Self regulation: a fashion fairytale

Greenpeace has proved that Detoxing fashion supply chains is a game changer; but without regulation, fashion as usual will continue its destructive impacts on the climate

Part 1: Progress of Detox committed brands on hazardous chemicals and slowing the flow/closing the loop

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This page: Factory Worker in Guangdong Province
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Part 1: Progress of Detox committed brands on hazardous chemicals and slowing the flow/closing the loop

A report by Greenpeace Germany

Image: “Detox” Striptease in Bangkok
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Executive Summary

Ten years ago Greenpeace launched its Detox My Fashion campaign to address the problem of hazardous chemicals found by our investigators in effluent from textiles supply chain factories, in products and in the environment, despite decades of regulation and corporate responsibility programmes. With the help of hundreds of thousands of supporters and activists, the campaign secured global commitments to Detox from 80 companies and suppliers,[1] to achieve zero discharges of hazardous chemicals in their supply chain manufacturing by 2020 and greater transparency about these hazardous chemical discharges. From 2014, brands also committed to tackle the problem of over-production and waste and take responsibility for the entire lifecycle of their clothes by “slowing the flow and closing the loop”.

One year after the 2020 deadline, we decided to see if these companies are still serious about their commitments. We’ve assessed the 29 global brands and retailers based on current information published on their websites - as a ‘blind check’[2] - to see; firstly, whether the significant progress that had already been made on hazardous chemicals, evaluated in our 2018 report Destination Zero, is being maintained beyond the 2020 goal, and secondly if any effective measures have been adopted to reduce the overproduction of clothes and counter the ‘fast fashion’ trend. We provide an overview of these findings in Part I, and full details of the assessments in Part II.

The assessment on hazardous chemicals is mostly positive. On the whole, the momentum that was started by the Detox campaign is being maintained, with leading companies and several industry stakeholders taking responsibility for not only securing the 2020 goal but also promoting it to the entire textile sector (for example ZDHC, the group of textiles suppliers in Italy (Detox Consortium (CID)), OEKO-TEX, Bluesign). It is still a work in progress, and there is of course much more to be done, particularly the need to expand the Detox success story to

the remaining 85% of the clothing market that did not commit to Detox. There are also signs of a new 'race to the bottom', with the same polluting practices we found in Asia and Central America during the Detox campaign now shifting to Africa, when the clothing industry should be building on the best practice instead.

However, the overriding problem of overproduction and overconsumption in the fashion industry is impossible to ignore; all of the impacts on health, the environment and people from fashion are multiplied by the growing volumes of clothing being produced and sold. The excesses, unfairness and instability of fast fashion were cruelly exposed by the Covid pandemic. The extreme overproduction and overconsumption of fashion led to large quantities of clothes that were not being sold, some of which ended up being destroyed.

While businesses in Europe were sheltered from the impacts of Covid, global supply chains and the people dependent on them in Global South countries took the full economic impact of the pandemic when orders were cancelled at suppliers, leaving workers unpaid and whole communities on the brink of survival.

Not surprisingly, the assessment on slowing down the overproduction of clothes is not so positive. The commitments to slow the flow and close the loop were mostly not implemented at anything like the scale required to truly address the problem. Most efforts have been aimed at closing the loop (circularity), but very little has been done to slow the flow of excess - leaving the fast fashion business model unchanged and maintaining its notoriety as a significant contributor to the global climate and biodiversity crisis.

