
25_P41P	Plastic – Rigid	25_P41P – PP (5) – Other Rigid Containers, Cups, Lids, Plates, Trays, Tubs	Y	N	Plastic
25_P19P	Plastic – Rigid	25_P19P – PP (5) – Utensils	N	N	Plastic
25_P20P	Plastic – Rigid	25_P20P – PP (5) – Other Rigid Items	Y	N	Plastic
25_P23P	Plastic – Rigid	25_P23P – PS (6) – Expanded/Foamed Hinged Containers, Plates, Cups, Tubs, Trays, and Other Foamed Containers	N	N	Plastic
25_P42P	Plastic – Rigid	25_P42P – PS (6) – Other Expanded/Foamed Forms	N	N	Plastic
25_P27P	Plastic – Rigid	25_P27P – PS (6) – Utensils	N	N	Plastic
25_P43P	Plastic – Rigid	25_P43P – PS (6) – Solid Hinged Containers, Plates, Cups, Tubs, Trays, and Other Solid Containers	N	N	Plastic
25_P44P	Plastic – Rigid	25_P44P – Plastics and Polymers Designed for Compostability – Rigid Items	N	N	Plastic
25_P35P	Plastic – Rigid	25_P35P – Other/Mixed Plastics – Rigid Items	N	N	Plastic



25_P5P	Plastic – Flexible	25_P5P – PET (1) – Flexible and Film Items	N	N	Plastic
25_P10P	Plastic – Flexible	25_P10P – HDPE (2) – Flexible and Film Items	N	N	Plastic
25_P12P	Plastic – Flexible	25_P12P – PVC (3) – Flexible and Film Items	N	N	Plastic
25_P15P	Plastic – Flexible	25_P15P – LDPE (4) – Clear Non-Bag Film	N	N	Plastic
25_P16P	Plastic – Flexible	25_P16P – LDPE (4) – Other Flexible and Film Items	N	N	Plastic
25_P21P	Plastic – Flexible	25_P21P – PP (5) – Clear Non-Bag Film	N	N	Plastic
25_P22P	Plastic – Flexible	25_P22P – PP (5) – Other Flexible and Film Items	N	N	Plastic
25_P29P	Plastic – Flexible	25_P29P – PS (6) – Flexible and Film Items	N	N	Plastic
25_P45P	Plastic – Flexible	25_P45P – Plastics and Polymers Designed for Compostability – Flexible and Film Items	N	N	Plastic
25_P46P	Plastic – Flexible	25_P46P – Multi-Material Laminate – Pouches and Envelopes	N	N	Plastic
25_P33P	Plastic – Flexible	25_P33P – Multi-Material Laminate – Other Forms	N	N	Plastic
25_P34P	Plastic – Flexible	25_P34P – Other/Mixed Plastics – Textiles	N	N	Plastic
25_P36P	Plastic – Flexible	25_P36P – Other/Mixed Plastics – Flexible and Film Items	N	N	Plastic
25_P47P	Plastic – Other	25_P47P – Plastic – Small – Two or more sides measuring 2” or less	N	N	Plastic
25_WO1N	Wood and Other Organic Materials	25_WO1N – Wood/Organics – All Untreated Forms w/o plastic component	N	Y	Nonplastic



25_WO1P	Wood and Other Organic Materials	25_WO1P - Wood/Organics - All Untreated Forms w/ plastic component	N	N	Plastic
25_WO2N	Wood and Other Organic Materials	25_WO2N - Wood/Organics - All Treated or Painted Forms w/o plastic component	N	N	Nonplastic
25_WO2P	Wood and Other Organic Materials	25_WO2P - Wood/Organics - All Treated or Painted Forms w/ plastic component	N	N	Plastic
25_WO3N	Wood and Other Organic Materials	25_WO3N - Wood/Organics - Textiles w/o plastic component	N	N	Nonplastic
25_WO3P	Wood and Other Organic Materials	25_WO3P - Wood/Organics - Textiles w/ plastic component	N	N	Plastic
25_WO4N	Wood and Other Organic Materials	25_WO4N - Wood/Organics - Other Forms w/o plastic component	N	Y	Nonplastic
25_WO4P	Wood and Other Organic Materials	25_WO4P - Wood/Organics - Other Forms w/ plastic component	N	N	Plastic
25_WO6N	Wood and Other Organic Materials	25_WO6N - Wood/Organics - Small - Two or more sides measuring 2" or less w/o plastic component	N	Y	Nonplastic
25_WO6P	Wood and Other Organic Materials	25_WO6P - Wood/Organics - Small - Two or more sides measuring 2" or less w/ plastic component	N	N	Plastic

