THE ROAD FROM CONCEPT TO SHELF:
UNDERSTANDING PACKAGING CHANGE TIMELINES

THE STEPS INVOLVED IN CHANGING PACKAGING DESIGNS

Packaging plays a critical role in maintaining product integrity and safety. Even minor changes require rigorous testing, careful evaluation, and regulatory review to protect both the product and the consumer. The full process can take years, often up to a decade, and involves multiple organizations and regulatory agencies across the value chain.

STEP 1:
Market Need Identified

(Supply Chain Impacted: CPG Company Estimated Timeline: 1-5 years)

Companies assess consumer demand, safety requirements, and feasibility before, or sometimes alongside, development.

STEP 2:
New Package Development: Lab Testing

(Supply Chain Impacted: Raw Materials Supplier Estimated Timeline: 1-2+ years)

New materials must be tested for:

- Safety
- Performance
- Consistency
- Regulatory compliance

This requires multiple tests, and when regulatory approvals are needed, can add several years.

STEP 3:
Packaging Development & Regulatory Review: Lab Testing

(Supply Chain Impacted: Packaging Supplier/ Converter Estimated Timeline: ~1 year)

Packaging is documented for regulatory use and tested for:

- Durability
- Shelf life
- Distribution

There are established standards for testing packaging integrity. Results must be completed before regulatory filing, and additional testing may be required.

Some products require regulatory authorization. Approvals for consumer use may involve federal and state agencies, depending on the product and its intended use.

STEP 4:
Equipment & Performance Testing: Lab Testing

(Supply Chain Impacted: Packaging Supplier and/or Contract Packager Estimated Timeline: 6 months-2 years)

- Packaging must run safely and efficiently on manufacturing equipment.
- New materials often require equipment modifications or capital investment.

STEP 5:
Product & Shelf-Life Testing: Large Scale Commercial Testing

(Supply Chain Impacted: Back to the CPG Estimated Timeline: 1-2 years)

Finished packages undergo:

- Shelf-life testing
- Quality validation
- Safety verification
- Consumer testing

If packaging changes use existing, already-approved materials (such as PCR or compostable formats), companies may begin the design process at this stage; however, full testing, equipment validation, regulatory documentation, and supply chain adjustments still typically require 18-24 months before commercialization.

STEP 6:
Commercialization

(Supply Chain Impacted: CPG to Retailer Estimated Timeline: 9-18 months)

Once validated, production scales and products enter distribution.

THE ROAD AHEAD

Policy decisions should account for development timelines, regulatory review, capital investment cycles, and supply chain coordination.

USDA EPA DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA CONSUMER PRODUCT SAFETY COMMISSION UNITED STATES FDA

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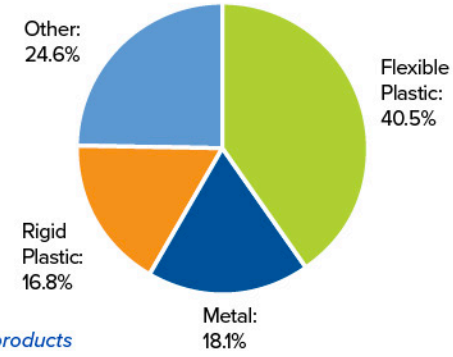
FLEXIBLE PACKAGING BAN COULD DISRUPT FOOD ACCESS FOR CALIFORNIA WIC PARTICIPANTS

RESTRICTIONS COULD LIMIT AFFORDABILITY, AVAILABILITY, AND SHELF LIFE FOR CALIFORNIA WOMEN, INFANTS, AND CHILDREN FOOD SUBSIDY PARTICIPANTS THROUGHOUT THEIR MONTHLY BENEFIT PERIOD.

Packaging Material Distribution Across WIC-Approved Foods

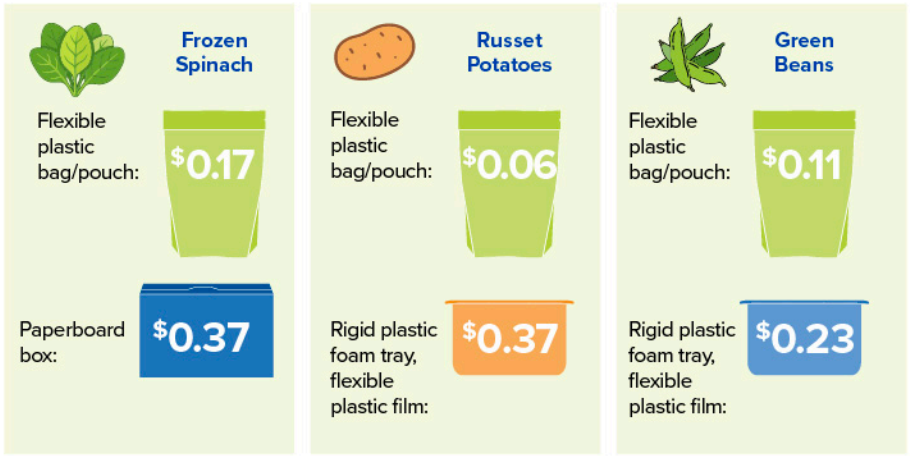
Flexible plastic represents the largest share of packaging materials used across WIC-approved foods. Only 4.5% of products offer an alternative packaging format, with product choice further limited in rural and Native communities.



