SUBJECT: Fabric recycling: pilot project

DIGEST: Requires the Department of Resources Recycling and Recovery to establish a three-year pilot project located in the Los Angeles and Ventura Counties partnering with garment manufacturers to study and report on the feasibility of recycling fabric.

ANALYSIS:

Existing law:

1) Establishes within the California Environmental Protection Agency the Department of Resources Recycling and Recovery (CalRecycle) to administer and oversee the Integrated Waste Management Act of 1989 (IWMA), the Beverage Container Recycling and Litter Reduction Act, and related laws pertaining to solid waste management. (Public Resources Code (PRC) §40400)

2) Under IWMA establishes a state recycling goal of 75% of solid waste generated to be diverted from landfill disposal through source reduction, recycling, and composting by 2020. (PRC § 41780.01)

3) Establishes targets to achieve a 50% reduction in the level of statewide disposal of organic waste from the 2014 level by 2020, and a 75% reduction by 2025. (HSC § 39730.6)

This bill:

1) Requires that CalRecycle establish a pilot project, in partnership with garment manufacturers located in Los Angeles and Ventura counties, to study and report on the feasibility of recycling fabric. The pilot project may include:

   a) Creating accessible textile collection sites;
b) Developing a hub or consolidating pre-consumer textile scraps to facilitate the use of those materials by other businesses;

c) Remanufacturing of fibers;

d) Increasing capacity to sort textiles to create cleaner and more uniform material streams; and

e) Community engagement and education on impacts of and alternatives to “fast fashion.”

2) Requires the pilot project to annually report to CalRecycle demonstrating progress towards the goals of the project, including the amount, in pounds, of textiles that were collected and diverted from disposal.

3) Limits the pilot project to three years and requires public posting of the conclusion of the project within six months and at least by July 1, 2027.

Background

1) Solid waste in California. For three decades CalRecycle has been tasked with reducing disposal of municipal solid waste and promoting recycling in California through the IWMA. Under IWMA, the state has established a statewide 75% reduction, recycling, and composting goal by 2020. Additionally, the state has established a target of a 75% reduction in the level of disposal of organic waste from the 2014 level by 2025.

According to CalRecycle’s State of Disposal and Recycling Report for Calendar Year 2020, published in December 2021, approximately 77.4 million tons of material was generated in 2020; with about 52% sent to landfills; 17% exported as recyclables; 12% composted, anaerobically digested or mulched; and 13% either recycled or source reduced. According to the report: “We are falling far short of our 75 percent recycling goal and face clear evidence that an economy driven by resource extraction and single-use disposable products continues to endanger our people and imperil our planet.”

2) “Fast fashion” leads to large amounts of textile waste. “Fast fashion” is an approach to the design, creation, and marketing of clothing fashions that emphasizes making fashion trends quickly and cheaply available to consumers. By quickly cycling through styles retailers are able to incentivize shopping, which has led to a doubling of clothing production from 2000 to 2014. The increase of production carries a host of concerns ranging from the greenhouse gas emissions of clothing production to the often poor wages and working conditions of textile manufacturers. This bill focuses on the problem at the end of the garment’s lifecycle. Fast fashion provides clothes to consumers for lower
prices, but in the process quality and longevity of garments is de-emphasized leading to more waste. According to CalRecycle’s 2020 Facility-Based Characterization of Solid Waste in California report, textiles were the sixth most prevalent material type disposed by single-family residences in 2018. California disposed of nearly 1.2 million metric tons of textiles in 2018, making up about 3% of California’s total waste stream.

3) **95% of California’s textile waste is reusable or recyclable**, according to CalRecycle. That means garments or other textiles, when disposed of, still had garment material tags on them or were in a condition where they could potentially be reused. The presence of material tags is important because different textiles are made of different blends of natural and synthetic compounds. Without tags, if textiles are mixed together, it becomes impractical to determine the blends used in each product making them essentially unrecyclable.

According to CalRecycle in the current donation system only 10-15% of garments are directly resold. The majority of the remaining materials are bought by brokers and then recycled: 30% of this recycled material is cut down to make wiping cloths and rags; 20% is converted into recycled fibers for uses such as carpet padding, insulation, and pillow stuffing; 45% are sent overseas for further processing; and 5% are ultimately sent to landfills.