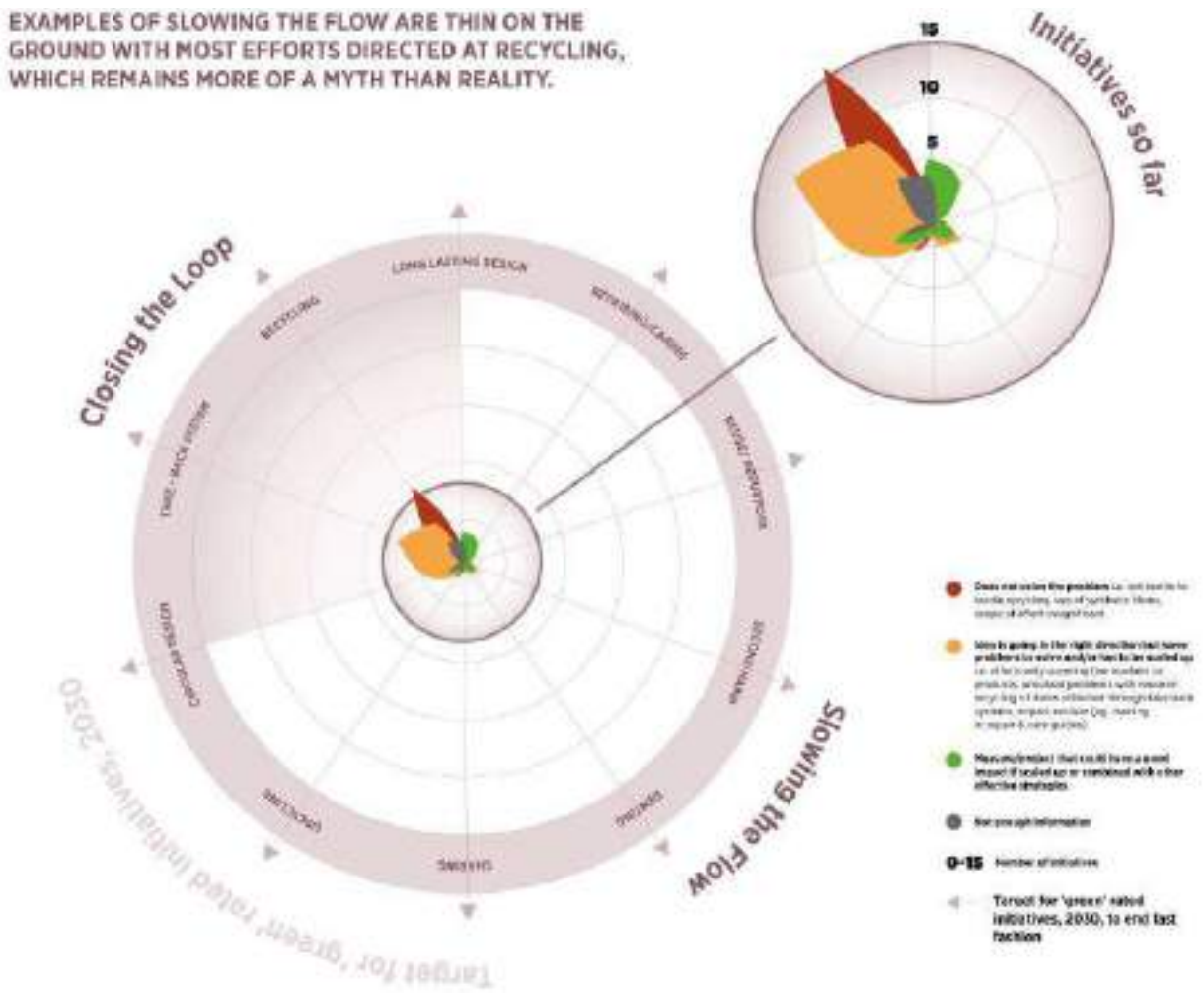


Figure 1: Initiatives by the 29 committed brands on slowing the flowing and closing the loop

Finally - and most importantly - we discuss whether what is essentially self-regulation is the solution to both of these problems and conclude that it is not. There will always be companies that will not take any action unless they are required to by regulation, whether that's cutting corners on hazardous chemicals and water pollution in Africa or speeding up the turnover of "disposable" plastic clothing. There is therefore an urgent need for regulators to level the playing field, both locally (EU) and globally. Under pressure from the Greenpeace Detox My Fashion campaign, the Detox committed brands have proved that working with suppliers to eliminate hazardous chemicals in supply chain facilities can be done,[3] but the majority of fashion brands are still not taking responsibility for this problem. Meanwhile the fast fashion business model which has led to "disposable fashion" being considered as "normal" continues to dominate the production of clothes.

As this diagram shows, the environmental impacts of fashion are mostly taking place in the countries where all of our clothes are made - especially in East Asia, Asia and Turkey: therefore a good part of the emissions and impacts in these countries occur because of consumption in the Global North.

In the face of the great planetary climate and biodiversity crises - with a third crisis of chemicals recently proposed - regulators must finally take responsibility for changing the way that fashion is made. Now is the time, as there is a unique opportunity, with two policy proposals currently being considered by EU regulators- a strategy for sustainable textiles, and a due diligence law on global supply chains. We are urging regulators to take bold action and serve notice to the fashion industry that business as usual cannot continue, and that companies using practices that devastate the planet and people's lives will be regulated out of the market and held to account.

