



THE INTERSECTIONS OF ENVIRONMENTAL AND SOCIAL IMPACTS OF THE GARMENT INDUSTRY

Background paper for the Clean
Clothes Campaign

August 2022

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“The business model at the heart of fast fashion drives destruction of our planet’s social and environmental resources. Overconsumption of fast fashion is unsustainable for workers and the planet – both will suffer irreversibly if we do not change how we consume clothing globally.”



This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of Clean Clothes Campaign and do not necessarily reflect the views of the European Union.

August 2022

Clean Clothes Campaign (CCC) is a global network of labour and human rights organisations, including unions. It campaigns and advocates for the improvement of working conditions in the apparel and sportswear industry.

This paper is published by Pro Ethical Trade Finland - Eettisen kaupan puolesta ry (Eetti). Pro Ethical Trade Finland is a non-profit organisation that promotes trade justice, sustainable value chains and ethical consumption.

This publication is co-funded by the European Commission (DG INTPA), as part of the 3-year project "Filling the Gap: Achieving Living Wages through improved transparency". Please visit <https://cleanclothes.org/campaigns/filling-the-gap> for more information.

Contact: info@cleanclothes.org

Acknowledgments and context: This discussion paper was formulated in consultation with members and partners in the Clean Clothes Campaign network. The paper presents and contextualises known environmental impacts and impacts on climate changes and the intersections with labour rights, human rights, and social issues in the of the global garment sector. The paper aims to provide the Clean Clothes Campaign network and other stakeholders and CSOs with a summary of relevant, up-to-date information about these issues as well as typical responses from industry actors, stakeholders, and civil society. The content of the paper, and the actions outlined should be viewed as the initial steps towards formulating our position on intersections of environmental and social impacts and our goals for a just transition for the global garment industry.

01 Introduction

Clothing consumption and production is out of control

Demand for clothing continues to increase, particularly in growing consumer economies across the globe.¹ By 2030 global apparel consumption is projected to rise by 63%, from today's 62 million tons to 102 million tons - equivalent to more than 500 billion additional T-shirts.² By 2050 this figure is likely to be almost three times today's amount.³

Coherent with this development, utilisation rates of clothing have dropped significantly. The average number of times a garment is worn has decreased: a survey of 20 countries showed that consumers now wear less than 50% of items in their wardrobe.⁴ The average American bought 68 new pieces of clothing in 2019. In 1980 this figure was 12. Half of these items are now worn 3 times or less.⁵

Needless to say, all this has a dramatic impact on the environment. Estimates regarding the textile industry's share of the global CO₂ emissions vary between 3% and 10%.⁶ Research indicates that the textile industry causes significant industrial water pollution⁷: 35% of micro plastics found in waterways originate from washing textiles,⁸ and the production of cotton uses

¹ Fibre2Fashion (2020). "Global Apparel Market Outlook - An Overview". *Fibre2Fashion*.

<https://www.fibre2fashion.com/industry-article/8698/global-apparel-market-outlook-an-overview>

² Ellen MacArthur Foundation (2017). *A New Textiles Economy: Redesigning Fashion's Future*, p. 19.

https://www.ellenmacarthurfoundation.org/assets/downloads/publications/A-New-Textiles-Economy_Full-Report.pdf

³ Ellen MacArthur Foundation (2017). *A New Textiles Economy: Redesigning Fashion's Future*, p. 21.

https://www.ellenmacarthurfoundation.org/assets/downloads/publications/A-New-Textiles-Economy_Full-Report.pdf

⁴ van Elven, M. (2018). "People do not wear at least 50 percent of their wardrobes, says study". *Fashion United*. <https://fashionunited.uk/news/fashion/people-do-not-wear-at-least-50-percent-of-their-wardrobes-according-to-study/2018081638356>

⁵ Thomas, D. (2019). "The High Price of Fast Fashion" *Wall Street Journal*. <https://www.wsj.com/articles/the-high-price-of-fast-fashion-11567096637>

⁶ On recent research on the environmental and climate impact of the global garment industry, see the article "The clothing industry produces 3 to 10% of global greenhouse gas emissions, as accurately claimed in Patagonia post" (2020) by *Climate Feedback* (a global network of scientists reviewing claims in climate change media coverage) here: <https://climatefeedback.org/claimreview/the-clothing-industry-produces-3-to-10-of-global-greenhouse-gas-emissions-as-accurately-claimed-in-patagonia-post/> or the report by Quantis (2018) *Measuring Fashion: Environmental Impact of the Global Apparel and Footwear Industries Study* here: https://quantis.com/wp-content/uploads/2018/03/measuringfashion_globalimpactstudy_full-report_quantis_cwf_2018a.pdf.

