The Apparel Industry's Environmental Impact

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THE IMPACT OF CONSUMERISM ON OUR ENVIRONMENT

Erasmus+

Premise

- Consumerism is an economic and cultural ideology that encourages the acquisition of goods and services.
- It is a belief that both personal happiness and economic prosperity stem from consumption, primarily of material goods (such as clothes and electronics).
- It is estimated that 1.7 billion people around the world belong to the “consumer class”.15
- The consumer class includes people that are able to purchase non-essential goods (items that go above and beyond satisfying basic needs) such as expensive cars, fancy jewelry, and big houses.16

Premise (2)

- Beyond the question of whether consuming brings greater happiness, a major consequence of consumerism is its devastating environmental impacts.
- Making new products requires a lot of energy and resources while producing billions of tons of waste each year.
- In fact, many of the environmental issues that burden our world today, including climate change, can be linked to this consumer appetite for throwaway items such as the newest cell phone model or “fast fashion”.

Premise (3)

- Household consumerism is responsible for an estimated 60% of global greenhouse gas emissions and between 50% and 80% of total land, resource, and water use.17
- The manufacturing of everyday goods is responsible for 20% of carbon dioxide emissions and 35% of global electricity use

Fast-changing fashion trends and low prices allow people to consume more

The apparel industry must embrace a new approach to sustainably

- Roughly 20 pieces of clothing per person are manufactured each year.
- Growth of the multi-trillion-dollar apparel industry has been fed by “fast fashion,” which makes clothing cheaply and quickly with a low price-tag.

Increased Production and Consumption

- Fast fashion uses innovative production and distribution models to dramatically shorten fashion cycles, sometimes getting a garment from the designer to the customer in a matter of a weeks instead of months.
- The number of fashion seasons has increased from two a year – spring/summer and fall/winter – to as many as 50 – 100 microseasons

Traditional vs. "Fast" Fashion

TRADITIONAL: 2 CYCLES PER YEAR

TYPICAL FAST FASHION: 50 CYCLES PER YEAR

Source: True Cost

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Increased Production and Consumption

Fast-changing trends and low prices have allowed people to consume more. The average consumer is now

purchasing 60 percent more items of clothing compared to 2000,

but each garment is kept half as long

Average Consumer Bought **60%** More Clothing in 2014 Than in 2000, But Kept Each Garment Half as Long

2000 2014

Source: McKinsey & Company

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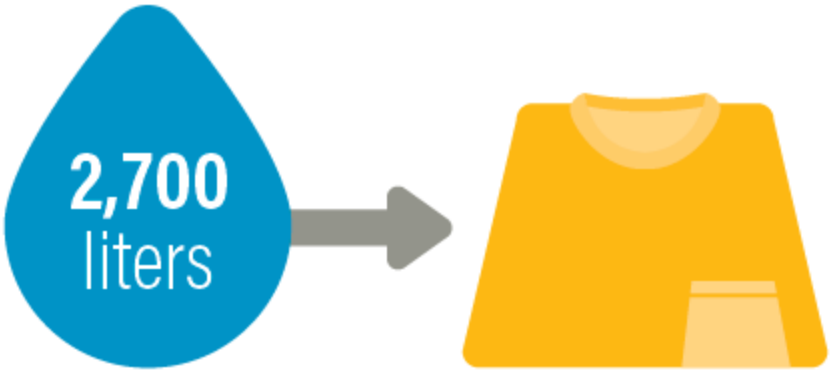
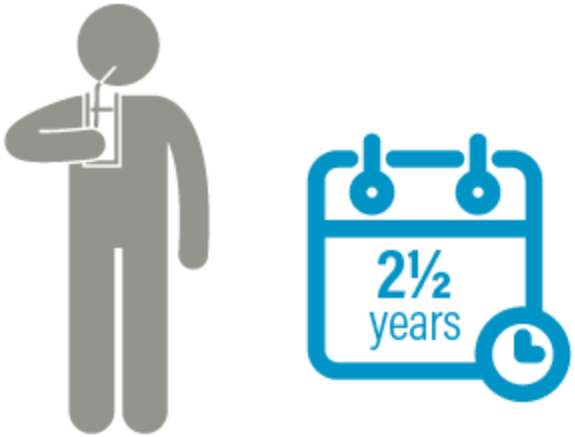
Water Stress and Pollution

- Cotton is the most common natural fiber used to make clothing, accounting for about 33 percent of all fibers found in textiles.
- Cotton is also a very thirsty crop, requiring 2,700 liters of water—what one person drinks in two-and-a-half years—to make one cotton shirt. In areas already facing water stress, cotton production can be particularly damaging. In Central Asia, for instance, the Aral Sea has nearly disappeared because cotton farmers draw excessively from the Amu Darya and Syr Darya rivers.
- Cotton farming is also responsible for 24 percent of insecticides and 11 percent of pesticides despite using about 3 percent of the world's arable land.

It Takes 2,700 Liters of Water to Make One Cotton Shirt



Enough Water for One Person to Drink for 2½ Years



Source: National Geographic

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Garment manufacturing

- Water use and pollution also take place during clothing production.
- About 20 percent of industrial water pollution is due to garment manufacturing, while the world uses 5 trillion liters (1.3 trillion gallons) of water each year for fabric dyeing alone, enough to fill 2 million Olympic-sized swimming pools.

