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Research report

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Issue: Creating A Sustainable Program For The Recycling Of Clothing
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Table of Contents

Introduction	3
Definitions of key terms	4
General overview	6
Major parties involved	7
Timeline of Key Events	9
Previous attempts to solve the issue	9
Possible solutions	9
Bibliography	10

Introduction

Currently we are facing climate change, temperatures shift, and weather patterns change long-term. Drought, storms, heat waves, rising sea levels, melting glaciers and warming oceans directly harm animals and destroy the world as we know it. Human activities since 1800, particularly the industrial revolution, have been the main driver of climate change. The 13th goal of the United Nation includes taking urgent action to combat climate change and its impacts.

The fashion industry is big, its value is equal to 3 trillion dollars. It's 2% of the world's Gross Domestic Product (GDP). The fashion industry is responsible for a range of many negative environmental impacts. The production of clothes constructs 10% of humanity's total carbon emissions. In 2020, humans released 37 billion tons of CO₂ into the atmosphere and this number is only going up. That's not all, the fashion industry uses a lot of water, one pair of jeans takes 7,500 litres of water to make. This is drying up water sources and textile dyes are the world's second-largest polluter of water. Clothing is mostly worn for 1-3 years, while the lifespan of clothing is on average 2-10 years. 85% of all clothing goes to a landfill each year.¹

Chetna Prajapati, who studies ways of making sustainable textiles at Loughborough University in the UK, said: "The current fashion system uses high volumes of non-renewable resources, including petroleum, extracted to produce clothes that are often used only for a short period of time, after which the materials are largely lost to landfill or incineration, this system puts pressure on valuable resources such as water, pollutes the environment and degrades ecosystems in addition to creating societal impacts on a global scale."²

There is a reason why not many clothes are recycled; the problem is within the materials and textiles that clothes are made from. They are made from problematic blends of natural yarns, hand-made filaments, plastics and metals, which makes it time consuming and extremely difficult to recycle, however it is possible to convert clothes into fibre and use it to manufacture all sorts of other products.

Despite the fact that it's difficult to recycle clothing, it's still very important since it helps decrease the elements that contribute to climate change. The Economic and Social Council is therefore creating a sustainable program for the recycling of clothing.

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<https://fashinnovation.nyc/fashion-industry-statistics/#:~:text=Fashion%20Industry%20Statistics%3A%20General%20Data&text=Its%20value%20is%20equivalent%20to>

²

<https://www.bbc.com/future/article/20200710-why-clothes-are-so-hard-to-recycle>

Definitions of key terms

Fast Fashion

Fast Fashion is the mass production of inexpensive clothes by mass-market retailers. The production is done at high speed and low cost to maximise the profits. These inexpensive clothing is a response to the latest trends. These clothes are appealing because they are affordable and trendy. But their quality is most of the time bad, which is the reason these clothes are quickly thrown away.

Sustainability

Sustainability in general means the ability to be maintained at a certain rate or level. This can be social, environmental and economical. In this case it's mostly used in the environmental context. Environmental sustainability is the duty of linking with the planet to maintain natural resources and avoid threatening the life of future generations.³

Non-renewable resources

A non-renewable resource is a natural substance that isn't refilled with the same speed as that it is consumed. Fossil fuels are non-renewable resources. Fossil fuels were formed millions of years ago within the Earth from dead plants and animals. Examples of fossil fuels are coal, oil, and natural gas. When fossil fuels are used, they release greenhouse gases including CO₂. Making fossil fuels the primary contributor to climate change.

Recycling

The measures of converting waste into reusable material. Recycling should not be confused with reuse, which is something different. Reusing is the activity of reusing a product without first separating the product into raw materials.

Raw materials

Raw materials are the input goods or basic materials from which a product is made. Examples of raw materials are steel, oil, corn, grain, gasoline, lumber, forest resources, plastic, natural gas, coal, and minerals. There are two types of raw materials: direct raw materials and indirect raw materials. Direct raw materials are the materials used within the final product, while indirect raw materials are the materials used throughout the production process of the final product, but these raw materials are not directly in the final product.

A circular economy

A circular economy is an economic system based on loops. In these loops raw materials, components and products don't lose their value, or at least as little as possible. Renewable energy sources are used. Reusing and recycling is the core of this system.