On finding reliable data about the environmental and climate impact of the global garment industry, see Wickler, A. (2020) "Fashion has a misinformation problem. And that's bad for the environment" on Vox here: https://www.vox.com/the-goods/2020/1/27/21080107/fashion-environment-facts-statistics-impact?fbclid=IwAR0QL8IzBDVS-DAC9-1VRDVLZszy1TV_yvSkOk18-u8N2N4r4ROqkLZzLrU

⁷ Chequer, F. M. D., et. al. (2013). "Textile Dyes: Dyeing Process and Environmental Impact" in *Eco-friendly Textile Dyeing and Finishing*. Ed. Gunay, M., IntechOpen. <https://www.intechopen.com/chapters/41411#B6>

⁸ Boucher, J. and D. Friot, (2017). "Primary microplastics in the oceans: a global evaluation of sources", *IUCN*. DOI: <https://doi.org/10.2305/IUCN.CH.2017.01.en>

more pesticides and insecticides than any other single major crop. Generally, up to three kilograms of chemicals are needed to produce one kilogram of cotton garments.⁹

02 Garment industry, clothing consumption and climate change

According to some estimates, the fashion industry's global greenhouse gas emissions add up to more than the total emissions of all international flights and maritime shipping combined.¹⁰ Projections made about the development of the industry impact suggests that if the industry continues on its current path, by 2050, it could use more than 26% of the carbon budget associated with the 2°C pathway. That is over a quarter of the world's carbon budget taken up by the fashion industry alone.¹¹ The greenhouse gas emissions emitted by the industry are generated at all stages in the supply and value chain, through raw material production, processing and assembly, logistics, and in customer product care and end-of-life disposal.

Ever increasing mass production of garments is causing significant CO2 emissions exacerbating climate change, which impacts people in at-risk countries in the Global South, countries which often also produce garments to consumer economies in the Global North. The impacts of climate change can already be observed with drought and crop failure in India, flooding in Indonesia, climate change induced natural disasters in Bangladesh and more. Climate disasters force people to migrate, making them vulnerable to exploitation in sectors such as the garment industry. In addition to this climate change induced disasters also occur in districts with many factories.

Climate change is already impacting communities in 'climate-vulnerable' countries, including communities of garment workers.

⁹ Ellen MacArthur Foundation (2017) *A New Textiles Economy: Redesigning Fashion's Future*.
https://www.ellenmacarthurfoundation.org/assets/downloads/publications/A-New-Textiles-Economy_Full-Report.pdf

¹⁰ The World Bank (2019) "How Much Do Our Wardrobes Cost the Environment?". *The World Bank*.
<https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente>

¹¹ Ellen MacArthur Foundation (2017) *A New Textiles Economy: Redesigning Fashion's Future*, p. 20.
https://www.ellenmacarthurfoundation.org/assets/downloads/publications/A-New-Textiles-Economy_Full-Report.pdf

Internal migration is one of the effects of climate change that is already making workers more vulnerable to exploitation by the garment industry.¹² In Bangladesh, two-thirds of land lies less than 5 metres above sea level. Flooding and rising levels of salinity in water tables in coastal regions are causing the land in these areas to be unsuitable for agriculture, and, as a result, farmers are increasingly abandoning farms and moving to the cities¹³ where they join urban slum populations and seek work for example in the garment industry.¹⁴

Migrant workers are vulnerable to exploitation as they lack the social support networks and immediate family structures which often provide support for child care and generally help to mitigate or distribute risk. As can already be observed in Dhaka and Chittagong's urban slums, poor housing, lack of school and health facilities, and limited access to clean water and hygiene, are just some of the consequences of rapidly growing populations around factories, linked to internal migration.¹⁵ Social infrastructure is not adequately developed to accommodate the increasing population thus causing further risks for health and safety for people working in the factories.

In 2019 and 2020, production hubs in Indonesia experienced severe floods washing away urban slum areas where factory workers live.¹⁶ In Karnataka state in India – a major garment producing hub - 80% of districts were hit by drought and crop failure in 2019. A government think tank reported that 40% of India's population will have no access to drinking water by 2030.¹⁷ Changing weather patterns also affect cotton farmers in India as well as across the world.¹⁸

¹² Plowman, A. (2016) "Bangladesh's Disaster Capitalism", *Jacobin*. <https://jacobin.com/2016/01/bangladesh-rana-plaza-rmg-garment-industry-climate-change-environment>

¹³ International Food Policy Research Institute (2018). Press release: "New Study: Sea Level Rise to Force 200,000 To Migrate from Bangladesh Coastal Areas". *Ifpri.org*. <https://www.ifpri.org/news-release/new-study-sea-level-rise-force-200000-migrate-bangladesh-coastal-areas>

¹⁴ Marshall, R. and S. Rahman (2013). *Internal Migration in Bangladesh: Character, Drivers and Policy Issues*. United Nations Development Programme. <https://www.undp.org/bangladesh/publications/internal-migration-bangladesh-character-drivers-and-policy-issues>

¹⁵ Unicef (2015). *The Ready-Made Garment Sector and Children in Bangladesh*, pp.10-11. https://sites.unicef.org/csr/files/CSR_BANGLADESH_RMG_REPORT.PDF

¹⁶ Aditya, A. et. al. (2020). "Hundreds of Thousands Flee as Flooding in Jakarta Kills 53". *Bloomberg.com*. <https://www.bloomberg.com/news/articles/2020-01-03/indonesia-flood-kills-30-hundreds-of-thousands-flee-their-homes-k4xq0z7g>. Jakarta itself, which houses many garment factories (see open apparel registry), is sinking year after year due to climate change, with 40% of the city now below sea level.