Based on an audit of 304 WIC-approved products

When Alternatives Exist, They Often Cost More

Where alternative packaging formats are available, the study identifies differences in price per unit across packaging types.



Price per unit varies across packaging formats, with alternative materials often associated with higher costs.

WHAT THE DATA SHOWS

Flexible packaging dominates WIC-approved foods, with limited alternatives

Alternatives formats, when available, often cost more and affect shelf life

Packaging format directly impacts usability, food waste, and benefit utilization

WIC requirements can limit reuse and refillable packaging models

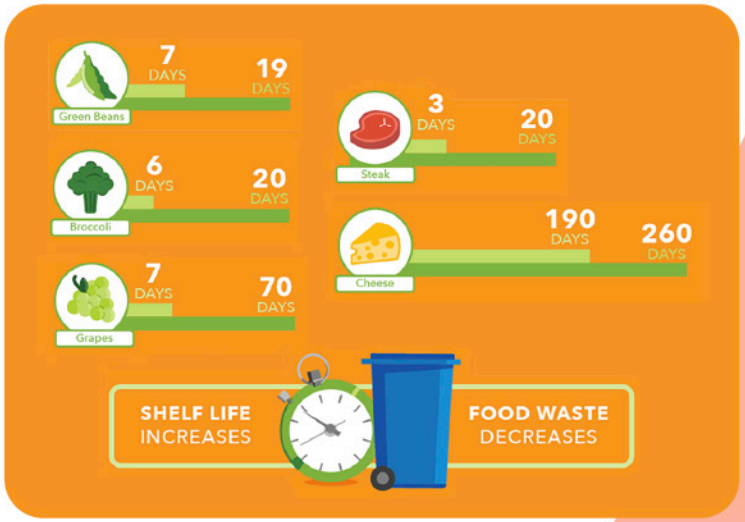
Policy goals and WIC program realities are not always aligned

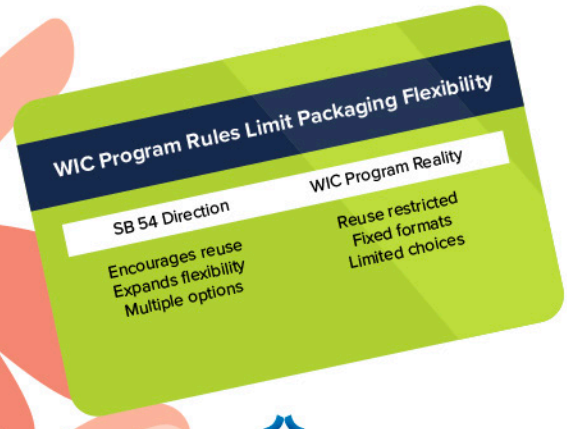
Thank you for shopping!

Access Dr. Andrew Hurley's research on WIC food access across urban, rural, and Native communities

Flexible Packaging Extends How Long Food Lasts and Reduces Waste

Flexible packaging is associated with longer product usability across multiple food categories due to its barrier properties, influencing how long food remains usable in the home.





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Source: Packaging School Study on WIC Packaging Formats and Impacts

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Californians Desire and Need Recycling Labeling for Packaging

A survey from ERM Shelton, fielded August 1–14, 2025, among 2,062 U.S. respondents, provided the following insights into consumer behavior on recycling and labeling for flexible films and packaging in California. The overall margin of error is ±2.16% and ±2.58%.

Labels Matter More in California

California consumers are more likely than the national average to use packaging labels to identify plastic films. If California law and regulation restrict or discourage clear on-package recycling instructions for specialty collection pathways, it may reduce proper recycling behavior in the state where labels are especially effective.

California's Biggest Problem is Confusion About Curbside

A large share of Californians incorrectly believe that flexible film and packaging belong only in curbside recycling. That means the policy priority should be to clarify "store drop-off vs. curbside," not to remove helpful directions.

Less Information Could Mean More Contamination

If consumers lose access to clear, standardized instructions, more film and flexible packaging may end up:

- In the curbside bin, contaminating recycling streams, or
- In the trash, reducing recovery and sending more to the landfill altogether.

