

FEDERAL, STATE, AND LOCAL POLICY RECOMENDATIONS ON

Textile Stewardship



CPSC
California Product
Stewardship Council



PREPARED AND PRESENTED BY

THE STATEWIDE TEXTILE RECOVERY ADVISORY
COMMITTEE HOSTED BY THE CALIFORNIA PRODUCT
STEWARDSHIP COUNCIL (CPSC)





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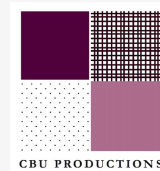
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PREFACE

Since 2020, CPSC has hosted regular Statewide Textile Recovery Advisory Committee (STRAC) calls among industry experts, with intent to publish a report on recommended textile-specific legislation in California. We acknowledge unwanted textiles end up in landfills all over the world as a result of overconsuming and under-utilizing materials in our economy.

With credits to the OR Foundation, the cover photo captures the state of human and environmental damages caused by textiles sold in countries under the guise of second-hand and circularity with no end-of-life management support.

We recognize and respect the over 200 tribes of indigenous peoples as traditional stewards of this land we call California. Traditional textile manufacturing played an integral role in this region's ecosystem and cultural identity.

We hope work done in California alleviates the externalized impact as we recognize our role in the global industrial system that disproportionately impacts our community's most vulnerable members.

We ask for advocacy in making changes to a textile circular economy that expands material recovery systems with funded solutions to complex problems.



Jumpstarting California's circular economy with **TEXTILE RECOVERY**



COMPLEX PROBLEMS REQUIRE COMPLEX SOLUTIONS

The volume and diversity of materials in the textile and clothing industry are immense, with additional complexities of equity and access to necessities (clothing and textile products) with great potential for reuse and a soil-to-soil circular economy.

Industry efforts to create textile reuse and recycling options have proven expensive, siloed, and lacking the transparency necessary for public investments.

THE STATUS QUO CANNOT CONTINUE

Thrift stores receive unwearable garments with no support for managing residential waste.

Local government and waste facility operators cannot take on new textiles programs without funding a costly source separated stream with garbage rates.

Residents have no verified information on what to do with unusable textile and what materials are used in the products.

Brands are not held accountable for selling non-recyclable, non-durable materials without proper end-of-life management options in place.

CALRECYCLE IDENTIFIED TEXTILES AS A PRIORITY

Textiles are the fifth most common material in residential and commercial waste streams.

California families throw out over 1.2 million tons of textiles to the landfill, 6% of the total waste stream.

GOVERNMENT ACTION AT EVERY LEVEL

This set of policy recommendations is an invitation to join CPSC in a conversation on how the private, public, and NGO sectors can work together to address significant challenges in textile recovery around the world. Volunteer action and siloed industry grants do not address the high-costs of creating source-separated material recovery programs in alignment with the waste hierarchy prioritizing reuse and repair over recycling and disposal options.

Local Action

1. Green Purchasing to include contracts with reuse, repair, and recycling
2. Buy uniforms with recycled content from brands with repair and recycling
3. Require reporting and recycling, as part of collection partnerships
4. Start a public database of verified textile handlers

Federal Updates

1. Remove subsidies on virgin fossil fuels
2. Address unfair tariffs on organic and recycled textiles
3. Invest in sustainable agriculture and domestic fiber/fabric manufacturing
4. Regulate PFAS & Microplastics
5. Establish labeling and standards to support sorters and recyclers

State Policies

1. Implement tax incentives for repair for immediate relief to small businesses conducting textile sustainability services.
2. Pass Extended Producer Responsibility (EPR) to create an industry funding source for textile recovery infrastructure with separate programs for industry sectors, i.e. hospitality textiles and clothing to reduce costs & footprint for impacted industries.
3. Expand PFAS & microplastics regulations on to engage polluters and prevent future abatement.
4. Start statewide education and outreach campaigns on waste prevention and textile recovery opportunities, both residential and commercial.