¹⁷ The Guardian (2019) "Indian villages lie empty as drought forces thousands to flee". *The Guardian*. <https://www.theguardian.com/world/2019/jun/12/indian-villages-lie-empty-as-drought-forces-thousands-to-flee>

¹⁸ Fairtrade Foundation (2020) *Fair Trade and Cotton*. (Commodity briefing). *Fairtrade Foundation*. https://www.fairtrade.org.uk/wp-content/uploads/2020/10/Cotton_commodity_briefing_2020.pdf

03 Threats to the environment and health from farm to factory - pollution and water use

There are negative impacts on the environment caused by production of textiles are often also harmful for people. When we speak about textile materials we generally speak of natural and synthetic (man-made) fibres. The two most used fibres for garments are polyester, which is synthetic, and cotton which is a natural fibre, both of which have their specific negative impact on the natural environment. But also forms of textiles and leather are implicated in pollution and causing harm to ecosystems and the health of workers.

Polyester is made from crude oil

Polyester remains the most common fibre on the market with 52% of the global market share.¹⁹ Polyester is a synthetic fibre dependent on fossil fuel extraction as it is made from crude oil. The manufacturing process of the fibre is energy intensive and causes water pollution - microplastics are released into waste water and grey water both across manufacturing as well as from laundry during the life cycle of polyester garments.²⁰ Clothes made from polyester or similar types of textiles release half a million tonnes of micro fibres into the ocean every year, equivalent to more than 50 billion plastic bottles.²¹ This waste is adding to already serious plastic pollution issues that are harming animals and polluting water sources.

Cotton and pesticides

Cotton is a remarkably unsustainable product for both workers and the environment, yet it is the second most used fibre in textiles. It accounts for 23% of the global fibre market, and for 90% of all natural fibres used in the textile industry.²²

¹⁹ Textile Exchange (2020). Preferred Fiber and Materials Market Report 2020, p.5. *Textile Exchange*. https://textileexchange.org/wp-content/uploads/2020/06/Textile-Exchange_PREFERRED-Fiber-Material-Market-Report_2020.pdf

²⁰ EEB, Circle Economy and Fair Trade Advocacy Office (2020). *Avoiding Blind Spots: Promoting Circular and Fair Business Models*. https://eeb.org/wp-content/uploads/2020/11/avoiding-blind-spots_report.pdf

²¹ Ellen MacArthur Foundation (2017). *A New Textiles Economy: Redesigning Fashion's Future*, p. 39. https://www.ellenmacarthurfoundation.org/assets/downloads/publications/A-New-Textiles-Economy_Full-Report.pdf

²² Fashion Revolution (2015). *It's Time for a Fashion Revolution*, p. 12. Fashion Revolution. https://www.fashionrevolution.org/wp-content/uploads/2015/11/FashRev_Whitepaper_Dec2015_screen.pdf

Cotton farming harms land and soil due to the immense water use as well as use of pesticides and insecticides. To produce the cotton needed for just one shirt, you need up to 2,700 litres of water.²³ Fertilisers and pesticides that are damaging the planet are also poisoning families of workers.^{24, 25}

The production of cotton threatens food security in places often already affected by shortage of clean water and food. Water resources used in cotton production could have been used for food production in countries that experience hunger and poverty. Cotton cultivation also drives the deforestation. It is estimated that by 2030, the fashion industry could be using over 115 million hectares that otherwise could be used to grow crops for feeding the increasing population.²⁶

Excessive use of fertilizers, pesticides and other chemicals is still common in cotton farming, particularly in smallholder farming, despite advances in farming technologies. Cotton covers just 2.4% of the world's cultivated land but uses 5.7% of the world's pesticides (and 16% of insecticides),²⁷ more than any other single major crop.²⁸

These chemicals filter into the groundwater, polluting large areas of land and threatening the health of farmers, as well as local communities. Thousands of cotton farmers and their families suffer from pesticide poisoning every year.²⁹

The use of pesticides also has a huge social impact on farmers. Research shows smallholder cotton farmers often earn under \$2 a day, yet are made to spend up to 60% of their annual income on pesticides.³⁰ Reports show that suicides of farmers have been linked to this economic hardship.³¹

Organic cotton can have a lower environmental impact than conventional cotton, because no

²³ World Wildlife Fund & National Geographic (2013). *The Impact of a T-Shirt*. (Video).

<https://www.youtube.com/watch?v=xEExMcjSkwA>

²⁴ Pesticide Action Network UK (2020). "Pesticide concerns in cotton". <https://www.pan-uk.org/cotton/>

²⁵ On sustainability of cotton, see also Organic Trade Association (2018) *Cotton and the Environment*, https://ota.com/sites/default/files/indexed_files/Cotton%20and%20the%20Environment%20Final%20July%202018.pdf, EJAtlas (2017) "Cotton production at Aral Sea, Uzbekistan and Turkmenistan", <https://ejatlas.org/conflict/the-aral-sea-dried-due-to>

²⁶ Global Fashion Agenda and Boston Consulting Group (2017). *Pulse of the Fashion Industry*, p.15. <https://globalfashionagenda.org/product/pulse-of-the-fashion-industry-2017/>

²⁷ Pesticide Action Network, (2018). *Is Cotton Conquering its Chemical Addiction?* https://issuu.com/pan-uk/docs/cottons_chemical_addiction_-_update?e=28041656/62705601

²⁸ Ibid.