Don't Penalize Progress Before Infrastructure Catches Up

California consumers are already highly engaged in recycling. Many are ready to participate in circular solutions. Restricting educational and instructional labeling before access and collection systems expand could discourage participation and reduce the effectiveness of future pilots and infrastructure investments.

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California Consumers Are Engaged—and Skeptical

Californians are more likely to say the recycling system needs improvement. If the state removes clear recycling instructions without improving access and education, it risks increasing public frustration and distrust.

Flexible Film and Packaging Is the Best Example of the Problem

Flexible film and packaging recycling illustrates why California needs a more tailored approach:

- Consumers are willing to recycle
- Consumers look to labels for guidance
- Consumers want more drop-off access and education
- But many still wrongly believe film and flexible packaging only belong in curbside recycling

Removing or limiting clear store drop-off instructions will not solve that confusion. It may make it worse.

Recommended Path Forward

We urge policymakers to ensure that laws and regulations are implemented in ways that reduce confusion without eliminating truthful consumer guidance.

Policy Recommendations

Preserve truthful, non-misleading instructional labels. Allow clear statements such as:

- "Store Drop-off Only—Not Curbside"
- "Recycle through approved film collection program"

Differentiate curbside claims from specialty collection instructions. A label directing consumers to a verified non-curbside pathway should not be treated the same as a broad recyclability claim.

Pair labeling policy with access improvements. If California wants better film and flexible packaging recovery, it should expand:

- Store drop-off access
- Public education
- Standardized consumer messaging.

Support pilot programs and future infrastructure. California should not foreclose innovation in flexible film and packaging collection and recycling before statewide systems can scale.

Reevaluate as data and infrastructure evolve. As collection networks and end markets improve, the state should maintain a pathway for qualifying materials and approved consumer instructions.

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For more information or to discuss these recommendations further, please contact the Flexible Packaging Association's Kyla Fisher, Director, Regulatory Affairs & Sustainability at kfisher@FlexPack.Org or Matt Singh, Director of Government Affairs at msingh@FlexPack.Org.

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Flexible Film Packaging Recycling in California: Retail Depots

The Opportunity: A Proven, Scalable Recycling Pathway: California's Plastic Pollution Prevention and Packaging Producer Responsibility Act (SB 54) sets ambitious recycling targets for plastic film and flexible packaging. One of the most established and effective methods for collecting these materials from consumers is through drop-off/depot collection systems—and for good reason: in most cases, municipal curbside programs do not accept plastic film or flexible packaging. A recent study from the Association of Plastic Recyclers notes that 11 times more post-consumer films are collected and recycled through store drop-off programs versus curbside[1].

Drop-off/depot programs represent a currently operational, scalable, and verifiable compliance pathway—and California is already leading the nation in consumer access.

However, a critical regulatory gap threatens to undermine this proven infrastructure: SB 343 currently stipulates that recycling volumes not reported through large volume processing facilities will not count toward recycling rates. While SB 54 acknowledges a role for alternative collection systems, there is little to no regulatory guidance on how such systems will intersect with SB 343 recyclability claims, and the recycling rate is higher.

This must be addressed to unlock the full potential of California's existing film collection network.

California Leads the Nation in Film Collection Access*

According to the Sustainable Packaging Coalition's 2026 Access Rate Study:

Geography	% of Californians with Access
Within **20 miles** of a drop-off site	99.13%
Within **10 miles** of a drop-off site	97.19%
Within **3 miles** of a drop-off site	87.98%

California ranks #1 in the U.S. for consumer access to polyethylene (PE) film and flexible packaging store drop-off collection. Contributing factors include California's population density, robust retail network density, and established infrastructure for retailer participation.

*Data sourced from the Sustainable Packaging Coalition's Access Rate Study (March 2026) and PlasticFilmRecycling.Org (last accessed April 29, 2026)

[1] Eunomia, for Association of Plastic Recyclers (2024) *How to Scale the Recycling of Flexible Film Packaging*

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California Store Drop-off Network: By the Numbers*

Metric	Data
Total statewide store drop-off locations	2,677
Participating retail chains	16
Counties with at least one location	51 out of 58
Sacramento County locations	57

*Based on the Reflects locations across all California counties, including multi-location counties[2].

