

ECOCHIC DESIGN AWARD 2017

ADDITIONAL RESOURCES

THE ISSUES AT A GLANCE

The fashion industry is at a critical point. Fashion brands, retailers, suppliers and designers alike are facing new pressures as they constantly race to churn out the next fashion must-have, at faster rates and lower prices. We now consume 80 billion new pieces of clothing every year – 400% more than we consumed just two decades ago.¹

With this rapid rise in consumption and production comes a staggering increase in waste and we are witnessing never-seen-before rates of disposal and wastage.

However, external conditions, such as the tightening of legislations and increased competition for resources are forcing fashion companies to review their business goals and operations to adopt proactive and more sustainably minded approaches in preparation for the future. Alongside this, the consumer is becoming increasingly aware and sensitive to the negative environmental impact of this way high consumption.

Below are resources and research to demonstrate some of the fashion industry's pressing issues in terms of environmental impact, consumption, production, waste and the potential of designers and consumers to drive positive change.

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THE ENVIRONMENTAL IMPACTS OF FASHION AND TEXTILES

- The fashion and textile industry is the second most polluting industry in the world, second only to oil.
Source: Business of Fashion (2015); Danish Fashion Institute (2013)
- 20% of freshwater pollution comes from textile treatment and dyeing.
Source: Raybin, A (2009), Water pollution and textiles industry as cited in The Sustainable Academy (SFA) and The Global Leadership Award in Sustainable Apparel (GLASA) (2015), The State of the Apparel Sector – 2015 Special Report: Water
- The cultivation of cotton relies on heavy consumption of freshwater. The global average water footprint for one kg of cotton is 10,000 to 20,000 liters depending on where it is grown.
Source: Chapagain, A, Hoekstra, A et al (2006); Mekonnen, M.M. and Hoekstra, A.Y. (2010), Mekonnen, M.M. and Hoekstra, A.Y. (2011); Cotton Incorporated (2012) as cited in The Sustainable Academy (SFA) and The Global Leadership Award in Sustainable Apparel (GLASA) (2015), The State of the Apparel Sector – 2015 Special Report: Water
- 1 trillion kilowatt hours are used every year by the global textile industry, which is equal to 10 percent of the total carbon impact.
Source: Textile Exchange (2010), 2010 Global Market Report on Sustainable Textiles: Executive Summary
- Around 1.2 billion pairs of jeans are produced each year. It is estimated that a total of 3.5 trillion liters of water is used during its cotton production, fabric production, dyeing, and garment manufacturing.
Source: Statisticbrain.com (2016), Denim Jeans Industry Statistics; Levi Strauss & Co. (2015), The Life Cycle of a Jean (Redress uses the figures from the LEVI's report and Statisticbrain.com, multiplied 1.2 billion pair of jeans by 2912 liters of water)
- Cotton, which makes up 48% of textile production, is responsible for the use of 24% of global insecticides and 11% of all pesticides, more than any other single crop.
Source: EuroMonitor International (2014), Global Apparel and Footwear Market Update - 2014 as cited in the The Sustainable Academy (SFA) and The Global Leadership Award in Sustainable Apparel (GLASA) (2015), The State of the Apparel Sector – 2015 Special Report: Water; WWF (n.d.), Cotton Farming

¹ The True Cost (2015)

FASHION CONSUMPTION

- We consume 80 billion new pieces of clothing every year. This is 400% more than the amount we consumed just two decades ago.
Source: The True Cost (2015)
- By 2019, the global apparel retail industry is forecast to have revenue of USD\$1,651.6 billion, an increase of 25.4% since 2014.
Source: MarketLine (2015)
- The total retail sales of consumer goods in China reached USD\$ 4,573.5 billion (30,093.1 billion yuan) in 2015. It was predicted that China will become the world's biggest retail market in 2016
Source: National Bureau of Statistics of China (2016), Total Retail Sales of Consumer Goods in December 2015; eMarketer (2016), China Eclipses the US to Become the World's Largest Retail Market
- The FashionScope analysis indicated that by 2025 approximately 31% of global fashion sales will come from China, while another 11% will come from the emerging countries in Asia Pacific. Today, these two regions combined account for just 30% of sales.
Source: Business of Fashion (2016), The State of Fashion 2017
- In 2015, the EU and the US were the major markets for clothing, accounting for 34% and 19.4% respectively of world imports.
Source: World Trade Organization (2016), World Trade Statistical Review 2016