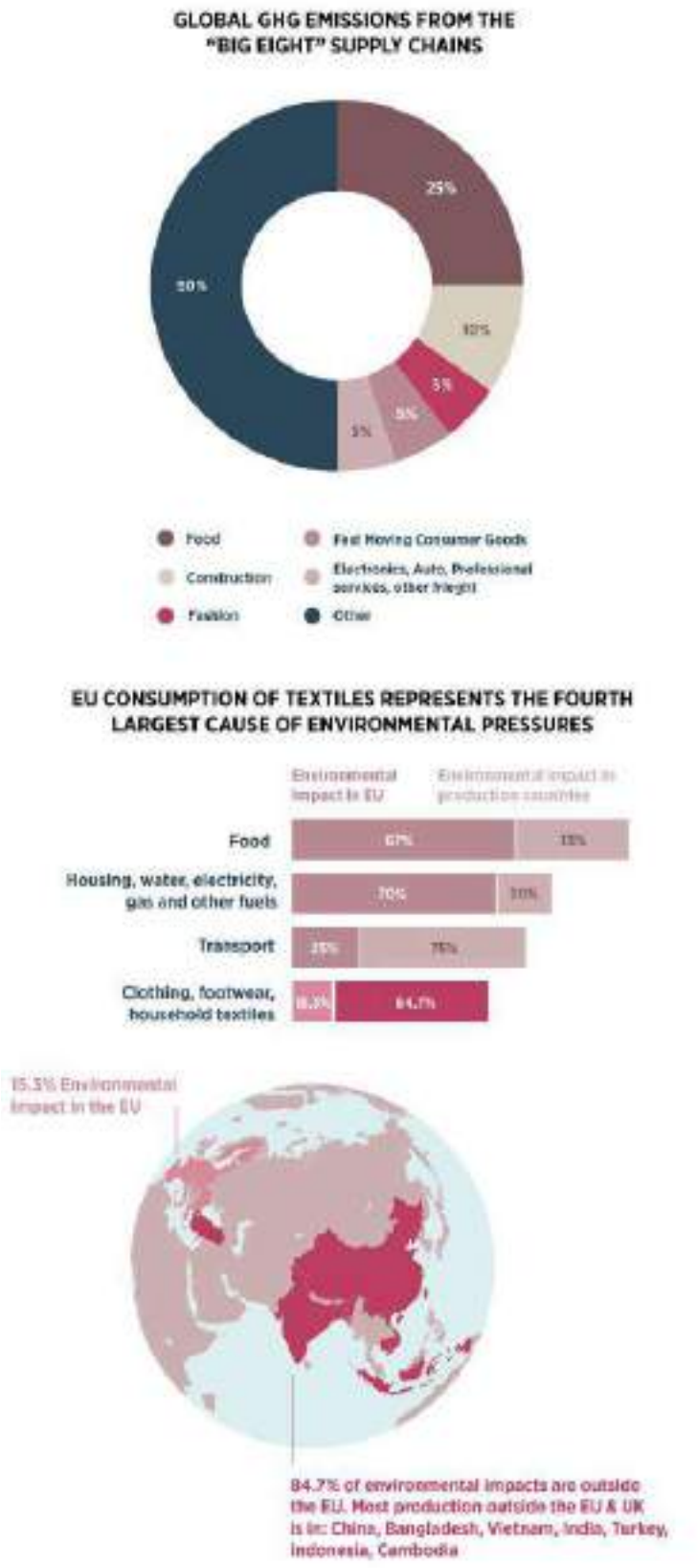
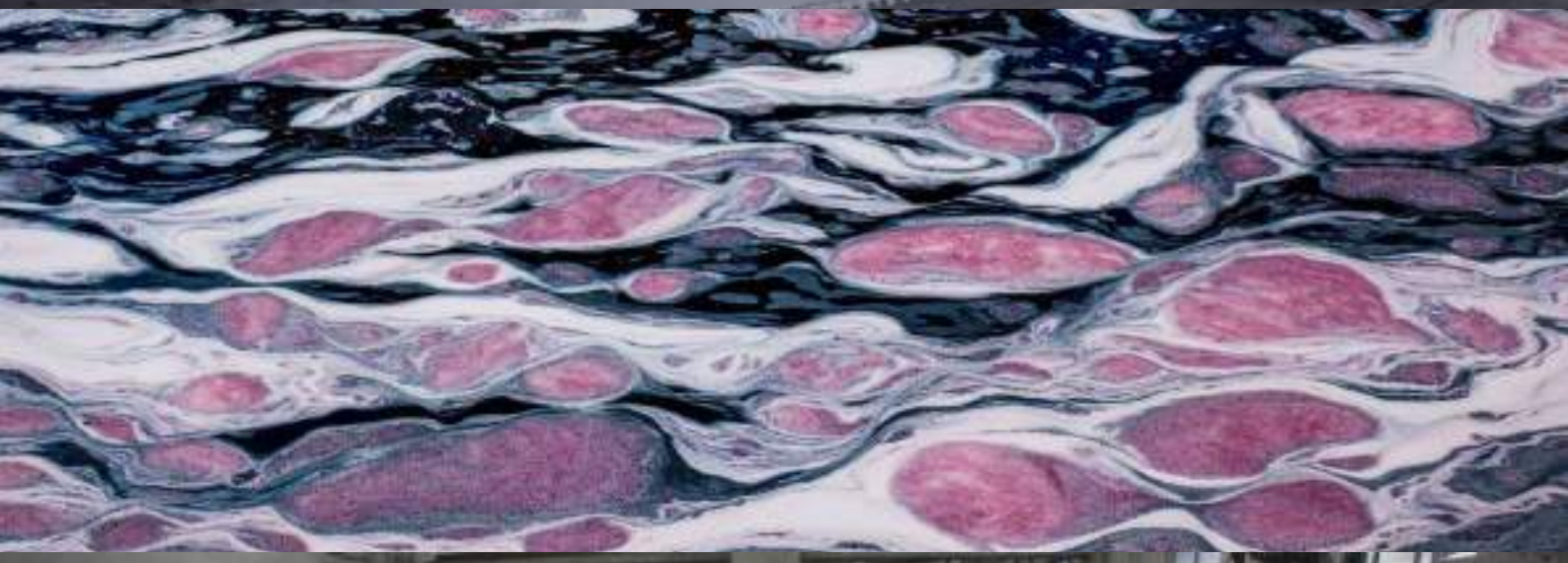