Why This Matters for SB 54 Compliance

Drop-off/Depot programs offer policymakers a ready-made infrastructure to support SB 54 recycling targets:

- Operational today—no new infrastructure investment required
- Statewide reach—nearly universal access for California residents
- Verifiable—forthcoming validation-based collection ensures data integrity[3]
- Scalable—existing retail partnerships can expand participation
- Cleaner—drop-off film tends to be cleaner and in greater demand in recycling markets than films collected via curbside and sorted at a large volume transfer processor (LVTP)

What Policymakers Can Do

1. Recognize and promote drop-off/depot as a legitimate and credible compliance pathway under SB 54 and SB 343.
2. Support statewide consumer education to drive consistent participation and utilization.
3. Recognize the value of How2Recycle's Store Drop off Label to ensure consumers understand how to recycle these materials.
4. Leverage existing infrastructure

The Bottom Line

With nearly 88% of Californians living within 3 miles of a film collection site and over 2,600 locations operating statewide, California has the foundation to meet SB 54's film recycling targets, but we need regulatory and legislative support for alternative collection systems and messaging on these systems to consumers. Policymakers have an opportunity to formalize this pathway and accelerate progress without delay.

[2] The Directory aggregates locations from retail submissions and targeted web-scraping sources. This aggregation provides a signal of retail drop-off but is not a robust or exhaustive measurement of all opportunities.

[3] In early 2027, the PlasticFilmRecycling.Org directory will launch a third-party validation process for film locations and volume collected. Those who participate in verification will be identified in the directory.

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Ways California Government Can Support Recyclers and Drive End Market Growth: Ideas from the Recycling Community

California's packaging extended producer responsibility (EPR) law (SB 54) has created an opportunity to lead the nation in building a robust, sustainable recycling economy—not just by collecting materials, but by ensuring those materials have strong, viable end markets. The following recommendations outline concrete actions the State can take to support recyclers, reduce operational burdens, and stimulate demand for products made from recycled content.

1. ENERGY COST RELIEF FOR RECYCLING OPERATIONS

The Challenge: Energy costs represent one of the **single greatest operational expenses for recycling facilities**. High electricity rates create a significant barrier to profitability and expansion, threatening the viability of California's recycling infrastructure.

The Recommendation: Establish a **special utility rate classification** similar to agricultural or industrial rate schedules that allows certified recyclers to access electricity at reduced rates. Lowering the energy cost burden will:

- Improve the economic viability of recycling operations
- Encourage investment and expansion of recycling capacity in California
- Help keep California's recycling infrastructure competitive

Recycling is an energy-intensive industry, and California's high electricity rates create a structural disadvantage that threatens the viability of the very facilities the state depends on to meet its recycling and circular economy goals. Just as California recognizes agriculture and heavy industry as sectors deserving of special utility rate consideration, recycling operations, which deliver direct public environmental benefit, deserve the same treatment. Establishing a special utility rate classification for certified recyclers is not a subsidy; it is a recognition that affordable energy is infrastructure for a functioning circular economy.

2. HAZARDOUS MATERIALS: RAILROAD TIES & COMPOSITE ALTERNATIVES

The Challenge: CalRecycle has identified that pressure-treated and creosote-soaked railroad ties are considered hazardous materials, creating disposal, handling, and liability concerns for agencies and contractors.

The Recommendation: Recognize and promote composite railroad ties and wood alternative products—many of which are manufactured from recycled plastics—as a preferred, non-hazardous solution. These products:

- Eliminate the toxicity concerns associated with creosote and pressure treatment
- Are durable, long-lasting, and made from recycled consumer materials
- Reduce lifecycle costs and environmental liability for the State

California has already identified creosote and pressure-treated railroad ties as hazardous—the logical next step is to actively promote the alternatives that already exist. Composite railroad ties made from recycled plastics are durable, non-toxic, and ready to deploy. The State should not wait for a liability event to encourage the switch.

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3. STATE PROCUREMENT AS A DRIVER OF END MARKET DEMAND

The Challenge: End market demand is the engine that makes recycling economically sustainable. Without buyers for recycled-content products, collection and processing efforts fall short of a true circular economy.

The Recommendation: California should leverage the enormous purchasing power of State agencies to incentivize and prioritize the procurement of durable products made from recycled consumer materials, including:

Product	Application
Composite Railroad Ties	Transit, rail infrastructure, roadside barriers
Polymer-Modified Asphalt	Roads, parking lots, and highway construction
Stormwater Management Systems	Infrastructure, water management, farming
Construction Blocks & Barriers	Building, public works

Agencies with the Greatest Procurement Opportunity:

- California Transit Agencies (Cal Transit)—composite railroad ties
- California Department of Food & Agriculture—agricultural plastic alternatives
- Department of General Services—statewide procurement policy leadership
- Department of Water Resources—stormwater and water infrastructure systems
- Department of Housing & Community Development—recycled-content building materials
- Division of the State Architect—construction specifications and standards

A formal Buy Recycled policy update or executive directive targeting these agencies could create immediate, scalable demand for recycled-content products manufactured in California.