Table 8: Material category list in California

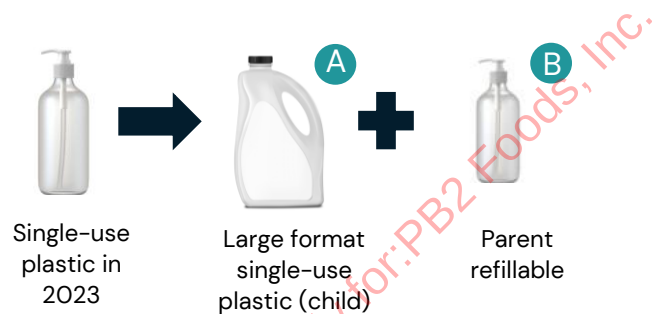


Appendix C: Example Source Reduction Packaging Changes

This appendix provides some examples of packaging changes that shift a format contributing to the 2023 baseline to a format potentially leading to source reduction activity. It provides some logic as to what kinds of changes may be attributed to various pathways but is not an exhaustive list of source reduction activities.

Reuse/Refill Formats

Traditional Refill-at-Home Model



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Reduce packaging by delivering the same household cleaning product via a parent and child refill-at-home model, in which the parent is refilled by a larger format single-use child format.	Assume the large format container Package A is refilling another format that is sold by the same producer as a refillable (Package B).	This is not permissible if you go from a more recyclable parent to a child or parent that is less recyclable. If filling a refillable container supplied by the producer, evidence exists that it was: ✓ Explicitly designed and marketed to be used for the same product. ✓ Designed for durability	Equation C

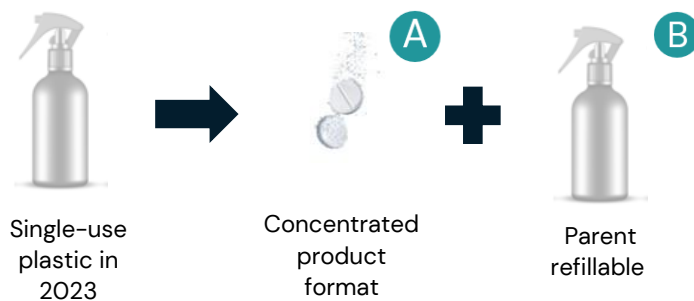
		✓ Supported by adequate retail infrastructure for bulk or large format packaging (i.e., refill sold in the same store)	
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Reuse/Refill Hybrid with Component Reuse



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Reduce packaging by delivering the same household cleaning product via component reuse, in which the child is the bottle, and the nozzle is reused.	As a component is kept and reused by the consumer, only the nozzle can be attributed to reuse/refill as a reusable component.	Evidence exists that the nozzle was: ✓ Explicitly designed and marketed to be used for the same product. ✓ Designed for durability ✓ Supported by adequate retail infrastructure for bulk or large format packaging (i.e., refill sold in the same store)	Equation C

Refill-at-Home with a Concentrated Child Format



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Reduce packaging by delivering the same household cleaning product in a concentrated format (e.g., pods, capsules) as refills for the parent package.	If a single-use format becomes a parent for a "child" concentrate, it can count as reuse/refill.	If filling a refillable container supplied by the producer, evidence exists that it was: ✓ Explicitly designed and marketed to be used for the <u>same</u> product. ✓ Designed for durability ✓ Supported by adequate retail infrastructure for bulk or large format packaging (i.e., refill sold in the same store)	Equation C

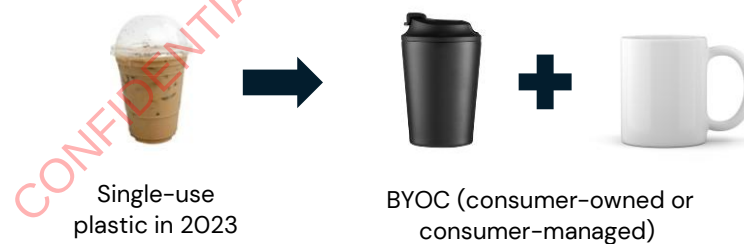
Reusables with Producer-Owned or Producer-Managed Returnables



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Packaging reduction resulting from a shift from single-use plastic to producer-managed or owned reuse-on-the-go returnable packaging solutions.	Switches into food serveware that demonstrably enters a reuse system in which packaging is given to consumer from the producer, processed in a system to be returned, washed and redistributed.	Evidence exists that the returnable is: ✓ Explicitly designed for the same product ✓ Explicitly and marketed to be used for the same product ✓ Designed for durability ✓ Supported by adequate infrastructure ✓ Reissued into the supply chain for reuse or refill for multiple cycles	Equation C

Elimination Formats

Refill-on-the-Go or Bring-Your-Own-Container (BYOC) Elimination (Utilizing Consumer-Owned Containers to Receive Product)