²⁹ For more on existing studies and underreporting of chemical exposure data: Pesticide Action Network, (2018). *Is Cotton Conquering its Chemical Addiction?* https://issuu.com/pan-uk/docs/cottons_chemical_addiction_-_update?e=28041656/62705601 p. 50

³⁰ Pesticide Action Network UK (2020). "Pesticide concerns in cotton". <https://www.pan-uk.org/cotton/>

³¹ Fairtrade Foundation (2015). "Cotton is failing to provide a profitable livelihood for small scale farmers". <https://www.fairtrade.org.uk/media-centre/news/cotton-is-failing-to-provide-a-profitable-livelihood-for-small-scale-farmers/>

synthetic pesticides and fertilizers are used. However, the share of organic cotton in the global cotton market remains under 1%, even if it is growing steadily with increased demand.³²

Chemicals used in the production of textiles, shoes and accessories are harming workers and the environment

A quarter of all chemicals produced in the world are used in textiles.³³ Chemicals used in leather, viscose and other textile production are harming the health of workers and the residents in the communities around the factories, as it pollutes water sources and destroys ecosystems.

Leather tanning and health impact in Bangladesh

According to the World Health Organisation (WHO), 90% of people who live and work in the urban slums in Hazaribagh and Kamrangirchar die before they reach the age of 50.³⁴ The two districts are major hubs for leather tanning, for which large amounts of hazardous chemicals, such as chromium and production mostly takes place with little safety measures taken on health protection or waste water management. Although not exclusively linked to leather, this statistic, reported by the WHO, undoubtedly owes a large debt to the industry situated in these small, densely populated districts.

Hazardous chemicals from leather tanneries are discharged into the air, streets and river, and workers report discoloured, itchy, peeling, acid-burned, and rash-covered skin; fingers corroded to stumps; aches, dizziness, and nausea; and disfigured or amputated limbs. Evidence also suggests elevated cancer rates among workers dealing with chemicals used for leather tanning.³⁵ Child labour in this industry is still common according to the Human Rights Watch report '*Toxic Tanneries*', with children as young as 8 found to be employed in production.³⁶ The issue was also highlighted in the Change Your Shoes project.³⁷

Production pollutes local water sources

The *Dirty Fashion* report on viscose manufacturing, found that factories in China and India dump untreated wastewater, contaminating local lakes and waterways. In Jiangxi, China, the viscose industry has been a factor in the pollution of Poyang Lake, turning the water black, killing fish and shrimps, and stunting crop growth. Growing incidences of cancer were

³² Textile Exchange (2021). *Organic Cotton Market Report*, p. 27. https://textileexchange.org/wp-content/uploads/2021/07/Textile-Exchange_Organic-Cotton-Market-Report_2021.pdf

³³ Changing Markets (2020). *Dirty Fashion: Crunch Time*. <http://changingmarkets.org/wp-content/uploads/2020/12/CM-WEB-DIRTY-FASHION-CRUNCH-TIME-DEC-2020-1.pdf>

³⁴ Boseley, S. (2017). "Child labourers exposed to toxic chemicals dying before 50, WHO says". *The Guardian*.

³⁵ Human Rights Watch (2012). *Toxic Tanneries: The Health Repercussions of Bangladesh's Hazaribagh Leather*. <https://www.hrw.org/sites/default/files/reports/bangladesh1012webwcover.pdf>

³⁶ *ibid*.

³⁷ Südwind, et al. (2017). *Watch Your Step! A Study on the Social and Environmental Impacts of Tanneries in Uttar Pradesh and Tamil Nadu, India*. Change Your Shoes project. http://labourbehindthelabel.net/wp-content/uploads/2017/12/CYS_report_Watch-Your-Step_India-ENG-1.pdf

reported, and villagers stopped drinking the well water in fear of the effect it could have on their families and children.

In Madhya Pradesh, India, viscose factories were found to be polluting the Chambal River, where downstream villages reported dark black water with streaks of red and an intense smell of rotting, indicating the presence of carbon disulphide. Families using the river suffer cancer and birth deformities, as their groundwater and soil have been contaminated by industrial pollution.³⁸

In Indonesia, textile factories are dumping textile waste and water from bleaching and dyeing of fabrics into the Citarum river, which is a major water source for Jakarta. This has led to mass pollution of the river basin, with fish stocks dying out or born deformed, and farmers with rice paddies flooded by the river experience abrasions on their feet.³⁹

04 Textile waste

Textile waste includes both the waste cut-off fabrics generated in production, the new unsold garments and those garments disposed of by the consumer when they no longer want it. The vast amounts of waste either end up in the oceans or in landfills or they are incinerated.⁴⁰

Much of our clothing waste ends up in the oceans, either as whole garments that break down over time, or through particles – micro plastics from polyester and similar fabrics – being released in washing, causing damage to ecosystems, where it is eaten by animals.⁴¹

The booming second-hand industry raises new challenges

The mass influx of second-hand clothes dumped in African countries has caused a waste problem and is damaging local textile production and job creation.⁴²

The second-hand and clothing reuse industry is a proactive response to recent fashion trends and mainstream criticism to overproduction, however, there are some concerns about its

³⁸ Changing Markets (2017). *Dirty Fashion: How Pollution in the Global Textile Supply Chain is Making Viscose Toxic*. http://changingmarkets.org/wp-content/uploads/2017/06/ENGLISH_DIRTY_FASHION_EX_SUMMARY_FINAL_SPREAD_PAGE_WEB.pdf