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<https://www.thebalancesmb.com/what-is-sustainability-3157876>

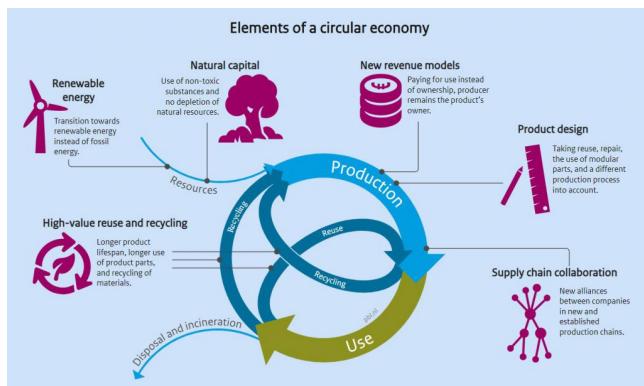


Figure 1: A circular economy

General overview

History of the clothing industry

Clothing is one of human's characteristics, a business has grown out of this basic need. Nowadays clothing is all about fashion. Fashion includes its own prejudices of style, individual taste, and cultural evolution. The invention of flax and wool fabric at the dig of Swiss lake in the 6th and 7th centuries BC is the oldest reported indication of employing fiber. Silk weaving was introduced to India circa 400 AD, whereas cotton spinning dates to 3000 BC. Before the nineteenth century the standard family made their clothes by themselves. There was no mass production of clothing yet. This commercial mass production started in the early nineteenth century. In 1858, the first designer to have his label sewn into the garments he created was Charles Frederick Worth.⁴

Clothing waste and recycling in different countries

The UK shared their plans for reducing waste on Global Recycling Day (Thursday 18 March). This included proposals for new measures that will fasten up action on fast fashion and hold manufacturers accountable for textile waste.

Germany has a high collection rate for reuse and recycling. It reportedly collects 75% of its textiles, but most of it is recycled to be used in lower value applications like insulation or filling material. Nevertheless, the company is the European leader in textile collection. Some main players in the German textile recycling market include Soex, Remitex, Striebel, EAST-WEST Textilrecycling Kursun and Boer Group. 50% of the old textiles in Germany get sold as second-hand products globally, 21% state material for new cleaning cloths, and 23% is used as raw material for premium burning materials.

The European Commission has stated that it's calling for an end to fast fashion by 2030. The EU wants to force fashion firms to make clothes more durable and recyclable. Virginijus

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<http://www.encyclopedia.chicagohistory.org/pages/300.html>

LmunA 2022

Sinkevičius, the EU environment commissioner, said “By 2030 textiles placed on the EU market should be long-lived and recyclable, made to a large extent of recycled fibres. They [clothes] will not need to be thrown away and replaced as often as now and that way consumers will gain a suitable and attractive alternative to fast fashion.” The EU has introduced many measures including new design requirements for textiles, clearer information on textiles, tight controls on greenwashing and support to research, innovation and investments and to the development of the skills needed for the green and digital transitions.

Textile mountains

Many brands and companies claim to recycle their clothes. But do they always? Not all companies and brands are in fact recycling that much at all. Recycling clothing is hard because of the different materials clothes are made of and many companies and brands want to make profit. Keeping these two things in mind we can conclude that recycling is a really hard and expensive risk. Which is why many industries do not recycle. The truth of recycling clothing is not transparently shared. In the Netherlands there are recycling boxes all around the country to hand in old clothes. What actually happens with these clothes is shocking. They are stored based on quality. The good quality used clothing is being sent to eastern-Europe and the bad quality clothing is sent to Africa. These MNCs do not have strict regulations, so the clothes can be used for everything by everyone. What most of the time happens is that these clothes are thrown away, creating textile mountains in Africa, Nairobi and Kenya. We believe we are sending our used clothing to poorer people in Africa, while we just contribute to creating those clothing mountains and help MNCs create more profits.

ActNow Climate Campaign

ActNow is the United Nations campaign for individual action on climate change and sustainability. It aims to educate and encourage individual behavioural change, mainly by adjusting consumption patterns. ActNow invites people around the world to step up their climate actions and join the movement to build a better future for all. The ActNow Climate Campaign has created a fashion challenge, which invites people around the world to make their individual contributions to zero-waste fashion.⁵

Major parties involved

The Plastic Soup Foundation

The Plastic Soup Foundation believes that Textile standards must become stricter. The textile sector is not sustainable enough. Laura Diaz Sanchez, the campaigner of Ocean Clean Wash, a campaign of the Plastic Soup Foundation has said: "We have been drawing attention to the environmental problems of microfibres derived from textiles for years." Together with 65 different NGOs the Plastic Soup Foundation has signed an unofficial document, with a goal

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<https://www.un.org/sustainabledevelopment/blog/2019/08/actnow-for-zero-waste-fashion/>

LmunA 2022

of helping the European Commission's 'comprehensive strategy for the textile sector,' expected next year. It contains a detailed elaboration of the desired rules and measures.

Patagonia

Patagonia is a designer of outdoor clothing and gear for the silent sports: climbing, surfing, skiing and snowboarding, fly fishing, and trail running. They donate 1% of purchases to grassroots-environmental groups all around the world. Patagonia is committed to the circular economy. All clothing is made from recycled materials and all items are accepted at all stores for recycling.

