The background features abstract, overlapping green geometric shapes in various shades of lime and forest green, creating a modern, layered effect. The shapes are primarily triangular and polygonal, with some thin white lines intersecting them.

Textiles Zone Works Training Workshop

June 21, 2017

Textiles: A Wake Up Call



Textiles: Industry

- u \$3 trillion global industry
- u 150 billion garments per year
 - Ø 20 pieces of clothing per person
 - Ø 60% petroleum-based synthetics
 - Ø 40% agriculturally derived



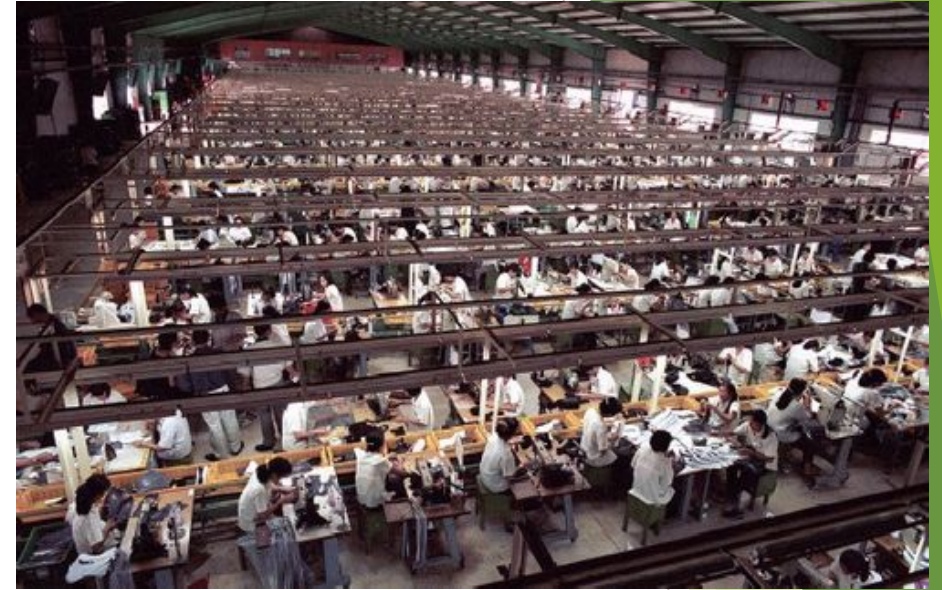
Textiles: Impacts

- Ø 70 million barrels of oil to make polyester
- Ø Synthetic fibers' emissions 300x more damaging than CO2
- Ø 25% of chemicals used on Earth



Textiles: Imports

- Ø US is the largest importer
 - Ø \$220 billion 2016
 - Ø \$41.4 billion online sales
 - Ø \$2k per person
 - Ø 97% imported
 - Ø 40% from China
 - Ø Domestic mfg ↓ 80% in 20 yrs



Impacts: Climate Change

- u Apparel industry = 10% of global carbon emissions, 2nd largest industrial polluter
- u GHG: T-shirt = Driving a car 10 miles
- u 2 million tons recycled = 1 million cars removed
- u Wearing clothing 50 x vs. 5 reduces carbon emissions by 400% per item, per year
- u GHG Emission Reduction Factor = 2.5 MTCO₂e/short ton



Issues:

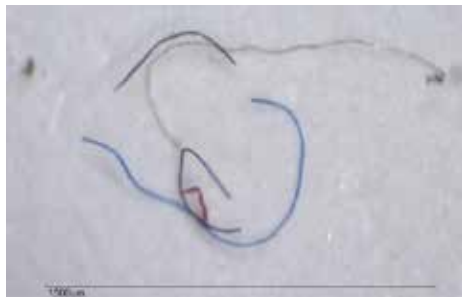
Jeans Water Consumption:
2,600 gallons of water = 1 pair
Each American = 8.3 pairs



Chemicals in Cotton T-Shirts:
700 gallons of water & 1/3rd lb
chemical pesticides & fertilizers