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Producers set up a system in which consumers may bring in their own container to be refilled on premise; producers keep track of how many single-use items are avoided.	Switches into consumer-owned durables (not food serviceware) and counted as BYOC elimination.	If a product is sold without producer supplying any packaging, it is elimination.	Equation C

Overwrap Elimination



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Remove the outer plastic wrap around a broccoli head.	The plastic overwrap film used to package the broccoli head.	Product sold in California as part of 2023 baseline.	Equation A



Component Elimination



Single-use plastic in 2023



Redesigned handle into bottle to eliminate detachable plastic handle

Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Remove detachable plastic handle and redesign handle into the bottle.	The detachable handle weight and component have eliminated a component.	New container sold in the market carrying the same product as the previous container design.	Equation A

Shifting Material Formats

Switch from Plastic to Non-Plastic Material



Single-use plastic in 2023



Paperboard box

Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity



Shifting from non-recyclable flexible film packaging to a paperboard box (lined or unlined).	The paperboard box (with no plastic components) can be counted as reduction of weight and components. If the paperboard box includes lining above de minimis, then the lining counts as a component.	New container sold in California containing the same product.	Equation A
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Right-Sizing, Concentration and Bulk Formats

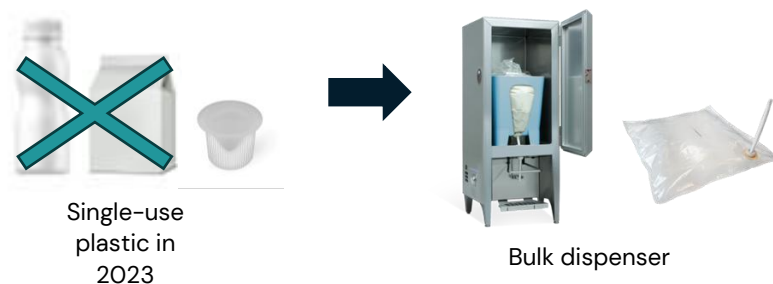
Bulk Packaging (i.e., In Instances with No Parent Packaging Available)



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Reduce packaging by delivering the same household product in bulk as refills, but <u>not</u> for a parent package (which would make it reuse/refill).	Converting from a smaller format to a larger one, in which more product is delivered with less packaging. The consumer is utilizing the format at home for direct use (and not with a parent format). This qualifies for bulk format within the right-sizing, etc. pathway.	If single-use plastic weight or number of components is reduced in California.	Equation A



Bulk Dispenser Model



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Moving from providing single-use packaging individual formats to a bulk dispenser format, delivering more product with less packaging, driving reduction.	Carton and plastics are recyclable in California and cannot move to a non-recyclable flexible film bladder for source reduction activities. However, as pods and flexibles are both not recyclable in California, they may contribute to source reduction going from a non-recycle small format to non-recycle flexible film.	The Act prevents producers from shifting from a recyclable to a non-recyclable/less recyclable format to meet source reduction targets.	Equation A

Lightweighting





Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Redesign plastic bottle mold to add ribs while reducing wall thickness.	Rigid plastic container that has undergone a structural change (e.g., thinner walls) but still holds same amount of product volume.	New, lighter plastic containers sold in California, containing the same product.	Equation A

Concentration of Product Resulting in Less Packaging

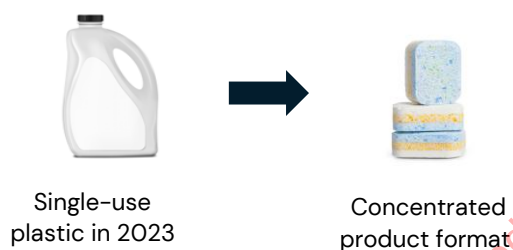


Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity



Reduce packaging delivering the same number of uses with a concentrated product.	The weight of the bottle before and after the move to concentrated product is the amount that can be considered as source reduction.	New packaging sold in California, for the same product.	Equation A
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Concentration to Pod or Capsule Format



Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Reduce packaging by delivering the same household cleaning product in a concentrated format (e.g., pods, capsules).	The weight of the package before and after the move to concentration is the amount that can be considered as source reduction as concentration, attributed to the right-sizing etc. pathway.	New packaging sold in California, for the same product	Equation A

From Single-Use to Bulk Format





Single-use plastic in 2023

Same product in bulk for consumption at home

Example	Why does it count as source reduction activity?	Under what conditions?	How to calculate source reduction activity
Reduce packaging by delivering the same household product in bulk for consumption at home – not to refill a “parent” package.	Considered a bulk packaging solution if going from a smaller format to a larger one, in which consumer is utilizing at home (not to refill a “parent”) Qualifies for Bulk Source Reduction	If single-use plastic amount is reduced in California.	Equation A

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