³⁹ Freischlad, N. (2019). "In Indonesia, cleaning up the Citarum, 'the world's dirtiest river', is now a military operation". *South China Morning Post*. <https://www.scmp.com/magazines/post-magazine/long-reads/article/2180655/indonesia-cleaning-citarum-worlds-dirtiest-river>

⁴⁰ Ellen MacArthur Foundation (n.d.). "Redesigning the future of fashion". <https://ellenmacarthurfoundation.org/topics/fashion/overview>

⁴¹ Boucher, J. and D. Friot, (2017). "Primary microplastics in the oceans: a global evaluation of sources", *IUCN*. DOI: <https://doi.org/10.2305/IUCN.CH.2017.01.en>

⁴² Katende-Magezi, E. for CUTS International (2017). The Impact of Second Hand Clothes and Shoes in East Africa. <https://www.tralac.org/images/docs/12012/the-impact-of-second-hand-clothes-and-shoes-in-east-africa-cuts-international-research-study-february-2017.pdf>

negative impact. Unsold second-hand clothes are likely to be shipped to and dumped in local markets in the Global South. In Uganda, for example, approx. 81% of all clothes sold today are cast-offs from the west. It has been widely reported that this influx of second-hand clothing to countries in the Global South is destroying local textile and tailoring economies.⁴³

05 Responses from the industry and civil society to mitigate or resolve environmental issues and climate impact of the garment industry

CSR tactics to manage brand image

72% of consumers think clothing brands should be responsible for what happens during the manufacturing process. Over half (56%) would be put off from buying from brands associated with pollution.⁴⁴ In theory, this should lead to consumers being able to make a difference with their shopping habits. In practice however, brands bombard consumers with multiple labels and CSR stories about specific areas of work, deliberately used to divert attention away from critical scrutiny and often addressing only some areas of environmental and social concern while ignoring others. The use of CSR marketing therefore makes it near impossible for consumers to know how to make a responsible choice. The proliferation of these tactics, combined with poor transparency means brands can increasingly greenwash their real impact on the environment, without addressing the true structural issues in supply chains.

Circular economy and future of fashion

⁴³ BBC News (2016). "Why East Africa Wants to Ban Second-Hand Clothes". *BBC News*.
<https://www.bbc.com/news/world-africa-35706427>

⁴⁴ Changing Markets (2019). *Dirty Fashion Disrupted: Leaders and Laggards Revealed*.
http://changingmarkets.org/wp-content/uploads/2019/12/CM_REPORT_FINAL_DIRTY_FASHION_DISRUPTED_LEADERS_AND_LAGGARDS_REVEALED.pdf

As a response to the waste issue in the global economy generally, the concept of circular economy has been taken up by progressive actors in the fashion industry. Circular economy makes great promises to solve some of the most pressing issues related to overuse of natural resources and problems related to waste. It suggests an alternative model for production and consumption enabling the decoupling between environmental degradation and growth by reshaping the business model and creating opportunities for sustainable development within planetary boundaries.

A sectoral plan for textiles in the Circular Economy Action Plan has been identified as a priority in the European Green Deal, which also sets out the Commission's zero pollution ambition for a toxic-free environment. While circular economy is expected to offer solutions to the environmental damage caused by the industry, it does not automatically address social and human rights implications. Jobs that are created as a result of innovations in circular economy can be precarious and forced labour and labour rights violations in recycling facilities may occur. There have been reports about child and forced labour in textile sorting in Europe and India.^{45, 46}

Voluntary corporate measures are failing to deliver change

The fashion industry has marked its own homework for too long. Auditing, used systematically across the industry by companies to check if factories meet social and environmental standards, has been shown to fail time and time again. The system not only fails to give true information about what is happening on the ground, but actively makes factories more dangerous by providing a false sense of security through checks that fail to represent a true picture of environmental or social concerns.

Key examples include the Ali Enterprises Factory that burnt down in September 2012 killing 250 people, just three weeks after being awarded SA8000 certification by audit company RINA, and the Rana Plaza building that collapsed in April 2013 after passing audits from TUV Rheinland.⁴⁷ Reports^{48, 49} show that similar failures of self-certification occur in environmental auditing.

This issue has long been known to CCC, which is why the network calls for strong due diligence legislation.⁵⁰

⁴⁵ Doherty, J. (2018). "East European textile 'slaves' found by Northumbria police". Let's Recycle. <https://www.letsrecycle.com/news/east-european-textile-slaves-found-by-northumbria-police/>

⁴⁶ Arisa and Sympany (2020). *Textile Recycling Unravelling*. <https://arisa.nl/wp-content/uploads/TextileRecyclingUnravelling.pdf>

⁴⁷ Clean Clothes Campaign (2019). *Fig Leaf for Fashion: How social auditing protects brands and fails workers*. <https://cleanclothes.org/file-repository/figleaf-for-fashion.pdf/view>

⁴⁸ Clean Clothes Campaign (2019). *Fig Leaf for Fashion: How social auditing protects brands and fails workers*. <https://cleanclothes.org/file-repository/figleaf-for-fashion.pdf/view>

⁴⁹ See also the *Dirty Fashion* reports by Changing Markets. <https://changingmarkets.org/portfolio/dirty-fashion/>

⁵⁰ See Clean Clothes Campaign (2021) *Fashioning Justice* for a comprehensive account on due diligence legislation: https://cleanclothes.org/file-repository/fashioning_justice.pdf/view

06 Concluding remarks

Negative environmental impact equals negative human rights impact

The environmental impact of the garment industry is also a human rights issue. The implication of the fashion industry in the global ecological and social crisis, did not occur by accident, but through decades of economic domination and exploitation. Multinational corporations (MNCs) based in Western countries have exploited the human and natural resources of poorer nations to produce cheap goods, control markets and make immense profit, further solidifying their global power.