4. EPR CREDIT PROGRAM FOR AGRICULTURAL FILM RECYCLING

The Challenge: California's mandatory fumigation film requirements—unique to California and not required in eastern states—create a state-mandated increase in plastic use for the agricultural sector. Farmers face the added burden and cost of collecting and recycling these films with limited financial support.

The Recommendation: Through the EPR framework, consider counting the volume of agricultural films recycled in the state towards the film material recycling rate by establishing a credit trading system that let's producers claim credits for agricultural film recycling through a fee trading system to help offset farmers' costs associated with the collection and recycling of agricultural films. Because fumigation film use is a state-imposed requirement, California has a responsibility to help manage the downstream recycling costs it generates.

California mandates the use of these films—it could also help manage the cost of responsibly recycling them.

5. BROADENING THE DEFINITION OF THE CIRCULAR ECONOMY

The Challenge: Current policy frameworks tend to define the circular economy narrowly focusing primarily on packaging-to-packaging recycling. This limits recognition of the full environmental and economic value that recycled materials can deliver.

The Recommendation: California should formally recognize that a true circular economy includes alternative end-use products that:

- Replace virgin fossil-fuel-derived materials
- Deliver equivalent or superior performance and durability
- Generate meaningful environmental benefits beyond source reduction alone

Products such as composite railroad ties, polymer asphalt, composite rebar, and recycled-content construction materials represent legitimate and valuable circular economy outcomes that deserve equal recognition, incentive, and procurement support under state policy.

California's circular economy policy should be defined by environmental outcomes, not by the shape of the end product. Narrowly defining circularity leaves significant environmental and economic value on the table—and leaves an entire sector of innovative recycled content manufacturers without the policy recognition and market support they deserve.

6. STREAMLINING THE CALTRANS AUTHORIZED MATERIALS LIST FOR RECYCLED CONTENT PRODUCTS

The Challenge: Caltrans maintains an Authorized Materials List (AML) of products deemed acceptable for use in state transportation projects. For manufacturers and vendors working with recycled content materials, the process of applying for and being considered for inclusion on this list has proven complex, inconsistent, and difficult to navigate—creating a significant barrier to market entry for innovative recycled content products.

The Recommendation: Establish simplified, transparent application rules and processes for the Caltrans Authorized Materials List that include specific consideration for products made with recycled content. Streamlining this pathway would:

- Lower barriers to entry for small manufacturers
- Accelerate the availability of sustainable material options for state transportation projects
- Drive meaningful end market demand for companies producing durable goods from recycled plastics and other recovered materials

If California wants recycled content products used in state infrastructure, the pathway to approval should reflect that priority. There are significant opportunities for recycled plastics in transportation systems.

7. REDEFINING THE ROLE OF RECYCLED CONTENT IN LEED CERTIFICATION

The Challenge: Although voluntary in design, LEED (Leadership in Energy and Environmental Design) certification has become a de facto requirement for many government-funded construction projects—influencing state procurement decisions, local building codes, and project specifications across California.

Under the current LEED framework, recycled content points are awarded based on the weight and cost of recycled materials as a proportion of a project's total material costs—typically excluding mechanical and electrical components. This methodology can inadvertently disincentivize the use of recycled content products when those products represent a minor share of total project costs—even when they deliver significant environmental benefit. Examples include:

- Plastic composite dowels used as rebar alternatives
- Polymer-based concrete substitutes
- Recycled content drainage and stormwater systems

A high-performing recycled content product that displaces a virgin material or significantly reduces greenhouse gas emissions may earn little to no LEED credit simply because its dollar value is small relative to the overall project budget.

The Recommendation: California should support efforts to engage and lobby the U.S. Green Building Council (USGBC) to reform how LEED recognizes recycled content, specifically to:

- Award credit for the displacement of virgin fossil-fuel-derived materials, regardless of cost proportion
- Recognize lifecycle GHG reductions as a qualifying metric for recycled content credits
- Better reflect the true environmental value of durable recycled goods in construction applications

LEED should reward environmental outcomes—not just material cost percentages. Reforming this framework could be a powerful lever for driving greater adoption of recycled durable goods in California LEED projects.

