

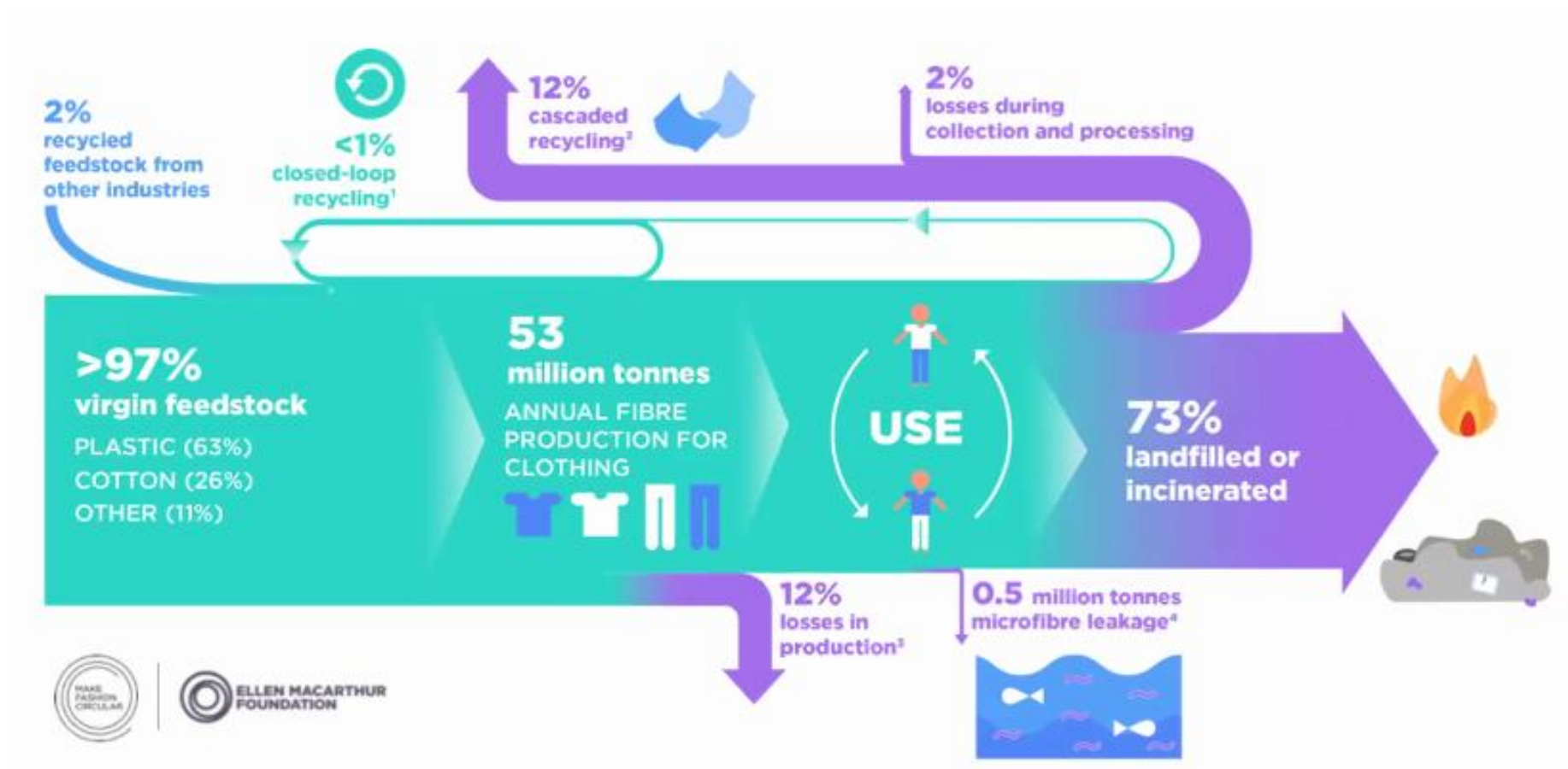
How Circularity can Solve Fashion's Systemic Problems

by Karri Ann Frerichs

CIRCULAR
FASHION

A snapshot of current waste and recycling rates in global apparel manufacturing and consumption

Approximately 20 pieces of clothing per person are manufactured each year⁽¹⁾. With a global population of 7.8 billion, that means approximately 156 billion garments are made each year and about 114 billion are thrown away, according to the diagram below. Before clothing even reaches the consumer, the equivalent of 18.7 billion garments of fiber, textiles and finished products are lost or wasted during the production processes. Less than 1% is recycled back into new clothing.



Graphic Source⁽²⁾: "A New Textiles Economy - Redesigning Fashion's Future" (2017) Ellen MacArthur Foundation.

Some of the challenges faced by fashion brands wanting to operate more sustainably:

So many brands have trouble operating as green as they'd like to because they typically enter the supply chain post fabric production. Their business journey begins by selecting finished fabrics based on the apparel they wish to produce. They have little to no control over where that fabric came from or how sustainable or pollutive its production process is.