CROSS-SECTOR ENGAGEMENT WITH INDUSTRY FUNDED SOLUTIONS

Extended Producer Responsibility (EPR) is a strategy to place shared responsibility for end-of-life product management on the producers, and all entities involved in the product chain, instead of the general public, while encouraging product design or redesign that minimizes the negative impacts on human health and the environment at every stage of a product's lifecycle. This internalizes the costs of processing and recycling or disposal into the total cost of a product with primary responsibility on the producer, or brand owner, who ultimately makes design decisions for their products. It also creates a setting for recycled commodities markets to emerge, which helps support a true circular economy.

Issues with equity, and access to necessary goods and information can be associated with poorly designed EPR programs. Our recommendation for textiles is to focus on unusable materials, after all usable textiles have been diverted into reuse, repair, and redesign. Or an EPR program that focuses on one industry sector of textiles, like hospitality linens or wearable technology with embedded batteries. Retail take-back should not be mandatory, rather, approved Producer Responsibility Organization(s) must incentivize retailer participation to meet a convenient collection standard.

Key elements of a successful EPR program:

1. Eco-modulation of fees and exemptions to incentivize design for recyclability and protect green and small businesses. For example, B-corps with takeback programs incorporating repair should pay less than others.
 2. Convenient collection and program performance standards to ensure public access to the program and program operators held to improvement goals.
 3. Plan for hard-to-manage problems associated with recycling materials not typically included in waste programs, such as PFAS or microfiber reduction.
 4. Impactful oversight measures and other tools to bolster program performance and support agencies in the enforcement processes.
- For more details on EPR, contact info@calpsc.org.



JOB CREATION AND MARKET DEVELOPMENT

POLICY OPPORTUNITY

BENEFITS

INVESTING IN RESILIENCE

STATE FUNDED GRANTS, LOW-INTEREST LOANS, AND TAX INCENTIVES

CREATE JOBS, EXPAND SUSTAINABLE AGRICULTURE, R&D, AND INFRASTRUCTURE, INCENTIVIZE INNOVATION

LEADING BY EXAMPLE

GREEN PURCHASING PROGRAMS FOR GOVERNMENT AGENCIES AND CONTRACTORS

PROTECT PRODUCT USERS, USE PUBLIC FUNDS RESPONSIBLY, AND DEVELOP SUSTAINABLE REGIONAL FIBER MARKETS

PREVENTING FUTURE COSTS

CHEMICAL BANS AND DISCLOSURES, EDUCATION AND OUTREACH

REDUCE TOXIC EXPOSURES, ENVIRONMENTAL AND HUMAN HEALTH IMPACTS, MAKE INFORMED PURCHASES,



CALIFORNIA-SOURCED NATURAL TEXTILES OFFER OPPORTUNITIES FOR MULTI-LEVEL SOLUTIONS

Natural fibers sourced from California maximize opportunities for soil-to-soil circularity, economic development and climate mitigation. Developing more capacity for in-state fiber processing will create jobs and reduce the carbon footprint of our textile stream. California leads the nation in number of sheep shorn for wool each year, and produces 90% of the country's long staple cotton. With recent record-setting investments in Climate Smart Agriculture by the California Legislature, these fibers will increasingly be produced within biodiverse agricultural systems. The passage of the Garment Worker Protection Act SB62 (Durazo, 2021), chemical ban in Children's products AB652 (Friedman, 2021), and others establish California as a leader for responsible production of textiles with an active industry ready to support the growing demand for sustainable textiles.

Current infrastructure gaps in California's circular textiles economy include convenient and widespread collection systems, large facilities for textile sorting by quality, condition, and fiber type, consolidation, and transportation of materials to preferred markets (repair over upcycling over recycling), and in-state processors turning fibers into yarns/fabrics. Key investments and policies will allow textile recovery businesses to thrive.

CONSUMER AND WORKER PROTECTION

EDUCATION AND OUTREACH

Education campaigns share crucial information and awareness. Building strategic relationships with key decision-makers, allies, opponents, lawmakers, and targeted communities are important advocacy tools to educate and mobilize others to take action.