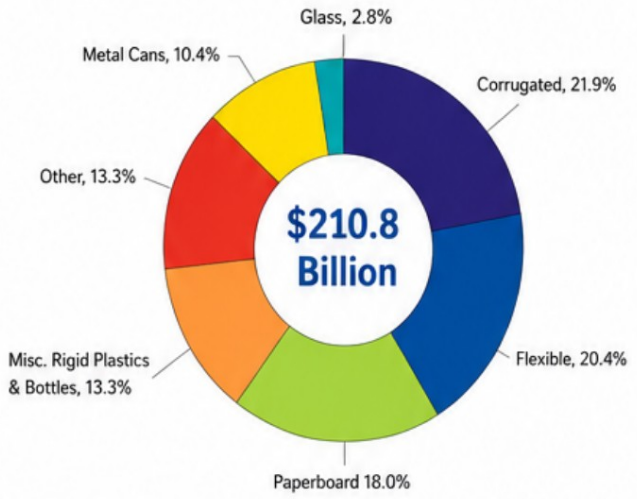
CONCLUSION

California has the policy tools, procurement power, and the environmental mandate to move beyond recycling collection and into true end market development. By addressing energy costs, supporting agricultural film recycling, eliminating hazardous material use through recycled-content alternatives, and directing state procurement toward recycled products, California can build a circular economy that works for recyclers, industries, and the environment alike.

For more information or to discuss these recommendations further, please contact the Flexible Packaging Association's Kyla Fisher, Director, Regulatory Affairs & Sustainability at kfisher@FlexPack.Org or Matt Singh, Director of Government Affairs at msingh@FlexPack.Org.

The U.S Flexible Packing Industry At A Glance

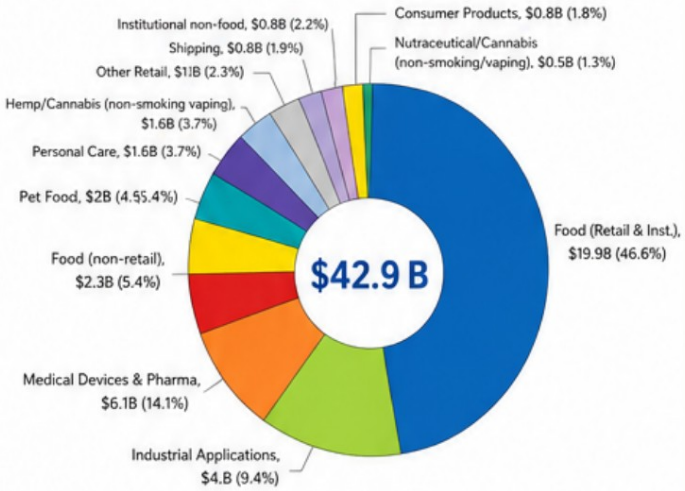
Total U.S. Packaging Market % Breakdown by Segment



Source: Informan

U.S. Flexible Packaging Industry

Breakdown by End-Use Market 2023
(in $ Billion)

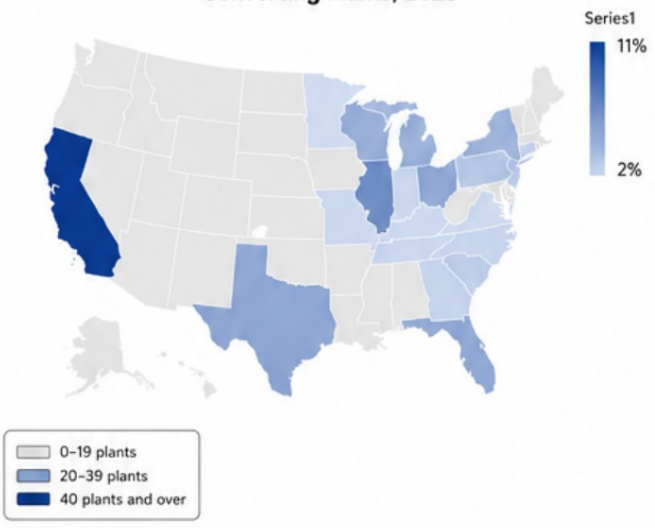


Note: Weighted average used for calculation
Source: FPA 2024 State of the Industry Survey

Flexible Packaging is the second largest packaging format in the U.S. closely trailing corrugate.

Flexible film packaging is Predominately used for food packaging, followed by medical device and pharma. The majority of these packaging formats are plastics based.

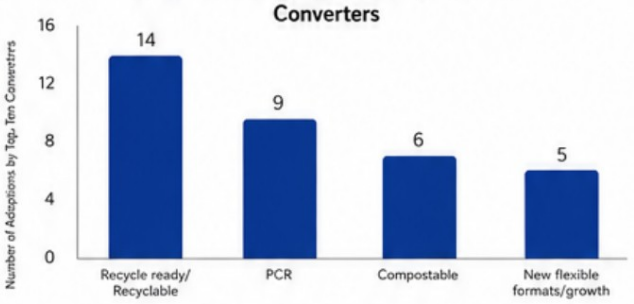
Location of U.S. Flexible Packaging Converting Plants, 2023



California has the largest volume of flexible film manufactures of any state in the US.

Flexible packaging contributes over $3B direct economic impact to the state.

