Policy Options to Drive Circularity in the Textiles Industry

CalRecycle Textiles Workshop

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Dr. Joanne Brasch, PhD

- Textile Economics and Environmental Analysis
- 10+ years lecturing on topics of textiles at UC Davis, Donghua University, and CSU Sacramento

Research areas:
- Textile Innovation
- Industrial Ecology
- Circular Economy
- Supply-System Sustainability

Pictured: (left) Testifying at the Senate Health Committee in support of SB 424 addressing tobacco waste, including Acetate cigarette filters and (right) Research at UC Davis Health System on medical textile waste.
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Second row: Doug Kobold, Joanne Brasch
Third row: Jordan Wells, Heidi Sanborn

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CPSC Mission – Goals of EPR

To shift California’s product waste management system from one focused on government funded and ratepayer financed waste diversion to one that relies on producer responsibility in order to reduce public costs and drive improvements in product design that promote environmental sustainability.
Strategic Directive 5
February 2007

CalRecycle will …

• “Seek statutory authority to foster cradle-to-cradle producer responsibility.”

• “Develop relationships with stakeholders that result in producer-financed and producer-managed systems”
National Stewardship Action Council

PRESENTED ON THREE PANELS AT THE CONFERENCE:

RECYCLED POLYESTER  MICROFIBERS  CARPET PLENARY
Textile Management Problems

1. Large volume of textile waste
2. Inability to identify and sort by polymer
3. Lack of recyclability
4. Need for collection and recycling investment
5. Hazardous substances are present in the textiles (i.e. PFAs and silver)
6. Microfiber and chemical washout
7. E-waste and lithium ion batteries in wearable technology
Textile Collection Infrastructure

What’s Needed? Who’s going to pay for it?

Pictured (above): Ancient papermaking using reused fibers required grading and sorting cotton and linen rags according to quality, breaking down fabrics to fibers, and recycling into paper. Image credits: stlcc.edu

What’s left after high-value garments are diverted?

Single and Mismatched

Stained/Ripped Garments

Protective Clothing

Industrial Fabrics

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WHAT POLICIES WOULD DRIVE A CIRCULAR ECONOMY FOR TEXTILES?
• Source reduction includes **reducing toxics**!
• Design for recyclability is not enough, **regenerative practices** needed
• Implement **producer responsibility** (Voluntary or Mandatory)

Achieving the 2030 Strategy: Climate+ goal will require strong partnerships to accelerate adoption of existing tools as well as enable disruptive innovation around new business models and zero carbon materials.
Mandated Textiles Collection- Canadian Examples

Municipality of Colchester- Curbside textiles collection began May 2016

City of Markham- First municipality in North America ban textile waste at the curb in April 2017

City of Halifax- City controlled collection bins
Partnership Program-
King County, WA

Threadcycle partners

These Threadcycle campaign partners regularly accept nearly all clothes, shoes, and linens for reuse or recycling:

- Big Brothers Big Sisters
- Goodwill
- Northwest Center
- The Salvation Army
- TexGreen
- usagain
- Value Village

Collection and recycling are expensive, source reduction is needed
Where do these policies fall on the Waste Hierarchy

- **REGENERATIVE**
- **RETHINK/REDESIGN**
- **REDUCE**
- **REUSE**
- **RECYCLE/COMPOST**
- **MATERIAL RECOVERY**
- **RESIDUALS MANAGEMENT**
- **UNACCEPTABLE**

Most Preferred

© Zero Waste International Alliance zwia.org/zwh
INCREASING CONSUMPTION: New styles at low purchase price (with externalized costs), with 52 micro-seasons per year with less utilization per garment.

OPPORTUNITY: Come together and focus on the need to cut consumption and prevent waste in the first place.
Textiles Policies Under Discussion

1. Microfiber washout prevention and capture (CA- AB 129 and 2379, BLOOM)
2. Mandatory apparel takeback
3. Recycled-content standards
4. Improved labeling for accurate sorting
5. Bans on curbside collection and landfilling
6. Eco-modulated fees (Visible, based on Enviro attributes)
7. Mandatory recycling
8. Banning per- and polyfluoroalkyl substances (PFAS) and other toxics
9. Bills on E-waste and lithium ion batteries could affect wearable technology
Politics of Microfibers

Science is getting better
Pressure is growing quickly

Options for action:

1. Design with environment in mind (e.g. durable, washout prevention)
2. Advocate on legislation to minimize pollution to support circular economy
3. Collaborate with organizations to achieve your corporate goals

Pictured (above): Screen shot from “The Story of Microfibers"
Pictured (below): Microfibers in the sand image from Greenpeace.org
What Can You Do and How We Can Help?

Partner with CPSC!

1. Design with Environment in Mind (e.g. durable, less resources)
2. Use sustainable fibers
3. Label products for consumer education (e.g. Recycled content, toxics)
4. Start a Take-Back program or support one
5. Collaborate/advocate on legislation to support circular economy
6. Support associations that support good policies

TOGETHER WE CAN DO ANYTHING!