Figure 2: Fashion is a major sources of greenhouse gases and is pushing on critical environment boundaries; the production of fashion for Western consumers is a major source of Global South impacts emissions



From the top
Cormorant Oil Field in the North Sea © Marten van Dijl / Greenpeace
Smoke from dyeing factories© Lu Guang / Greenpeace
River Pollution in West Java © Andri Tambunan / Greenpeace
Dye Factory in Shaoxing © Lu Guang / Greenpeace

1. Introduction to Detox-ing the textiles supply chain

Background on the Greenpeace Detox My Fashion campaign

The textiles industry is well known as a major user of hazardous chemicals[4] and industrial polluter of freshwater worldwide.[5] For many years local communities have witnessed multi-coloured rivers, as a result of effluent from the dyeing and processing of clothes for global and local clothing brands. In 2011 when Greenpeace started its Detox My Fashion campaign, most brands were not clearly associated with this pollution of rivers and waterways and did not take responsibility for the problem. The colourful effluents were hiding an even more serious and sometimes invisible problem - hazardous chemicals - some of which are known to cause cancer or disrupt hormonal systems in humans and/or animals. With insufficient control from national and local authorities, these effluents pollute freshwater resources and eventually the ocean - in some cases leading to the build up of hazardous chemicals in the food chain[6] - and impacting the health and livelihoods of local communities in the Global South.[7] Hazardous chemicals know no boundaries; they can be transported by ocean currents or in the air, some can remain in the final products and are washed out into local wastewater systems when consumers launder their clothes. Washing clothes made of synthetic fibres from the petrochemical industry, which make up about 60 percent of textiles sold today, also releases microplastic fibres into waterways. The "forever chemicals" PFCs, used for waterproofing outdoor clothing, are released into the atmosphere and are global contaminants, which are even found in remote mountain regions across the globe.