Trends for Emerging Materials/Products: Converters



Source: FPA 2024 State of the Industry Survey

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For more information contact Matt Singh: msingh@flexpack.org

Flexible Packaging Association
Circular Economy Education Day
Recycling Community Participant Directory

The following companies are exhibiting at the Flexible Packaging Association's Circular Economy Education Day. Please use this as a reference to guide your experience here and any follow-ups afterward.

Bob's Grocery Store

BobsGroceryStore.com

Bob's Grocery Store is an interactive collection of packaging innovations—such as recyclable, reusable, and recycled content solutions—curated by Borouge International (NOVA Chemicals, Inc.) to educate and inspire packaging decision-makers and policymakers. It emphasizes the importance of packaging while detailing the industry's success stories, opportunities, challenges, and roadblocks in transitioning towards a more circular future.

The storefront highlights how brands' sustainability efforts and marketing strategies have evolved over the last 5 years, including packaging designed for compostability, reuse, recyclability, and circularity. We focus on great innovations that take packaging to the next level, while also providing insights into 'less than ideal' messaging that creates confusion. Many of the third-party products highlighted in Bob's Grocery are discontinued, allowing this space to be a real-life time capsule of the evolution of packaging.

Through Bob's Grocery, we demonstrate how more sustainable packaging solutions can come to life on the shelf. Using product examples, we explore the latest innovations and practical strategies for circular packaging, from pigment reduction and lightweighting to material conversion and effective messaging.

Encourage your colleagues to check out Bob's Grocery Store in a virtual format at BobsGroceryStore.com.

Notes:

For more information, please contact the Flexible Packaging Association's Kyla Fisher, Director, Regulatory Affairs & Sustainability at kfisher@FlexPack.Org or Matt Singh, Director of Government Affairs at msingh@FlexPack.Org.

DURABLES

Companies manufacturing durable goods and construction products using recycled plastics as primary inputs.

ByFusion

ByFusion.com

Brian Ellison: brian@ByFusion.com

ByFusion transforms hard-to-recycle plastic waste—including films and mixed plastics—into ByBlocks, a building material used as an alternative to traditional concrete masonry units (CMUs). Their technology requires no sorting, cleaning, or melting of plastics, making it highly accessible for more difficult plastic recycling streams.

Notes:

Driven Plastics

DrivenPlastics.com

Adam Farmer: Adam.Farmer@DrivenPlastics.com

Driven Plastics converts difficult-to-recycle plastic waste into higher-quality, cost-effective asphalt. For nearly three decades, recycled polyethylene (rPE) has been explored as an asphalt additive, but progress has been hampered by a fundamental separation issue—oil/water-like separation arising from molecular incompatibility between rPE and asphalt components. Driven Plastics overcomes this polymer/oil separation with a patented process that uses a reactive terpolymer (RET) compatibilizer.

Independent validation supports the approach, including research from national laboratories such as the National Center for Asphalt Technology. Driven Plastics has 23 road installations across the United States that have repurposed approximately 242 tons of plastic, equivalent to about 39.8 million grocery bags.

Notes:

Earthwise Plastic Concepts

EarthwisePlasticConcepts.com

Jim Vucasovich: EarthwisePlasticConcepts@gmail.com

Earthwise Plastic Concepts manufactures ECODOBIES™—plastic rebar supports made entirely from 100% recycled plastic. Designed for use in concrete construction, ECODOBIES™ represent an innovative, environmentally responsible alternative to traditional rebar supports, diverting plastic waste from the waste stream and permanently encapsulating it within concrete applications. Their products offer the construction industry a practical, high-performance pathway to greater sustainability. Earthwise is based in San Luis Obispo, California.

Notes:

HydroBlox

HydroBlox.com

Ed Grieser: Ed@HydroBlox.com

HydroBlox produces high-performance drainage and stormwater management panels made from recycled plastic, providing a sustainable alternative to traditional gravel drainage systems for residential, commercial, and infrastructure applications. For 18 years, HydroBlox has successfully converted hard-to-recycle plastic into proven drainage products.

Notes:

ReCB California

UPFACTORYMaterials.com

Jan Ryman: Jan.Rayman@UpCycling.Group

ReCB California manufactures sustainable building materials by converting post-consumer food and beverage cartons and post-consumer LDPE film into durable construction products. The company's process transforms hard-to-recycle materials into high-value building inputs, supporting circular economy infrastructure and creating strong end markets for recovered waste.

ReCB California operates a manufacturing facility in Lodi, California, where it commissioned its production lines in April 2026 and is currently ramping up commercial operations. The facility is designed to scale production to process more than 9,000 tons of carton waste and over 3,000 tons of plastic film annually.