Garment manufacturing (2)

- The carbon footprint of a garment largely depends on the material.
- While synthetic fibers like polyester have less impact on water and land than grown materials like cotton, they emit more greenhouse gasses per kilogram.
- A polyester shirt has more than double the carbon footprint of a cotton shirt (5.5 kg vs. 2.1 kg, or 12.1 pounds vs 4.6 pounds).
- Polyester production for textiles released about 706 billion kg (1.5 trillion pounds) of greenhouse gases in 2015, the equivalent of 185 coal-fired power plants' annual emissions.

Polyester Production is Carbon Intensive

POLYESTER PRODUCTION FOR TEXTILES IN 2015

COAL-FIRED POWER PLANTS' ANNUAL EMISSIONS

Source: MIT

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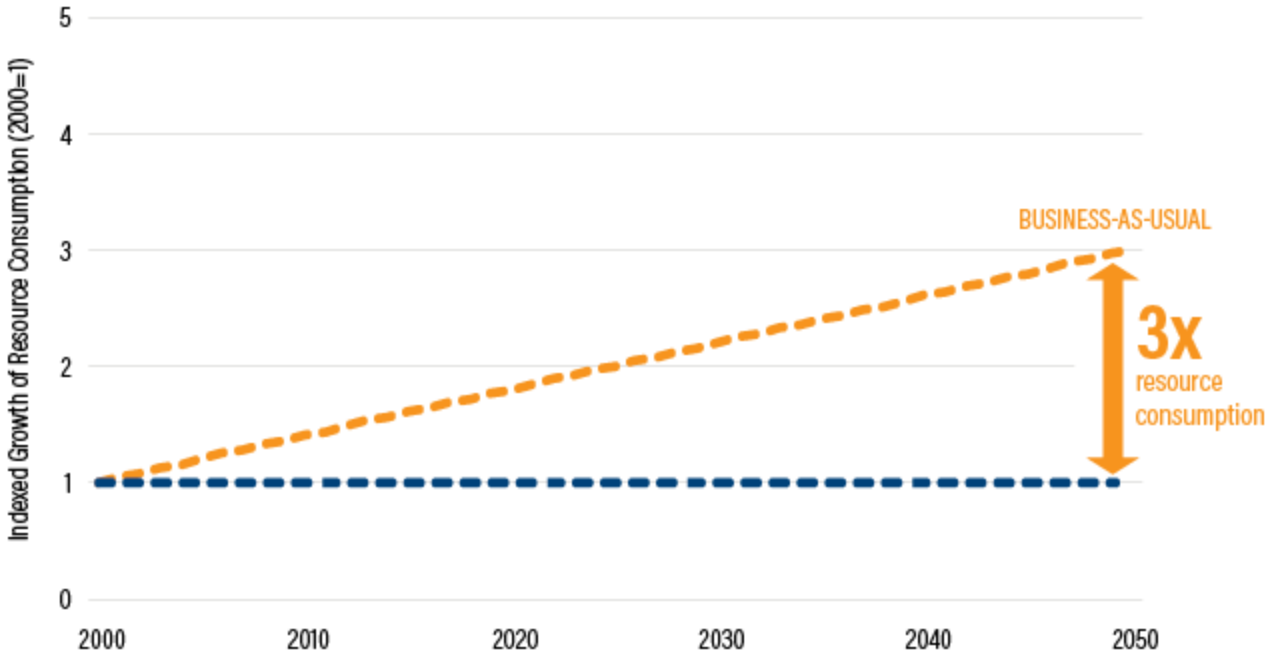
Apparel spending

- Apparel spending is projected to grow tremendously.
- This is particularly true in Asia, as hundreds of millions of people in China and India enter the global middle class.
- By 2030, there will be 5.4 billion people in the global middle class, up from 3 billion in 2015.
- We can expect increased demand for clothes and other goods that define middle-income lifestyles

Apparel spending (2)

If consumption continues at its current rate, we'll need three times as many natural resources by 2050 compared to what we used in 2000.

Resource Consumption Set to Triple by 2050



Source: OECD; Fischer-Kowalski et al. 2011.

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Apparel spending

- Assuming infinite resources in a finite world is not a sustainable business model…Beyond environmental concerns, unchecked consumption will undermine the world's economic and social goals.
- Some apparel companies will ignore those signals and continue with traditional take-make-waste business models.
- Others will embrace innovative new models that work within planetary boundaries and are a better fit for tomorrow's markets.

What to do?

- Apparel is just one sector competing for natural resources, but it's important that clothing makers start transforming their business models now given the industry's strong growth trajectory. Many companies are aware of the environmental risks and are ready to act.
- The first step is for companies to measure their environmental impacts and understand areas where they can improve.

What to do? (2)

- Some companies are working to improve their resource efficiency. H&M and Zara, both purveyors of fast fashion, joined 33 other fashion companies in a pledge to increase their clothing recycling by 2020 and are collecting and recycling used clothing at many of their stores.

THANK YOU!

http://www.wri.org/blog/2017/07/apparel-industrys-environmental-impact-6-graphics

https://www.ontarioecoschools.org/wp-content/uploads/2017/01/Climate-Change-and-Consumerism.pdf