The approach of the Detox campaign to solve this urgent issue, was to convince global brands to start taking responsibility for their supply chains and manufacturing processes and to work with their suppliers towards toxic-free production. With the support of hundreds of thousands of people from around the globe, the Detox campaign managed to engage 80 leading brands and suppliers, from fashion and sportswear, to luxury, multiple retailers and the outdoor sector, to commit to eliminate all hazardous chemical use and discharge to wastewater from their supply chains by 2020 via a public Detox commitment. Each Detox commitment included an individual action plan with an ambitious timeline for the following key steps:

- Setting up a Manufacturing Restricted Substance List (MRSL) including all hazardous chemicals to be eliminated in the entire supply chain
- Elimination policies for priority chemical groups such as Alkylphenols (APs) and Alkylphenol Ethoxylates (APEOs), per- and polyfluorinated chemicals (PFCs) and phthalates
- Publishing the wastewater testing results of wet process facilities
- Publishing a suppliers list, including wet process facilities
- Regular Detox progress reports

Achievements of the Detox My Fashion campaign: A paradigm shift from consumer safety towards responsibility for impacts in the supply chain, starting with zero discharges of hazardous chemicals

As documented in previous reports, the Detox My Fashion campaign managed to catalyze a real paradigm shift within the textile industry.

Ten years ago, before the start of the campaign, for most global fashion brands chemical management just meant providing "safe" products to the consumer. Therefore, they regularly tested their products against a list of restricted substances (RSL) to make sure the levels of chemicals found in their clothes conformed to legal requirements, minimising any risk to health when worn by their customers.

When Greenpeace launched the Detox My Fashion campaign, global fashion brands

claimed that setting up a list of chemicals to be eliminated from the entire supply chain (a Manufacturing RSL, or MRSL), disclosing their supply chains and even testing the wastewater of wet processing facilities for those chemicals and publishing the results was not necessary[8] or impossible to do.

Today it is a "must have" for responsible brands and a necessary step towards achieving their ultimate goal of toxic free production and zero discharges of hazardous chemicals into the environment.

This paradigm shift in the textile industry, that was catalyzed by the Detox movement, includes the following key achievements:

- A shift from looking at the end product only, towards also looking at the entire manufacturing process, where most of the pollution actually happens
- A shift from consumer safety towards also protecting workers, communities and the environment from hazardous chemicals used by production facilities
- A shift from testing final products towards also testing wastewater and input chemicals
- The implementation of the Precautionary Principle.[9]
- Transparency and implementing the Public's Right to Know:
  - Ensuring that suppliers publish wastewater tests regularly
  - Supply chain disclosure (publishing suppliers lists including wet processing facilities)

A blind check to find out if brands are still reporting on and implementing their Detox commitments after 2020

Greenpeace last reviewed the progress of Detox brands in 2018, with its report "Destination Zero" which showed that all of the committed brands and companies were delivering on the elimination of hazardous chemicals in a complex and global supply chain - although not all at the same pace.

But is this still the case beyond 2020, the deadline for Detox brands to achieve toxic free production? Are they continuing to implement and report on their commitments even without the pressure of an active Greenpeace campaign? Do they keep their commitments to Public Right to Know by disclosing their supply chains and publishing progress reports and wastewater data from their production facilities?

To verify this, Greenpeace did what could be called a "blind check": unlike previous reports, we did not get in touch with the Detox committed brands to ask them for an update on their progress, but we simply researched and analysed all the publicly available information on brands' websites and reports instead. In this way we could find out what they are doing without feeling the pressure of a global environmental organization like Greenpeace checking on them.

For the scope of the review, we mainly focused on the 29 brands with Detox Commitments, and not the individual and collective suppliers' commitments, as these brands are required to provide overall Progress Reports.

The trend towards zero discharge of hazardous chemicals continues

In general, the findings of this research are quite positive and show that most brands keep up the transparent reporting, have been working hard towards toxic free production over recent years and are planning to continue doing so.

More than half of the Detox brands ensure their suppliers publish wastewater data for 80% - 100% of their wet processing facilities at least once a year. This data shows that many have managed to eliminate hazardous chemicals from over 90% of their facilities,

including priority chemical groups such as APEOs, PFCs, and phthalates. Many of them have also disclosed 80% to 100% of their suppliers, but some are still not including wet processing facilities. While some continue to work on this issue beyond 2020 and maintain their reporting on progress despite a less active Greenpeace Detox campaign, for just under a third the last dedicated Detox update was in 2019, and for some others even 2018 or earlier, as the issue does not seem to be a priority for them anymore.