As a vertically integrated operation, ReCB California focuses on feedstock sourcing, advanced manufacturing, and product commercialization to deliver sustainable alternatives to traditional construction materials while improving waste diversion outcomes.

The Lodi facility represents the latest expansion of the ReCB platform, building on the success of its sister operation in Des Moines, Iowa, which has been in operation for over 15 years.

Notes:

Triton Ties

TritonTies.com

Greg Janson: GJanson@TritonTies.com

Triton Ties manufactures composite railroad ties made from recycled plastic materials. Their products offer a durable, non-toxic alternative to traditional creosote-treated wood ties, addressing both performance and environmental concerns in rail infrastructure.

Notes:

PELLETS & PACKAGING

Companies processing recycled plastics into pellets and packaging materials, closing the loop on flexible packaging.

Borouge International (NOVA Chemicals, Inc.)

NOVAChem.com/NOVA-Circular-Solutions

Julianne Trichtinger: Julianne.Trichtinger@BorougeInternational.com

Borouge International (NOVA Chemicals, Inc.) is an integrated polyolefin provider. They have a recycling business that focuses on creating circular supply chains for flexible plastics by processing post-consumer and post-industrial film materials into recycled content pellets for use in new packaging and products. They work closely with brands, retailers, and converters to incorporate recycled materials into their food and non-food packaging products. The U.S. recycling facility for Borouge International is located in Connersville, Indiana.

Notes:

Circulus

Circulus.com

Marcus San Juan: Batman@Circulus.com

Circulus operates advanced recycling facilities that process post-consumer flexible plastic films—including grocery bags, bread bags, and agricultural films—into recycled resin pellets. They focus on producing food-grade and high-quality recycled content to support true packaging-to-packaging circularity.

Notes:

ENEVI

ENEVI.net

Dev Kumar: Dev@ENEVI.net

Based in California, ENEVI is engaged in the recycling and reprocessing of flexible plastic materials, working to develop reliable feedstock streams and high-quality recycled outputs that support packaging manufacturers seeking recycled content. ENEVI recycles both agricultural and post-consumer films.

Notes:

Polyfit US Inc.

Polyfit.us

Kristopher Miner: Kris@Polyfit.us

Polyfit transforms hard-to-recycle plastic scrap—including HDPE, PP, LDPE, LLDPE, PS, ABS, and PC—into high-quality pellets for remanufacturing. Specializing in closed-loop recycling, Polyfit supports clients from collection through to remanufacturing, operating major facilities across North America. Their focus on producing certified post-consumer recycled (PCR) resin positions them as a trusted partner for brands and manufacturers seeking to meet environmental compliance and recycled content standards.

Notes:

Revolution Sustainable Solutions
RevolutionCompany.com
Cherish Changala: CChangala@RevolutionCompany.com

Revolution is a leading North American flexible plastic film recycler and manufacturer. Through an innovative circular approach, Revolution collects used plastic film, recycles it into certified post-industrial and post-consumer resin (including for direct food-contact applications), and then creates new film products for consumer, commercial, and agricultural markets.

Notes:

OTHERS

Additional organizations supporting the flexible plastics circular economy ecosystem through collection, logistics, and recycling services.

Andros Engineering and Recycling
Andros-Eng.com/Services/Recycle-Services
Ben Andros: Bandros@Andros-Eng.com

Andros Engineering provides turnkey operating equipment to help farmers collect and bale agricultural films. Their subsidiary, Andros Recycling, provides comprehensive recycling and material recovery services, specializing in the collection and processing of flexible plastics, agricultural films, and industrial materials. They work with generators across multiple sectors to develop practical, cost-effective recycling programs and connect materials to viable end markets.

Notes:

Flexible Film Recycling Alliance (FFRA)

PlasticFilmRecycling.org

Kurt Kurzawa: KKurzawa@PlasticsIndustry.org

The Flexible Film Recycling Alliance (FFRA) is an industry coalition dedicated to advancing the collection, sortation, and recycling of flexible plastic films in the United States. The Alliance brings together stakeholders across the flexible plastics value chain—including resin producers, film manufacturers, retailers, recyclers, and brand owners—to develop and scale practical solutions for keeping flexible plastic films out of landfills and in productive use. FFRA operates PlasticFilmRecycling.org, an online searchable directory to help consumers identify where and how to recycle flexible films.

Notes:

Please use this sheet to take notes as you meet with our exhibitors. When you get back to the office, scan the QR code for more resources, including:

- The Road from Concept to Shelf: Understanding Packaging Change Timelines
- Flexible Packaging Ban Could Disrupt Food Access for California WIC Participants
- Californians Desire and Need Recycling Labeling
- Flexible Film and Packaging Depots in California
- Seven Ways to Support Recycling in California
- Fast Facts on Flexible Packaging