Poorer communities, especially in the Global South where the majority of clothing production takes place, are the first to face the effects of the pollution and climate crisis - poor air quality, over-exploitation and misuse of natural resources, hunger, public health crises, drought, floods and displacement.⁵¹ A systematic undermining of power (of women, of people of colour, of people of low income) and lack of voice given to worker communities in across all garment producing countries, has deliberately silenced people who would speak out about the destruction of the earth's natural resources and ecology.⁵²

There is no justice for the planet without justice for people - and vice versa. Significant efforts must be made to ensure workers and their representatives are allowed to take power and a central role in co-creating the transformative change necessary to fix fashion production system. Brands have the resources and the responsibility to pay a living wage and remediate the environmental destruction they may have caused directly or indirectly.

In 2019, the textile industry generated \$1.9 trillion.⁵³ The 20 largest businesses in the sector account for approximately 97% of the industry's global retail profits.⁵⁴ Thereby wealth and profits remain in the hands of this small group of corporations. This stands in sharp contrast to the poverty wages earned by garment workers and the environmental destruction of production countries in order to generate massive profits. Against this backdrop it is obvious that it is not enough to redesign production while maintaining economic inequality and suppression of workers' rights.

⁵¹ For more on this, see Plowman, A. (2016) "Bangladesh's Disaster Capitalism", *Jacobin*.

<https://jacobin.com/2016/01/bangladesh-rana-plaza-rmg-garment-industry-climate-change-environment>

⁵² Wretched of the Earth (2019). "An open letter to extinction rebellion". *Red Pepper*.

<https://www.redpepper.org.uk/an-open-letter-to-extinction-rebellion/>

⁵³ Global Fashion Agenda and Boston Consulting Group (2019). *Pulse of the Fashion Industry*, p.15.

<https://globalfashionagenda.org/product/pulse-of-the-fashion-industry-2019/>

⁵⁴ Hanbury, M. (2018). "20 companies dominate the world's fashion industry. Here's who makes the list".

Business Insider. <https://www.businessinsider.com/nike-zara-ti-maxx-top-list-global-fashion-brands-2018-12?international=true&r=US&IR=T#10-kering-gucci-alexander-mcqueen-balenciaga-1>

Lack of transparency hurts the environment and workers' rights

Poor regulation of the globalised market has stifled the development of protections for workers and the environment. The relentless drive for cheaper production encourages countries with weak governance to compete for global business by degrading both labour rights and environmental standards.⁵⁵ For the environment, cost cutting leads to practices like illegal dumping of waste in rivers. For workers, this surfaces as employers increasingly use short term contracts to avoid paying seniority benefits and pushing forced overtime.

The cost of environmental and social responsibility falls on production countries, but rarely paid for through retail or purchase value. This means there are often insufficient means at lower levels of supply networks to meet costs such as paying living wages, upgrading energy efficiency in factories, sustainable disposal of waste, etc.⁵⁶

The global garment sector is characterised by lack of transparency. The complexity of garment production and the lack of data about where clothes are made means that environmental and social damage is often hidden from consumers, from the workers, even from governments. Companies often use the excuse of complex value chains, confidentiality of contractual obligations or the claim that transparency will compromise their competitiveness.

The lack of transparency allows for abuses of workers' rights and natural resources to go unchecked. Instead, all brands should be subject to the obligation to publish in a transparent and accessible manner all their supply chain information: transparency is an important part of due diligence and is crucial to ensure access to remedies in that it enables CSOs, journalists, worker organisations and unions, affected communities as well as enforcement authorities to hold companies accountable for human rights violations and environmental harms in their supply chain. But operating transparently does not make a business sustainable. It will always be a tool, not a goal in and of itself.⁵⁷

⁵⁵ See for example the repression of wage struggles in Bangladesh; Clean Clothes Campaign (2020) "A year after crackdown on wage protests in Bangladesh, hundreds of workers still face retaliatory charges", <https://cleanclothes.org/news/2020/a-year-after-crackdown-on-wage-protests-in-bangladesh-hundreds-of-workers-still-face-retaliatory-charges> or Khan, A. and G. Milne (2019) "Why Bangladesh's dependence on FDI means low wages and poor working conditions for garment workers will continue" *London School of Economics and Political Science*. <https://blogs.lse.ac.uk/southasia/2019/09/05/why-bangladeshs-dependence-on-fdi-means-low-wages-and-poor-working-conditions-for-garment-workers-will-continue/>

⁵⁶ House of Commons Environmental Audit Committee (2019) *Fixing Fashion: clothing consumption and sustainability*, pp. 13-14. <https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/1952/1952.pdf>

⁵⁷ Clean Clothes Campaign (2020). *Position paper on Transparency*. https://cleanclothes.org/file-repository/transparency_position_paper_ccc_2020-10-15.pdf/view

07 Recommendations

People and the planet go hand in hand. There is no ethical garment industry without sustainability for the planet. At the same time, solving the climate crisis cannot be done without addressing the systematic denial of human rights for the people who live in communities experiencing first-hand the consequences of climate change. They must be allowed to take power and be given the opportunity to negotiate transformative change, co-creating an industry that protects our planet's social and environmental resources.