Ocean Plastic:
Tiny clothing fibers =
85% of material on shore

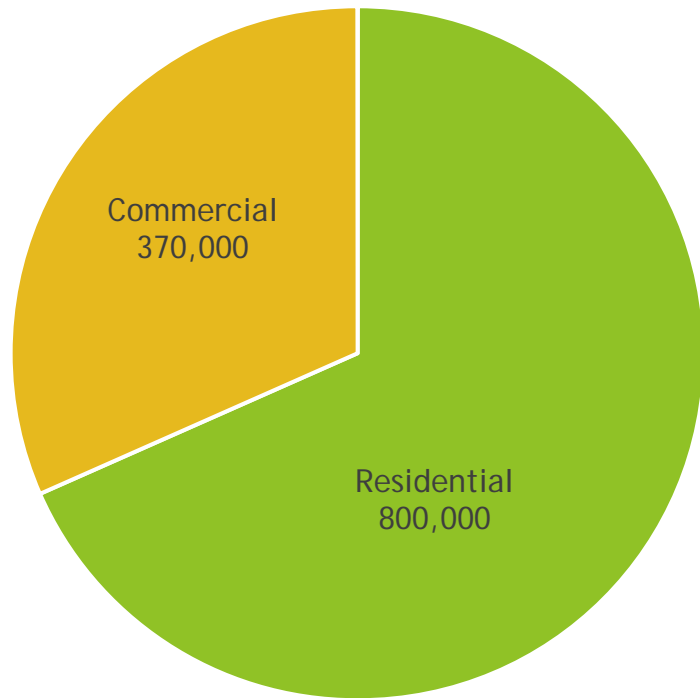


In U.S. on average we only
wear 20% of our clothes



Instability of Foreign Markets

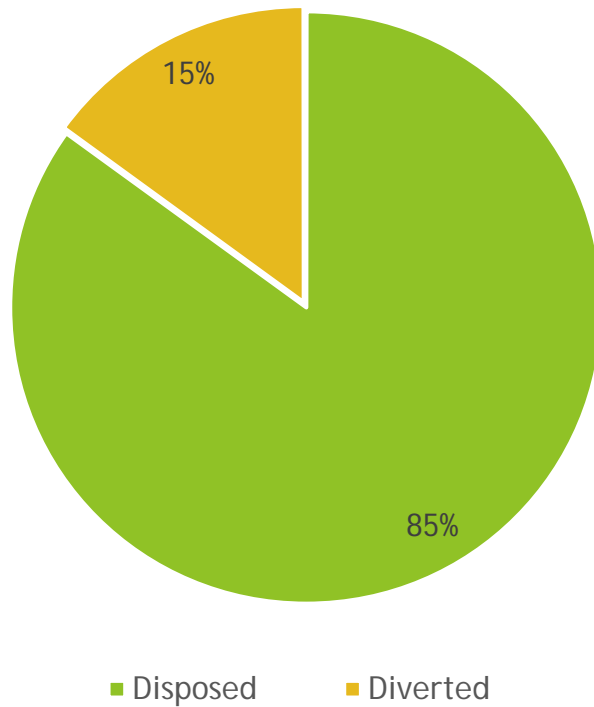
2014 California Textile Disposal



- u Total Disposal: 1.27 million tons
 - u 6th Most Prevalent Material Disposed
 - u Multi-family: 189k tons
 - u Retail Trade: 107k tons
 - u 5% of Landfill Space

U.S. Textiles:

Discarded Total:
13+ Million Tons



- u 95% of disposed are reusable or recyclable
- u 5% remainder = garbage
- u Once commingled = garbage
- u 82 lbs/person



Current System:

- Ø Charity sells 10-15%
- Ø Brokers buy 80%:
 - Ø 30% Wiping cloths
 - Ø 20% Converted into fibers:
 - Ø Carpet padding
 - Ø Insulation for autos and homes
 - Ø Pillow/cushion stuffing
 - Ø 50% overseas:
 - Ø Central & South America, Asia, Africa & Europe
 - Ø Bales purchased cents/pound
 - Ø Importation markets volatile



Thrift Stores Cannot Sell It All



Fast Fashion

- Definition: *“An approach to the design, creation and marketing of clothing fashions that emphasizes making fashion trends quickly and cheaply available to customers”*
- Business model: low quality & high volume
- 2000-2014: consumption doubled
- Planned obsolescence
- Mass produced
- No inherent quality to be collectable
- Negatively impacts exportation
- Destined for disposal

*Emma Watson, Met Gala, 2016
Example of Recycled Content Fabric &
Smart Design*



Trends:

- u Apparel Retailer Take Back & Warranties
- u Extended Producer Responsibility
- u Zero Waste garments
- u Materials Innovation
- u Industry Collaboration



**BREAK UP WITH
YOUR BAG** ♻️

GET 20% OFF A NEW BAG
& YOUR BAG WILL GET A NEW HOME



Solutions:

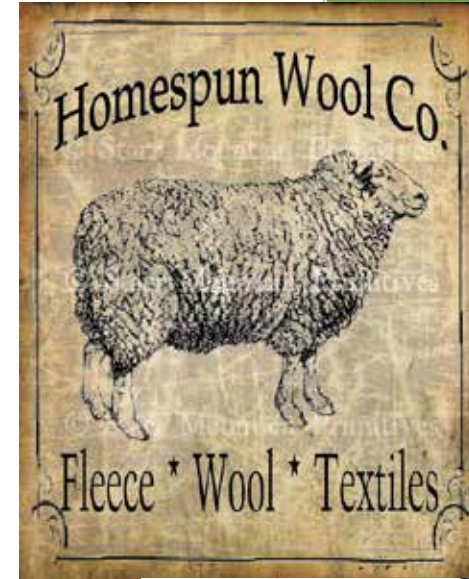
"The clothing we choose to wear everyday has an enormous impact on the planet and its people. Our clothing can either continue to be a major part of the problem, or it can be an enormous part of getting our planet on track. The choice is ultimately ours. We can vote at the ballot box for strong climate measures and vote at the cash register for clean clothes."



Zady CEO Maxine Bedat

What can I do now?

- Ø Buy less quantity, higher quality, longer lasting, recycled content
- Ø Mend, repair, clean*
- Ø Choose more sustainable materials
- Ø Find uses for discarded/unwanted textiles:
 - Ø Animal shelters: Blankets, bedspreads/comforters, towels & stuffed animals
 - Ø Reinvent into other garments or products
 - Ø Donate local



Tracey Harper

tracey.harper@calrecycle.ca.gov

(916) 341-6531