SCALE OF FASHION AND TEXTILE PRODUCTION

- The number of garments produced annually has doubled since 2000 and exceeded 100 billion for the first time in 2014: nearly 14 items of clothing for every person on earth.
Source: McKinsey & Company (2016), Style that's sustainable: A new fast-fashion formula
- Top three textile exporters in 2015 are China, EU, and India, which accounted for almost two-thirds of world exports.
Source: World Trade Organization (2016), World Trade Statistical Review 2016
- In 2015, China's clothing exports had a value of USD\$174.28 billion.
Source: Ministry of Commerce of the People's Republic of China Comprehensive Department (2016), 2015 年中国对外贸易发展情况
- In 2015, China was the leading exporter of textiles and clothing with a 37.4% share in world exports of textiles and 39.3% in clothing.
Source: World Trade Organization (2016), World Trade Statistical Review 2016
- In 2015, the global textile industry's fibre production volume fell for the first time since 2008 by 0.7% to 94.9 million tonnes.
Source: The Fiber Year Consulting (2012), The Fiber Year 2012; The Fiber Year Consulting (2016), The Fiber Year 2016 World Survey on Textiles & Nonwovens

CONSUMER AND INDUSTRY TEXTILE AND CLOTHING WASTE

- Approximately 15% of textiles intended for clothing ends up on the cutting room floor.
Source: Timo Rissanen (2005), 'From 15% to 0: Investigating the creation of fashion without the creation of fabric waste'
- About 95% of the textiles that are landfilled each year could be reused or recycled.
Source: Secondary Materials and Recycled Textiles Association (n.d.), Media Kit; H&M (2014), H&M Conscious Actions Sustainability Report 2014

- In China the total annual production of pre and post-consumer textile waste is estimated to be around 26 million tonnes. The market for the recycling of secondhand clothes has huge potential; the maximum revenue could be as high as 60 billion RMB.
Source: China National Garment Association (2016), 废旧衣物回收市场前景广阔，产业链待完善; China National Garment Association (2013), 中国每年 2,600 万吨旧衣服被扔掉
- In Hong Kong, approximately 111,690 tonnes of textiles were sent into landfills in 2015.
Source: Hong Kong Environmental Protection Department (2016), Monitoring of Solid Waste in Hong Kong - Waste Statistics for 2015. Redress calculates that this is an increase of 41% from 2011 waste
- In the UK, an estimated £140 million worth of used clothing, estimated at around 350,000 tonnes, goes to landfills every year.
Source: WRAP (2012), Valuing our clothes
- In the US between 2000 and 2014, tonnage of textile waste increased by 71.1% while tonnage for overall municipal solid waste increased at 6.17%. Only 16.2% of this textile waste was recovered.
Source: U.S. Environmental Protection Agency (2014), Advancing Sustainable Materials Management: 2014 Tables and Figures

BENEFITS OF CLOTHING AND TEXTILE REUSE

- Garment reuse can significantly contribute to reducing the environmental burden of clothing. By reusing 100 cotton T-shirts, it is estimated that the contributions to global warming will be reduced by 14%, and by reusing 100 polyester or cotton trousers, human toxicity in water will decrease by 45%.
Source: Laura Farrant & Stig Irving Olsen & Arne Wangel (2010), Environmental benefits from reusing clothes
- Extending the life of all UK clothing by an extra nine months of active use for each item would reduce carbon, waste and water footprints by around 20-30% for each item and save £5 billion in resources used to supply, launder and dispose of clothing.
Source: WRAP (2012), Valuing our clothes

POTENTIAL FOR DESIGNERS AND CONSUMERS TO DRIVE CHANGE

- Around 80% of a product's environment impact is locked in at design stage.
Source: WRAP (n.d.), WRAP and the circular economy

Consumer awareness and demand on the topics of sustainability is on the rise.

- In emerging markets, more than 65% of consumers have been found to actively seek out sustainable fashion.
Source: Cotton Lifestyle Monitor (n.d.) as cited in Business of Fashion (2016), The State of Fashion 2017
- Millennial consumers are more likely than non-millennial consumers to attempt to buy products from companies who support the causes they care about (52% versus 45%).
Source: Barkley (2011), American Millennials: Deciphering the Enigma Generation, p.78, cited in Forbes.
- 66% of consumers say they are willing to pay more for sustainable goods – up from 55% in 2014 and 50% in 2013. Among them millennials (age 18-34) continue to be most willing to pay extra for sustainable offerings – almost three-out-of-four respondents in the latest findings, up from approximately half in 2014. The rise in the percentage of respondents under 20, also known as generation Z, who are willing to pay more was equally strong – from 55% of total respondents in 2014 to 72% in 2015.
Source: Nielsen (2015), The Sustainability Imperative
- As of Spring 2016, millennials are the largest living generation in the United States; over the next decade their total income of \$1 trillion is expected to grow to be 30% more than that of Generation X and 7.5 times that of the Baby Boomers. On a global scale, 85% of them live in emerging markets and have a total spending power of approximately \$2.5 trillion, which is expected to grow three times by 2025.
Source: PEW Research Center; Bank of America, Goldman Sachs; US Census; Holly Ellyatt (2015), "How trillion-dollar millennials are spending their cash", CNBC, as cited in Business of Fashion (2016), The State of Fashion 2017