Overconsumption is unsustainable for workers and the planet – both will suffer irreversibly if we don't change fast fashion and the model behind how we consume clothing globally.

To avoid loss of employment in the countries currently producing the majority of the textiles, social dialogue and forward-looking governance of the industries is required - at the global and national level.⁵⁸

The following are some concrete steps that companies, governments, and the European Union can take to respond to some of the critical issues raised in this report:

Chapter	Recommendations
Climate	<p>Companies must:</p> <ul style="list-style-type: none">• Set publicly communicated, science-based targets for reducing the total emissions of whole supply chains and report on their performance. Where possible and if reliable data exist, calculations should be based on real data instead of static databases.• Collaborate with other industry actors to reduce the use of fossil energy in factories located in high-risk countries. This can be done for example through national or international industry-wide MSIs.⁵⁹ A clear signal must be sent to producing countries that markets are moving towards a low-carbon economy.• Shift to circular models / different material mix as part of GHG reduction strategies.• Brands must respect human rights, and as such pay a living wage. This enables people to fight for their rights, including environmental rights or the adaptation to climate change. <p>Governments and the EU must:</p> <ul style="list-style-type: none">• Governments must ensure that they reach national targets for carbon neutrality.

⁵⁸ ILO (2019). *Working Paper No. 326: The future of work in textiles, clothing, leather and footwear*. ISBN: 978-92-2-132930-5 or https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_669355.pdf

⁵⁹ For example, the German Partnership for Sustainable Textiles seeks to establish such collaboration. The initiatives are discussed with CSO members and need to involve CSO members of the PST and/or CSOs in the production country in the implementation. However, there are also elements to be criticised. See Clean Clothes Campaign and Femnet (2021) *Discussion paper on (the lack of) transparency in the Partnership for Sustainable Textiles*. https://cleanclothes.org/file-repository/lack_of_transparency_in_the_pst_ccc_discussion_paper_final.pdf/view. For Amfori BEPI system, another tool that companies can use to facilitate the reduction of fossil energy use at production facilities in risk countries, see FinnWatch (2019) *Supply chains as black as coal*. https://finnwatch.org/images/pdf/Supply_chains_coal_Finnwatch.pdf

	<ul style="list-style-type: none"> ● Governments must follow consumption-based (direct and lifecycle GHG emissions) of goods and services and define sectoral, science-based reduction targets. ● The EU must continue the timely roll out and implementation of the European Green Deal proposals announced in December 2019, including the adoption of an EU climate law with a 2030 climate target of at least 65% emissions reductions; the decarbonisation of energy intensive industries through the EU Industrial Strategy; a new EU law on deforestation to ensure that products on the EU market are not linked to deforestation, forest degradation or ecosystem destruction; taking into account the sustainable blue economy in the implementation of the European Green Deal; setting a headline target on halving the EU's material footprint by 2030 in the EU's Circular Economy Action Plan; mobilising additional public and private funds for financing the Green Deal; and integrating the European Green Deal in the programming process of the EU external budget and Neighbourhood, Development and Cooperation instrument ● The EU must offer support to third countries to adhere to the same principles as in Europe.
Pollution and water	<p>Companies must:</p> <ul style="list-style-type: none"> ● Increase transparency in waste water management and chemicals management. ● Substitute hazardous chemicals; ensure establishment of inventories of chemicals; train suppliers of safe use, handling, and disposal of chemicals; ensure accuracy of wastewater data, support and contribute to the establishment of publicly accessible Pollutant Release and Transfer Registers. ● Reduce the sourcing and processing of virgin materials and increase the use of more sustainable materials (organic, rainwater-fed cotton or recycled cotton and polyester) and alternative fibres, such as hemp, linen and lyocel. Companies must report on their progress in increasing the use of more sustainable materials in relation to the total raw material use. ● Mitigate and remedy contamination and pollution that are linked to garment production. <p>Governments and the EU must:</p> <ul style="list-style-type: none"> ● The garment industry is characterized by overconsumption. To achieve the EU Strategy's aim to build sustainable and circular consumption and production patterns, the EU should not steer away from developing binding rules and targets for member states and companies on extended producer responsibility, carbon emissions, waste management, or sourcing and processing of raw materials and chemicals. ● The EU Textiles Regulation makes labelling of textile products mandatory but the information is limited to fibre name and composition with washing instructions. The Commission must explore options to enhance the label by additional information on circularity aspects (durability and recycled content), chemicals, GHG emissions, and microplastics release potential.⁶⁰
Waste & circularity	<p>Companies must:</p> <ul style="list-style-type: none"> ● Set clear targets for reducing the overall amount of waste generated in their value chains. ● Rethink business models and move away from a profit-maximising rationale, towards a mission-driven one. A circular approach may help companies create value by disconnecting profit from production volume, through slowing, narrowing and/or recycling resources as well as reducing waste and consumption of new materials. ● Reduction of production must be accompanied with the respect of workers' rights and assuring socially just transition programmes. ● Enforce social performance up and downstream in value chains by integrating social and environmental metrics and due diligence through a company's sourcing policies and private sector initiatives. ● All producers should fund the end-of-life management of the products that they put on the market. Extended Producer Responsibility schemes (EPR) can be a useful instrument in this regard, provided they reflect the waste hierarchy and are based on a democratic governance also involving civil society actors and social enterprises.⁶¹