To summarize, the majority of the brands keep up the implementation and transparent reporting of their Detox commitments. The trend towards zero discharge continues, even though more work by the entire industry needs to be done to achieve it completely. A more detailed overview of the findings of this "blind check" on the key milestones of the Detox Commitment is in Part 2 firstly, on implementing supply chain transparency and the publication of wastewater test results, and secondly, on the progress towards zero discharge of hazardous chemicals.

Transparency, supply chain disclosure, Public Right to Know

Percentage of suppliers publishing wastewater data

More than half of the brands ensure that their suppliers publish wastewater data for 80% - 100% of their wet processing facilities at least once a year. H&M, C&A, as well as the German retailers Rewe/Penny, and Kaufland are leading the way and are testing all of their suppliers, while Primark only reports testing 32 sites out of 928 global suppliers and Lidl only 21 out of 570 main production facilities. No information about the number of facilities tested was given by Nike, Fast Retailing, Li Ning and Paramo. And finally, although Marks and Spencer includes the ZDHC MRSL (v.1) in its minimum standards for wet processing facilities, it does not require them to do Detox level wastewater testing, since "Detox" reporting is specifically marked as optional, and M&S does not report on the number or percentage of facilities which have actually done this.

Public accessibility of the wastewater data

Most brands publish their wastewater data either on the public platform of the Institute for Public & Environmental Affairs (IPE) or the ZDHC (Zero Discharges of Hazardous Chemicals) foundation or both. While the data on IPE is publicly accessible (login is required) and shows the brands, their suppliers lists, and suppliers' environmental data, with a pop-up window to show companies' wastewater data, on the ZDHC' Roadmap to Zero the public can view the "Detox live" map that shows if a supplier is meeting ZDHC's requirements or not, however, the actual wastewater data is only accessible by brands and suppliers. Although the ZDHC Gateway is a useful industry tool, it does not help communities living by the discharge pipes, civil society or consumers who have the Right to Know about hazardous chemicals being released into our waterways. However, some brands are going all in with transparency and are publishing the wastewater data of their suppliers on their own websites: While Benetton and Rotauf are brave enough to include names and addresses of their suppliers with the testing results, Valentino just shows their location on a map, and Inditex, Burberry and Miroglio Fashion publish the results on their own websites but do not give names and addresses of suppliers.

Supply chain disclosure

Many brands publish a list of 80% to 100% of their suppliers on their websites and most of them include wet processing facilities (mostly tier 2, see figure 7). Some brands, such as Burberry and Li Ning still do not disclose their supply chain at all, and others such as M&S, Victoria's Secret, Mango and retailers Coop and Lidl only disclose tier 1 (cut and sew suppliers, usually does not include wet

processing facilities), while Rewe does not specify the tiers included in its list.

Public reporting

Many monitored brands have published a Detox progress report in 2020, but for just under a third of them their last dedicated Detox update was in 2019, and as far back as 2018 for Inditex, Mango and Esprit.

Also, nearly a third of the brands monitored did not include detailed wastewater results or analysis in their latest reports. These are adidas, Nike, Levi's, Primark, M&S, Coop, Li Ning and Paramo.

On the other hand, some brands have published very detailed, insightful and open reports, including summaries for 2020, which identify trends over recent years. This shows that for brands that take this issue seriously, are committed and dedicate enough resources to it, the hard work pays off and zero discharge will be achievable.

Full details of Greenpeace's assessment and findings on the elimination of hazardous chemicals and wastewater data analysis are presented in Part 2 of this report: Evaluation of Detox Committed brands, 2021 - the ten-year milestone.