Less than 1% of cotton production is organic⁽³⁾, which means that organic cotton costs 20-30% more than "regular" cotton⁽⁴⁾. However the human costs of "regular" cotton production are not reflected in their lower costs. In Africa alone, the UN estimates that the health costs of pesticides nearly equals the total amount of international aid assistance given for healthcare (approximately \$4.4bil)⁽⁵⁾

Many brands turn to rayon, viscose, lyocell or modal as a more "eco-friendly" option to cotton as its production requires less water and its quality is considered more luxurious, closer to the feel of silk.

But the reality is that as recent as 2019, 7 of the world's top 15 Rayon / Lyocell producing companies by volume (equivalent to 35.2% of global production capacity) are deemed to be at high risk of sourcing from ancient and endangered forests or other controversial sources and are taking no action to the contrary⁽⁶⁾.



Little transparency in vast and masked global supply chains.

Brands must "buy into" a broken system that pollutes and exploits.

Competing on price accelerates the industry's race to the bottom.

Systemic Global Problems

>97%
virgin feedstock

PLASTIC (63%)
COTTON (26%)
OTHER (11%)

12%
losses in production¹

<1%
closed-loop recycling¹

1000 of me will die today from acute pesticide poisoning

2.4% of global farmland is dedicated to cotton.
But it accounts for
6% global pesticides and 16% insecticides
more than any other single major crop⁽⁴⁾.

Pesticides Action Network

Forest-based fabrics (like rayon and viscose) comprise 5% of the global apparel industry approximately 70 million trees per year. About 30% from endangered and ancient forests of Brazil, Indonesia and Canada⁽⁹⁾

The demand for dissolving pulp is estimated to increase by 9% yearly⁽⁹⁾.

Fibre2Fashion

Polyester accounts for 55% of the apparel industry and consumes 70 billion barrels of oil per year⁽⁷⁾.

By 2050, the fashion industry is projected to use up to 25% of the world's carbon budget⁽⁸⁾.

The fashion industry is also responsible for 20% of global water pollution⁽⁸⁾



Have a Local Impact

In 2016, the US generated
an avg 80lbs of textile waste
per person per year
(industry & consumer)

26,000,000 TONS
in the US alone⁽¹⁰⁾

According to this, Los Angeles City will generate
320,000 tons of textile waste each year. Most of
this abundant resource is landfilled or
incinerated (or shipped overseas where
it is landfilled or incinerated).

Only 15.2% is recycled

(as of 2017,
according to
the EPA⁽¹¹⁾).



**This rate of
consumption of
raw materials and
natural resources
is unsustainable**

73%
landfilled or
incinerated



unless...

**we change
our raw material
to something
that's abundant in
both quantity and
untapped value.**



End of life or discarded clothing offers various forms of value.



Discarded, but otherwise intact and wearable items with some market value can be re-merchandised and resold.



Damaged, stained, or ruined items can be shredded and

**DOWN
CYCLED**

End-of-life garments can be sorted by fiber and color, then be disassembled, shredded and

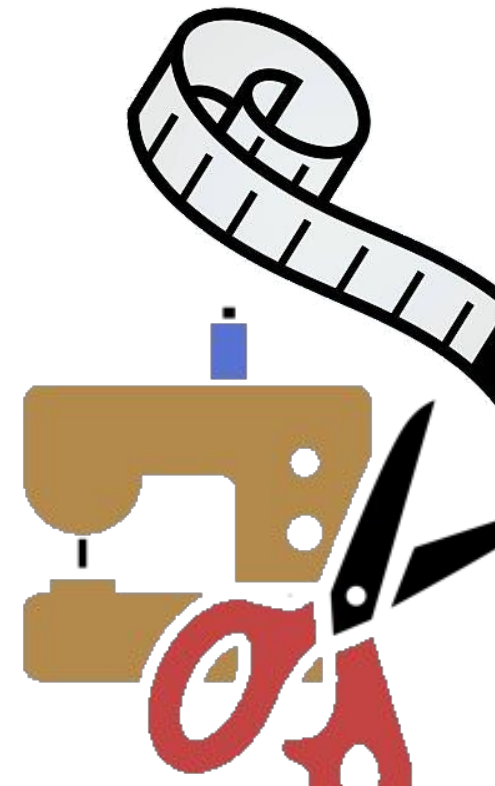
**RE
CY
CL
ED**



as padding, fillers and fluff

into new textiles

Intact and wearable items with little to no market value can be upcycled or redesigned into new products.



The background image shows a busy garment factory. Several workers, mostly women wearing pink headscarves, are seated at long tables with sewing machines. They are focused on their work, and the room is filled with the sounds of the machines and the sight of various fabrics and clothing items in different stages of production. The lighting is bright, and the overall atmosphere is one of industriousness.