LOCAL GOVERNMENT

Cities and counties need guidance on preferred textile recovery and repair service providers and funding to expand programs that support thrifts burdened with managing residential waste.

BUSINESSES

Commercial textile waste generators need access to an authenticated database of preferred processors. Reporting mandates, such as requiring thrift stores to report material flows or recyclers to report residuals, help with transparency.

RESIDENTS

Residents know that thrifts and developing countries are overwhelmed with too many textiles and not enough end-of-life support and need verified information from state and local government on best practices.

CHEMICAL BANS AND PREVENTION

California has a history of policies on toxics and harm reduction, such as chemical bans or microplastic laws, which require evidence supported by advocacy from topic experts.

Studies have shown that Perfluoroalkyl or polyfluoroalkyl substances (PFAS) and microplastics commonly discharged from textiles and carpet can lead to adverse health outcomes in humans and has been detected in drinking water, human blood, and feces. Maine banned non-essential use of PFAS in 2021.

Banning use of toxics in textiles and garments aligns with other state and federal actions and prevents harmful chemical from re-circulating.

Human and environmental health damages from improperly managed textiles are not funded by garbage rate payers. According to the polluter-pays model, the carpet and textiles industry should co-fund mitigation and abatement of PFAS and microfibers, starting with compensation costs borne by commercial laundries.

LABELING AND DISCLOSURE

Labeling requirements have long needed updating and enforcement. There are challenges addressing labeling at the state and local levels when garment labels are regulated at the federal level.

Current labeling standards do not provide the level of detail necessary for recyclers to safely process post-consumer textiles in their material-specific technologies. Another challenge experienced by recyclers are the label contents are not verified prior to market entry, nor do producers disclose finishing treatments impeding recyclability.

New labeling technologies, such as QR codes and RFIDs, will drive supply-chain transparency, but need to remain accessible and authenticated for public use.

The cost burden for expanding textile recovery programs should not fall on government and rate payers alone. Policies can be used to engage producers and find solutions to complex problems.

AVOID UNINTENDED CONSEQUENCES

LEARNING FROM CALIFORNIA'S EXPERIENCE WITH SEVERAL EXTENDED PRODUCER RESPONSIBILITY (EPR) AND PRODUCT STEWARDSHIP LAWS

Equity and access are at the core of unintended consequences to avoid when developing a textile recovery program. For example, the infrastructure for garment repair, reuse, and collection already exists in our communities and the businesses conducting these services are often serving low-income and marginalized communities as a measure of survival and resilience. These communities and businesses who rely on the reuse of secondhand garments could be threatened by giving brands direct access to unwanted garments at the point of collection. Brands who profit from creating new products from virgin materials might prefer garment recycling or destruction, even though it's lower on the waste hierarchy and less preferred for mitigating greenhouse gas (GHG) emission impacts. Any textile management program being considered should protect, elevate, and invest in existing infrastructure for collection, repair, and reuse and the jobs they provide to the local communities and the services necessary for regional recovery systems.

Landfill bans do not set a plan for sustainable management and can confuse residents about what to do with unwanted clothes. As such, this type of policy is not recommended until an adequate program with the proper infrastructure exists. Banning disposal of textiles without convenient recycling collection will result in illegal dumping, unauthorized collection kiosks, and can cost participating charities a lot of money to scale quickly.

Minimum recycled content goals are popular in plastics and packaging and can be applicable to textiles and clothing if the right precautions and studies are taken. The Textile Exchange, an industry association, set voluntary goals to introduce more organic cotton and recycled polyester in member organizations' products. Voluntary action identifies market leaders, and often requires legislation to loop in the laggards and provide safeguards for unintended consequences. An example of unintended negative consequences: mandated minimum recycled content standards can proliferate use of synthetic and blended textiles, creating problems for recyclability, increased microplastic emissions and additional chemical contaminants. We also want to avoid a strain on competition for recovered PET bottles, which are the predominant source for recycled polyester currently. A recent study found that recycled content claims were falsified. Programs without clauses on toxics reduction or environmental protection face issues of exposure as material handlers manage legacy products with undisclosed substances.