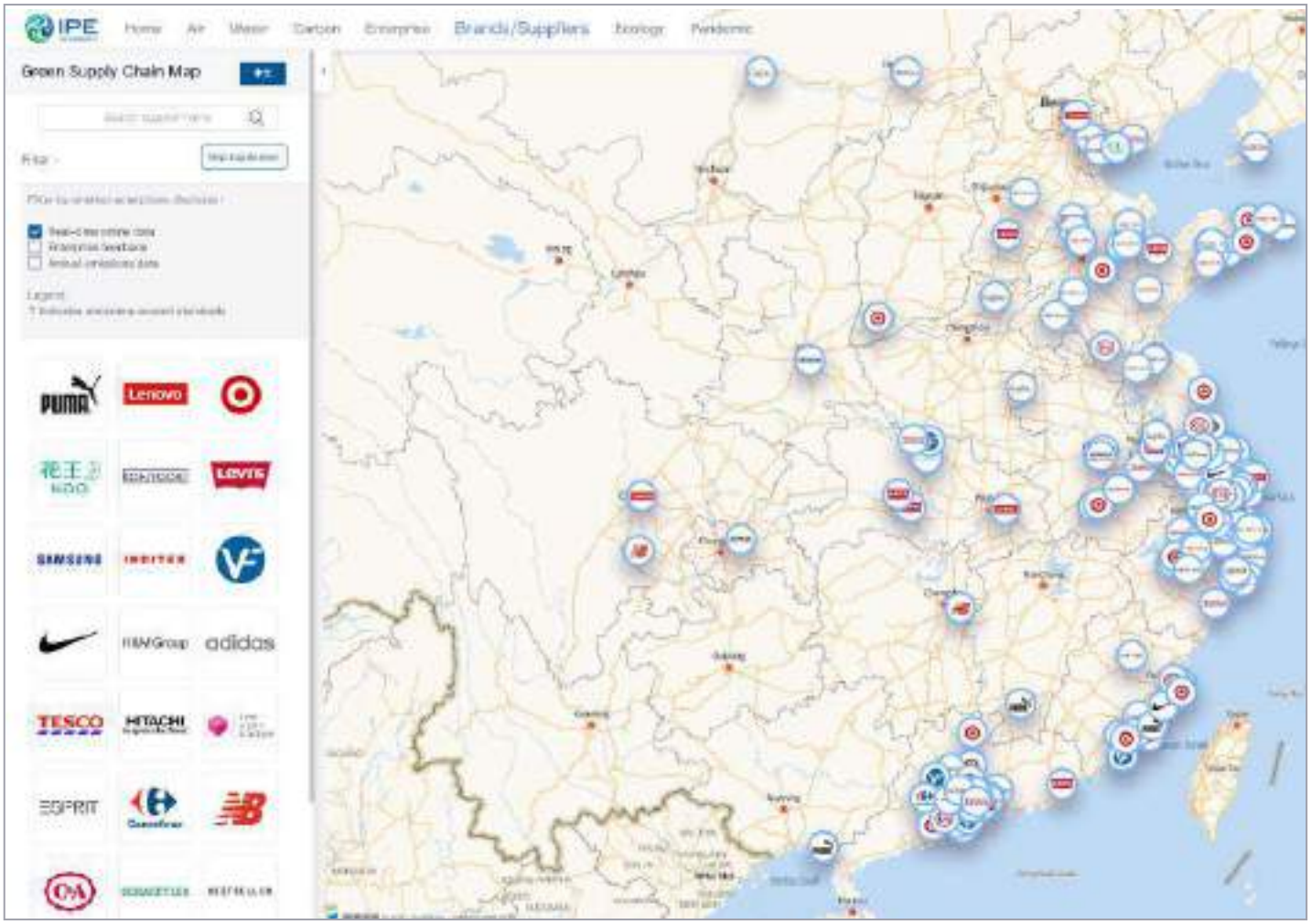


Figure 3: IPE Green Supply Chain map, showing suppliers for brands which report wastewater data [10]

Figure 4a: ZDHCs Detox Live platform, showing all the suppliers that submit their wastewater data [11]