4) **Textile recycling and reuse requires many steps.** The recycling and reuse process begins with collection, which needs to be done at both the pre-consumer phase for fabric scraps (i.e., generated while making other products) and the post-consumer phase (i.e., as people discard their garments). After collection, the textiles have to be sorted to separate reusable clothing from clothing to be recycled. Reusable clothing must then be further sorted into many subgroups, which can be very labor intensive, and then resold, often in developing countries.

Recycling of textiles is dependent on the blend of materials that they are comprised of. Cotton and other natural fibers are commonly mechanically processed by shredding, separation into fibers, and then respinning with virgin fibers into yarn. Synthetic fibers, such as polyethylene terephthalate can be mechanically processed by shredding, cleaning, molding into pellets, and then extrusion into new fibers. They can also be chemically processed; broken down into their component molecules to remove contaminants and then reformed into high-quality fibers.

**Comments**
1) **Purpose of Bill.** According to the author, “The fashion industry is one of the most influential industries in the world and they generate more textile waste than ever before. To tackle the problems and address the challenges, this pilot program will set up a collaboration between stakeholders in the fashion industry and have them act together on reducing the fashion industry’s negative impact on the environment. We are all in this together and hope we will be able to make better fashion decisions in the future.”

2) **Textiles comprise a small, but significant portion of the waste stream and have a large potential for reuse and recycling.** In order to achieve its ambitious waste reduction goals, California will need to make reductions across all areas of its waste stream. Given the high percentage of reusable and recyclable garments currently being sent to landfills, the textile industry has a great potential for reducing waste and helping establish models for circular economy practices. If California took full advantage of the recycling and reuse of its disposed clothing it could prevent over 1 million metric tons of waste being sent to landfills each year. Focusing on improving textile waste reduction will also help address California’s specific goals around organic waste reduction, due to the large quantities of cotton and other organic fibers present in garments.

3) **Los Angeles and Ventura counties are a nexus of the fashion industry.** According to the 2014 Los Angeles Area Fashion Industry Profile by the California Fashion Association over 77,000 people were employed in the fashion industry in Los Angeles County. Los Angeles County is home to such companies as California Textile Group and American Apparel and Ventura County is home to Patagonia and Fashion Forms. Furthermore, the Los Angeles Department of Sanitation has called for policies to prohibit textile companies from discarding scraps and has contracted with the California Product Stewardship Council to conduct surveys of stakeholders for a program to work with industry partners to upcycle materials. The co-localization of textile designers, manufacturers, and engaged local government agencies creates a nexus that could potentially be developed into a hub for businesses and policies promoting a circular economy for textiles.

4) **Committee amendments.** Staff recommends the committee adopt technical amendments.

**Related/Prior Legislation**
SB 1383 (Lara, Chapter 395, Statutes of 2016) established methane emission reduction targets for the state and established targets for CalRecycle to achieve a 50% reduction in the statewide disposal of organic waste by 2020 and a 75% reduction by 2025.

SOURCE: Author

SUPPORT:

California Product Stewardship Council
Californians Against Waste
Cbu Productions
Climate Reality Project, San Fernando Valley
Fashion Revolution USA
Fibershed
Gap, INC.
Goodwill Industries of San Francisco, San Mateo and Marin Counties
Los Angeles County Solid Waste Management Committee/integrated Waste Management Task Force
Lymi, INC. Dba Reformation
Regenerated Textile Industries, LLC

OPPOSITION:

None received

ARGUMENTS IN SUPPORT: According to the Climate Reality Project, “The fashion industry is among the most polluting industries in the world. Manufacturing alone is responsible for 10% of global carbon emissions and is considered to be the second most water intensive industry. Synthetic fabrics such as polyester, spandex, and nylon are petroleum based and made using an emissions intensive process…

“Senate Bill 1187 would require the Department of Resources Recycling and Recovery to establish a pilot program of up to three years with garment manufacturers in Los Angeles and Ventura counties to study and report on the feasibility of fabric recycling within their industry. Many within the fashion industry are eager to be the change that makes fashion environmentally responsible. There is much work to be done, and much to be learned. While this bill specifically addresses recycling within the manufacturing process, it is a step in the right direction. Protocols developed here could be used to create a robust fabric recycling model. California, with its record of climate leadership should be in the forefront of addressing necessary change in this important industry.”