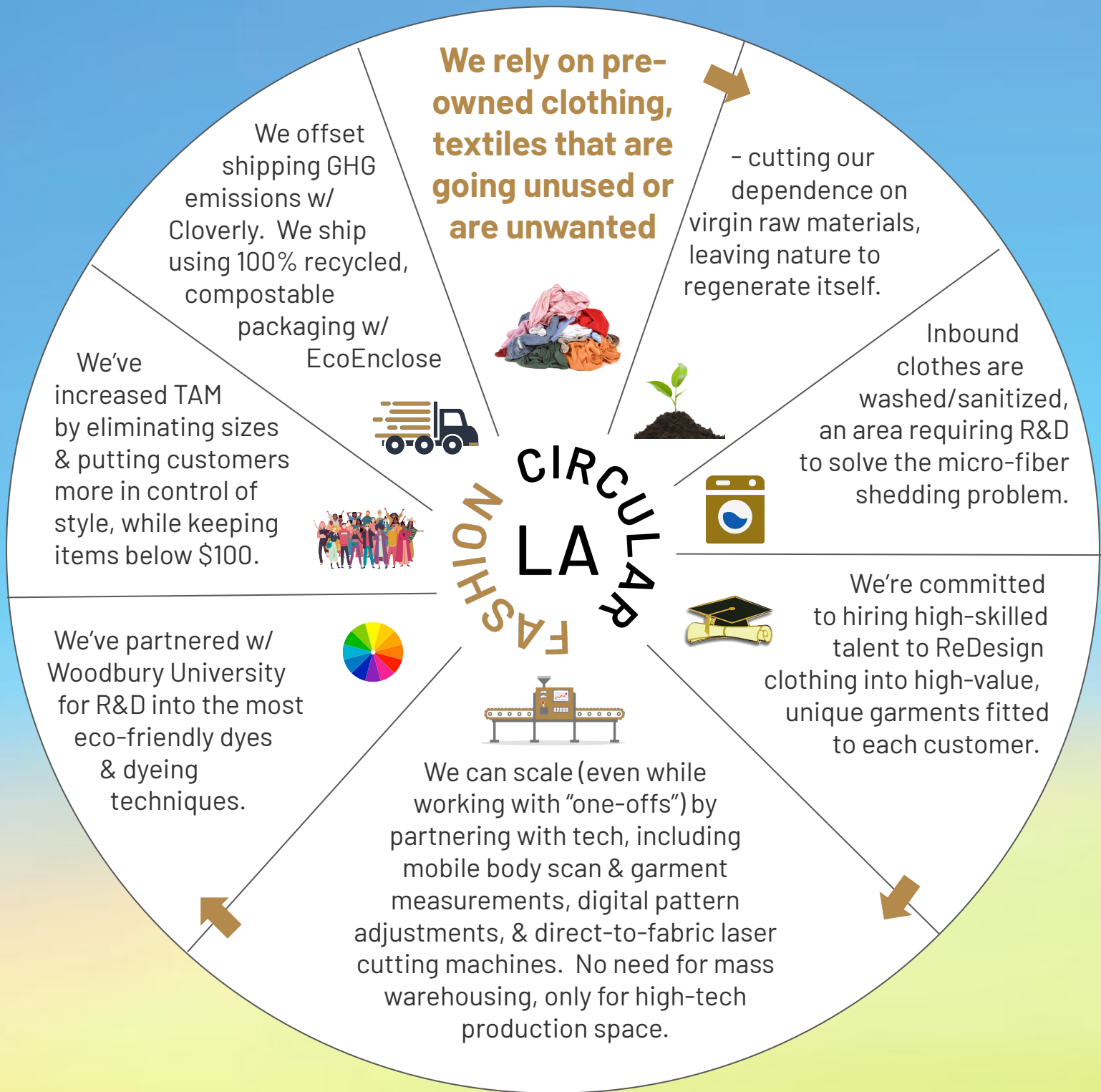
How Circular Fashion can help solve Labor Exploitation

The current LINEAR fashion model relies on mass production because, up until recently, clothing was viewed as a single sale item. Despite the burgeoning resale market, brands lose control of their products and miss out on the revenue generated as the product lives on. Until now, to make massive profits, a clothing manufacturer must make massive amounts of clothing to sell once to customers. Because you are only selling each piece once, it needs to be made as cheaply as possible, thus the race to the bottom resulting in rampant human exploitation and pollution on a global scale.

In the Circular Fashion model, clothing is treated as service and a single unit can be “sold” again and again. This means fewer units can be produced and more money can be made from each unit, eliminating the need to squeeze every penny from the bottom rung of your supply chain. It also means that higher quality clothing must be made to withstand more wears by more people, so even though this clothing is more expensive, more customers can afford it at the discounted rental pricing model. Now the focus shifts from quantity to quality and more high-skilled labor is required. Since you can rent the product again and again, it’s also possible to earn MORE than list price on each item.

This is the Product-as-a-Service business model and it operates best in a Circular Economy.

We are tackling these problems using **Circularity** to make Net Zero Fashion a reality for consumers





In the time it took you to read this, approximately 200 garbage trucks full of textiles were dumped into landfills (or incinerated) around the world. That's one garbage truck of clothing and textiles every second. (source EllenMacArthurFoundation⁽¹²⁾)

Seems like a lot of untapped value to me...



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**Because the most sustainable clothes
are the ones already in your closet**

Sources

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