⁶⁰ Fair Trade Advocacy Office in collaboration with a number of other CSOs including Clean Clothes Campaign (2020). *European Strategy for Sustainable Textile, Garments, Leather and Footwear*. <https://fairtrade-advocacy.org/wp-content/uploads/2020/07/Civil-Society-European-Strategy-for-Sustainable-Textiles.pdf>

⁶¹ Fair Trade Advocacy Office in collaboration with a number of other CSOs including Clean Clothes Campaign (2020). *European Strategy for Sustainable Textile, Garments, Leather and Footwear*, p. 15. <https://fairtrade-advocacy.org/wp-content/uploads/2020/07/Civil-Society-European-Strategy-for-Sustainable-Textiles.pdf>

	<p>Governments and the EU must:</p> <ul style="list-style-type: none"> • Ensure that circular business models displace linear ones by developing comprehensive policy frameworks to incentivise circular businesses. • Ban incinerating or landfilling unsold stock that can be reused or recycled. • Make fashion retailers take responsibility for the waste they create through the Extended Producer Responsibility scheme for textiles and reward companies that take positive action to reduce waste. The Waste Framework Directive already stipulates separate collection of textiles by January 2025. This requires significant improvement in the collection of textile waste in all Member States. • The EU must establish an integrated product policy framework for textile products, based on lessons learned under the Eco-design Directive. Producers will have to meet legally binding minimum requirements for design in order to have access to the EU market.⁶² • The EU must ensure that manufacturing outside of the EU (of products placed on the EU market) is required to meet the same standards as manufacturing within the EU through import restrictions of hazardous chemicals (both SVHC and beyond). Products made from recycled materials should fulfil the same minimum, environmental requirements as products made from virgin materials. Minimum requirements on products and recycled materials should be complemented by minimum requirements on social, human rights and governance.⁶³
Transparency & regulation	<p>Companies must:</p> <ul style="list-style-type: none"> • Increase transparency in value chains, e.g. at least by signing on to the Transparency Pledge on disclosing supplier data (which provides for very minimum reporting requirements) and utilising the Open Apparel Registry system to list their suppliers. • Require solid reporting on environmental management from suppliers, and increase transparency in waste, waste-water and chemical management. • Improve sourcing practices and policies and increase FOB prices to ensure that the prices allow suppliers to manage waste and environmental risks, worker health and safety, as well as living wages. • Support development and implementation of national and international due diligence legislation on emissions limits, materials, waste management and use of chemicals in the industry, alongside information on social impacts and human rights. <p>EU and governments must:</p> <ul style="list-style-type: none"> • Introduce ambitious mandatory human rights and environmental due diligence legislation instead of relying on voluntary measures, putting in place an obligation on companies to respect human rights in their operations and supply chains. This includes: transparency on the due diligence process, on the entire supply chain, on wages paid in the supply chain, worker rights, gender rights, freedom of association across the value chain and the awareness of risks and rights all the way down the supply chain, according to the “leave no-one behind” principle.⁶⁴ • Strengthen the Non-Financial Disclosure Directive and its General and Sectoral Reporting Standards to: <ul style="list-style-type: none"> a. specify clear mandatory requirements for reporting on human rights risks, impacts and their management based on the UNGPs, require supply-chain disclosure (production units and processing facilities) from, at a minimum, companies in high-risk sectors where violations are rife, such as garment. The supplier list should include machine-readable information on all production units and processing facilities, such as, at least the name, address, and parent company of the business, type of products made and number of workers at each site. • Trade agreements need to be made fully consistent with international agreements, sustainability requirements and goals to avoid negative impacts on nature and people. • Ensure that civil society – unions, NGOs and worker groups – are invited to contribute to the design of any steps towards a circular economy. Strong input from and on behalf of existing and future

⁶² Ibid.

⁶³ Ibid.

⁶⁴ Clean Clothes Campaign (2020). *Position paper on Transparency*. https://cleanclothes.org/file-repository/transparency_position_paper_ccc_2020-10-15.pdf/view. This paper is part of the Filling the gap; Achieving Living Wage Through Transparency project. See the full list of recommendations on transparency in the paper.

	<p>workers is vital to create a future industry that tackles both environmental and social challenges at the same time.⁶⁵</p> <ul style="list-style-type: none"> • Ensure that the EU's upcoming Textile Strategy, that aims to sustainable and circular consumption and production patterns, supports binding rules and targets for Member States and companies on extended producer responsibility, carbon emissions, waste management, or sourcing and processing of raw materials and chemicals.
	<p>Consumers and citizens can:</p> <ul style="list-style-type: none"> • Demand that both social and environmental justice is delivered in the fashion industry, starting with a change to the business model and purchasing practices. • Support civil society and engage with associations or decision makers to address the structural issues affecting the environment and employees.

⁶⁵ For example, the Just Transition Centre, set up by ITUC, brings together workers and their unions, communities, businesses and governments in social dialogue to ensure that labour has a seat at the table when planning for a Just Transition to a low-carbon world: <https://www.ituc-csi.org/just-transition-centre>