Ireland

Ireland is the EU-country that recycles clothing the most. SaveOnEnergy found Google searches like "Clothes Recycling" are currently highest in Ireland. Ireland has more than 1,200 locations where you can drop your clothes off so they will be recycled. These locations have been there since 1992. The company behind these locations: Clothes Pod, partners with Green-Schools, to promote long-term, whole-school and wider community action for the environment.⁶



Figure 2: Clothes Pod.

Italy

Italy is the biggest country in producing textile and clothing waste. The country produces around 465,925 tons of textile waste each year, equal to 7.7 kg for each of its 60 million

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<https://www.clothespod.ie/>

LmunA 2022

people. Portugal, Austria and the UK follow Italy as the worst offenders for unsustainable clothing habits. However, its textile waste has decreased by 0.41% between 2008 and 2018.

H&M

In 2013 H&M globally rolled out their Garment Collecting program. H&M slogan includes "Let's close the loop." H&M have recycling boxes in their stores across the globe. In 2019, H&M launched a rental service in one of their stores in Stockholm where you can rent selected outfits from their Conscious Exclusive collections. Since 2013, the technology in H&M's stores has improved, with H&M using its in-store recycling machine loop and its Green Machine that separates cotton and polyester blends through a hydrothermal process to become more circular. H&M has more plans for the future, they want to use only recycled and sustainably sourced materials by 2030 in its brands' collections. They also want to become fully circular and climate positive by 2040.⁷

UNEA

The United Nations Environment Assembly (UNEA) brings together representatives of the 193 Member States of the UN, businesses, civil society and other stakeholders to agree on policies to address the world's most pressing environmental challenges. Their fifth session was held from the 28th of February till the 2 of March 2022. They have written multiple resolutions, not covering the clothing recycling problem yet.

Timeline of Key Events

1818	The oldest still existing clothing brand of America is found: Brooks Brothers.
1873	Great Economic depression. Start of global acceptance of ready-to-wear clothes
March, 1989	Zara opens its first store in NYC. Modern introduction to fast fashion
January 1 2009	China enacted "The Circular Economy Promotion Law"
September 6 2015	H&M celebrated their first fashion recycling week with planting a giant garment recycling box in Covent Garden.
December 12 2015	United Nations Paris agreement is signed
November 17 2016	Most expensive dress was sold for \$4.8 million.
October 3 2018	Chinese authorities ban import of used clothes
March 14 2019	UN Fashion Alliance launched

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https://www2.hm.com/en_ie/sustainability-at-hm/our-work/close-the-loop.html

<https://fashionunited.uk/news/business/how-effective-are-h-m-s-circularity-efforts/2021021953726>

Previous attempts to solve the issue

The lack of intervention concerning this issue has contributed to its exacerbation. Due to this, the issue has escalated to a global near-crisis, if there isn't action taken soon this crisis will expand. It is crucial that we produce new and more innovative ideas and solutions to this problem. In order to achieve this, we must acknowledge that we are starting with no beginning point seeing as little has been done to resolve this issue. Several attempts have been made by the media to raise awareness; however, it has a minimal impact on fast fashion.

Possible solutions

Recycling clothes is a subject that is difficult to solve. Issues like fashion, consumer awareness, technical solutions that are sustainable, interesting commercial solutions are some problems that should be solved. One thing is clear: the way we use clothing and waste it is no longer sustainable. Although there is an awareness in the modern world that we no longer go on like we did. Several companies are starting with new methods to recycle clothing.

Deposit system for clothing

The idea of a deposit system for clothing is not new. Much like Sutch 'statiegeld', which awards recyclers for recycling plastic bottles, there are several small initiatives to start this up in the fashion sector, with the main idea to stimulate the collecting of clothes by giving. A (small) amount of money or a discount. Therefore, the amount of recycled clothing will increase. As a side effect it also creates an awareness of the bad effects of a consumption society. The success of such a system depends also on the participation of the government and the big companies. And all the marketing that is involved. It can be the start of recycling clothes on a bigger scale.

Make regulations for the use of fabrics for clothing

One of the main problems with recycled clothing is the fact that most clothes are made of hybrid fabrics. It is a difficult process to separate them. If we can make regulations for the fabrics, it is easier to standardise the process for separation. After that it is important to make it interesting for companies to start a business in this field of work. So, the idea is to let the government and some big clothing companies show their awareness by starting, regulating and financing this kind of business.

Green earth clothing tax

A general tax on all clothing collected by the government to stimulate initiatives to recycle clothing and sustain the clothing business. A related solution is to organise brainstorming sessions to collect ideas and best practical solutions in order to start up these solutions to make them commercially interesting and give them starting money or a loan to start up.