GLOSSARY OF TERMS

1. Collector/Sorter

A business providing textile collection services for the public, retailers, disposal sites, or other sites. Collector/sorters sort received materials for third-party reuse, or wholesale to processors for recycling. Collector/sorters do not convert material into recycled output. (CalRecycle, 2018)

2. Composting

Microbial breakdown of organic matter in the presence of oxygen. In a circular economy, composting can be used to convert food by-products, untreated natural fibers, and other biodegradable materials into compost, which can be used as a soil enhancer. (Ellen Macarthur Foundation, 2021)

3. Disposal/Landfill

Landfill means a waste management unit at which waste is discharged in or on land for disposal. Landfill does not include surface impoundment, waste pile, land treatment unit, injection well, or soil amendments. (CalRecycle, 2018)

4. Microplastics and microfibers

Solid polymeric materials to which chemical additives or other substances may have been added, which are particles which have at least three dimensions that are greater than 1 nm and less than 5,000 micrometers (µm). Polymers that are derived in nature that have not been chemically modified (other than by hydrolysis) are excluded. (CA Water Resource Board, 2020). A 2021 study commissioned by the California State legislature and the California Ocean Protection Council reported that microfibers from textiles are among the most common microplastic materials found in the marine environment.

5. Producer Responsibility Organization (PRO)

Producers must operate under an approved Stewardship Plan individually or as members of a Stewardship Organization. The Stewardship Organization must be organized as a non-profit organization exempt from taxation under Section 501(c)(3) of the Internal Revenue Code of 1986. The Producer or Stewardship Organization cannot use Program funds to pay penalties or costs for litigation against the State. (CalRecycle, 2019)

6. Recycling

Transform a product or component into its basic materials or substances and reprocessing them into new materials. Embedded energy and value are lost in the process. In a circular economy, recycling is the last resort action. (Ellen Macarthur Foundation, 2021)

- Chemical/Advanced Recycling is used to refer to a suite of recycling technologies that use a variety of non-mechanical processes to process polymers back into a recycled polymer of similar quality to virgin, or into hydrocarbon precursors or petrochemical intermediates and fuels. Some chemical recycling technologies are used to generate recycled polymers (purification and decomposition) whereas others can be used to generate either polymer precursors, fuels, or a combination of the two (conversion).
- Mechanical Recycling for textiles involves the shredding of fabrics and fibers for use as stuffing, padding, and insulation; or the shredding and re-spinning of fibers to make new yarns. Mechanical recycling generally degrades the quality of the recycled fiber. PET recyclers are experimenting with using polyester textiles as a feedstock into their mechanical recycling process to produce PET flake or pellet which can in turn be used to produce PET filament or yarn.
- Thermal Conversion (pyrolysis, gasification, hydrothermal conversion) and incineration are equivalent to disposal/landfill and not counted as diversion or recycling without evidence on energy/water use and residual outputs.

7. Repair

Operation by which a faulty or broken product or component is returned back to a usable state to fulfil its intended use. (Ellen Macarthur Foundation, 2021)

8. Reuse

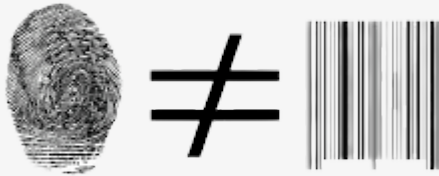
The repeated use of a product or component for its intended purpose without significant modification. Small adjustments and cleaning of the component or product may be necessary to prepare for the next use. (Ellen Macarthur Foundation, 2021)

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SIGNATORIES SUPPORTING THIS REPORT

THE UNDERSIGNED STAKEHOLDERS SUPPORT THE POLICY TOPICS IDENTIFIED IN THIS REPORT AS ATTAINABLE SOLUTIONS FOR CALIFORNIA'S TEXTILE CIRCULAR ECONOMY



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