A circular economy for textiles

Several big companies have started with activities to start with a circular system. Secondhand products of the company will be reused and refurbished in (separated) stores to sell. With prices of consumer goods that rise to the sky, there is probably a market for cheaper reused products.

Standardise all clothing

Only two standard clothing sets. One male and one female (by biological sex) will be available to the public as a solution to the clothing waste.

Prohibiting fashion-related media

Fashion-related media exposes society to fashion items they do not need. To make society purchase less clothing, they shouldn't be exposed to many fashion items, therefore we should make fashion-related media forbidden.

Bibliography

Beall, Abigail. "Why Clothes Are So Hard to Recycle." *BBC*, 13 July 2020,

www.bbc.com/future/article/20200710-why-clothes-are-so-hard-to-recycle

Chassagne, Titouan. "ActNow for Zero-Waste Fashion." *United Nations Sustainable*

Development, 15 Aug. 2019,

www.un.org/sustainabledevelopment/blog/2019/08/actnow-for-zero-waste-fashion/

"Clothing and Garment Manufacturing." [Www.encyclopedia.chicagohistory.org](http://www.encyclopedia.chicagohistory.org),

www.encyclopedia.chicagohistory.org/pages/300.html

Evans, Marni. "What Is Environmental Sustainability?" *The Balance Small Business*, 8 July

2020, www.thebalancesmb.com/what-is-sustainability-3157876

"Fashion Industry Statistics: The 4th Biggest Sector Is Way More than Just about Clothing."

Fashinnovation, 8 June 2021,

<https://fashinnovation.nyc/fashion-industry-statistics/#:~:text=Fashion%20Industry%20Statistics%3A%20General%20Data&text=Its%20value%20is%20equivalent%20to>

LmunA 2022

Geneva Environment Network. “Environmental Sustainability in the Fashion Industry.”

Www.genevaenvironmentnetwork.org, 19 Nov. 2021,

www.genevaenvironmentnetwork.org/resources/updates/sustainable-fashion/

“Global Carbon Project - Cicero.” *Www.cicero.oslo.no*,

www.cicero.oslo.no/en/posts/single/global-carbon-project Accessed 13 June 2022.

GOV.UK. “Government Unveils Plans for Wide-Ranging Waste Prevention Programme.”

GOV.UK, 18 Mar. 2021,

www.gov.uk/government/news/government-unveils-plans-for-wide-ranging-waste-prevention-programme

Guest, S. A. P. “SAP BrandVoice: How to Create Sustainable Fashion from Recycled

Clothing.” *Forbes*,

www.forbes.com/sites/sap/2019/06/19/how-to-create-sustainable-fashion-from-recycled-clothing/?sh=6fd5540b2c64 Accessed 13 June 2022.

H&M. “Let’s Close the Loop | Repair & Recycle | H&M.” *H&M*, 2018,

https://www2.hm.com/en_ie/sustainability-at-hm/our-work/close-the-loop.html

“Home.” *Clothes POD*, www.clothespod.ie/. Accessed 13 June 2022.

“Press Corner.” *European Commission* - *European Commission*,

https://ec.europa.eu/commission/presscorner/detail/en/QANDA_22_2015

Preuss, Simone. “How Effective Are H&M’s Circularity Efforts?” *Fashionunited.uk*, 19 Feb.

<https://fashionunited.uk/news/business/how-effective-are-h-m-s-circularity-efforts/2021021953726>

LmunA 2022

“The European Market Potential for Recycled Fashion | CBI - Centre for the Promotion of Imports from Developing Countries.” Www.cbi.eu, 30 Aug. 2021, www.cbi.eu/market-information/apparel/recycled-fashion/market-potential

United Nations. “Goal 13 | Department of Economic and Social Affairs.” *Sdgs.un.org*, United Nations, 2022, sdgs.un.org/goals/goal13.

---. “What Is Climate Change?” *United Nations*, 2020, www.un.org/en/climatechange/what-is-climate-change#:~:text=Climate%20change%20refers%20to%20long

Xerostech. “Why Fashion Must Turn off the Taps.” Www.xerostech.com, 27 Aug. 2021, www.xerostech.com/updates/why-fashion-must-turn-off-the-taps#:~:text=According%20to%20the%20UN%20one

Further reading

- <https://www.chemistryworld.com/features/recycling-clothing-the-chemical-way/4010988.article>
- <http://www.thepipettepen.com/make-textile-recycling-the-new-vogue-the-role-of-science-in-a-sustainable-fashion-future/>
- <https://www.theguardian.com/environment/2021/nov/06/clothes-made-from-recycled-materials-sustainable-plastic-climate>
- <https://research.wur.nl/en/projects/1-3c-1-recycling-and-end-of-life-strategies-for-sustainability-an>