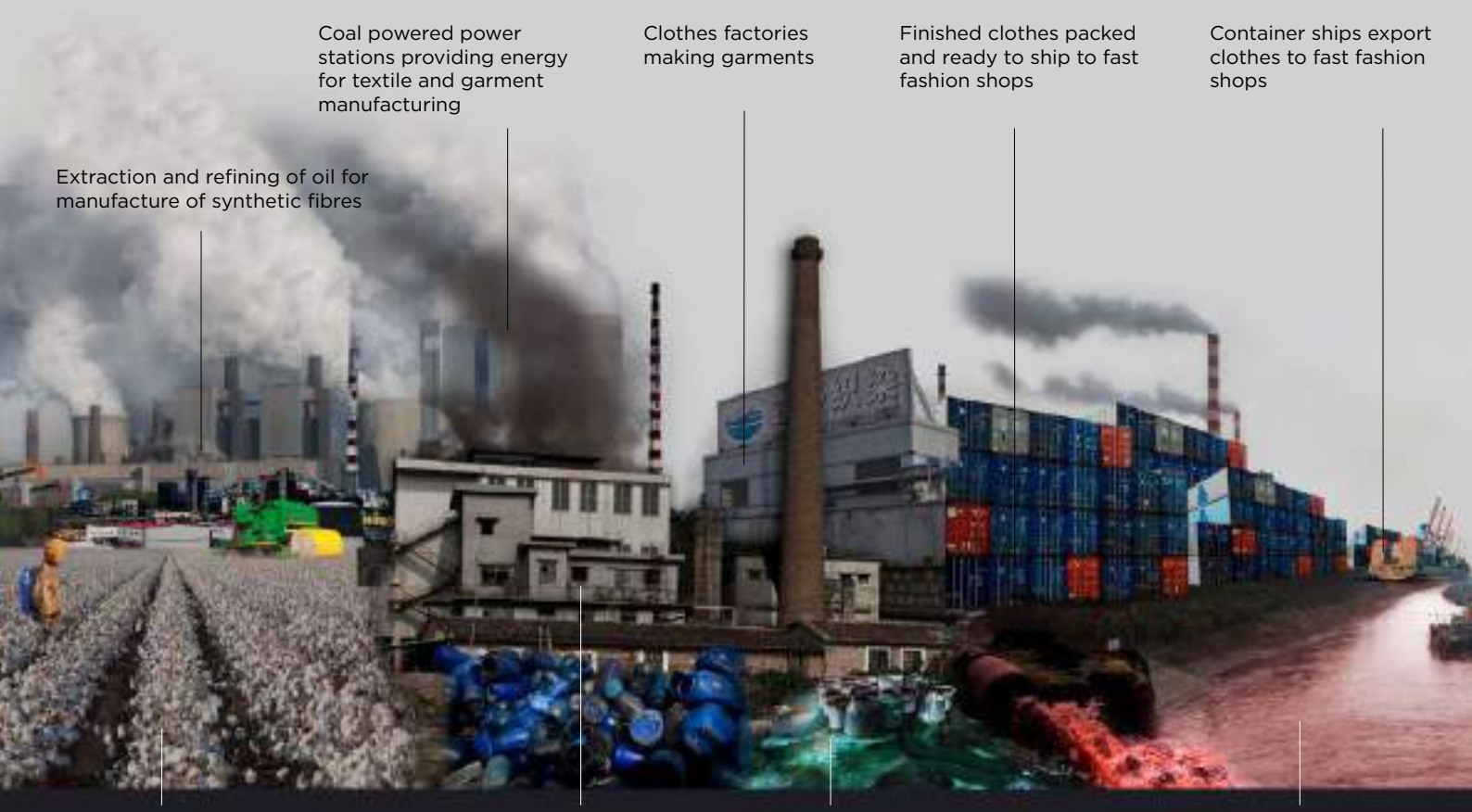
Figure 4b: ZDHCs Detox Live platform, showing some brands that link to their suppliers

Image: Detox Catwalk in Bandung
© Greenpeace / Hati Kecil Visuals

2. Introduction to the growing problem of overproduction and consumption

With the rise of fast fashion, the textile industry has grown explosively in the last two decades. Sales of clothing have nearly doubled from 1 trillion dollars in 2002 to 1.8 trillion dollars in 2015, projected to rise to $2.1 trillion by 2025. Nowadays fast fashion brands constantly offer new styles[12] to buy and produce about 52 “micro-seasons” a year. This means at least one new “collection” every week, and companies like H&M and Forever 21 both get daily shipments of new styles. This has led to consumers seeing cheap clothes more and more as “perishable goods” that are worn a few times, if at all - and then thrown away at an ever increasing rate. For example, in Germany, a party top is used on average 1.7 times and is then discarded.[13] The average person buys 60 percent more items of clothing every year and keeps them for about half as long as 15 years ago.[14] The huge rise in online shopping is fueling this trend even more, further encouraged by the Covid pandemic: as predicted in November 2020, the fashion e-commerce market is expected to grow further at 11.4% per year and reach a total market size of over $1 trillion by the end of 2025.[15] In the UK, half of online clothes shoppers have returned fashion items they purchased online, but for some, the inconvenience of returning goods proves too much trouble, as a third (34%) of them have kept products they don’t want due to the hassle of returning them.[16] The impact of the pandemic has ruthlessly revealed the incredible scale of the current overproduction: in Germany it is estimated, for example, that 500 million apparel[17] and footwear winter season products were unsold from December 2020 to January 2021, when clothes shops were closed.

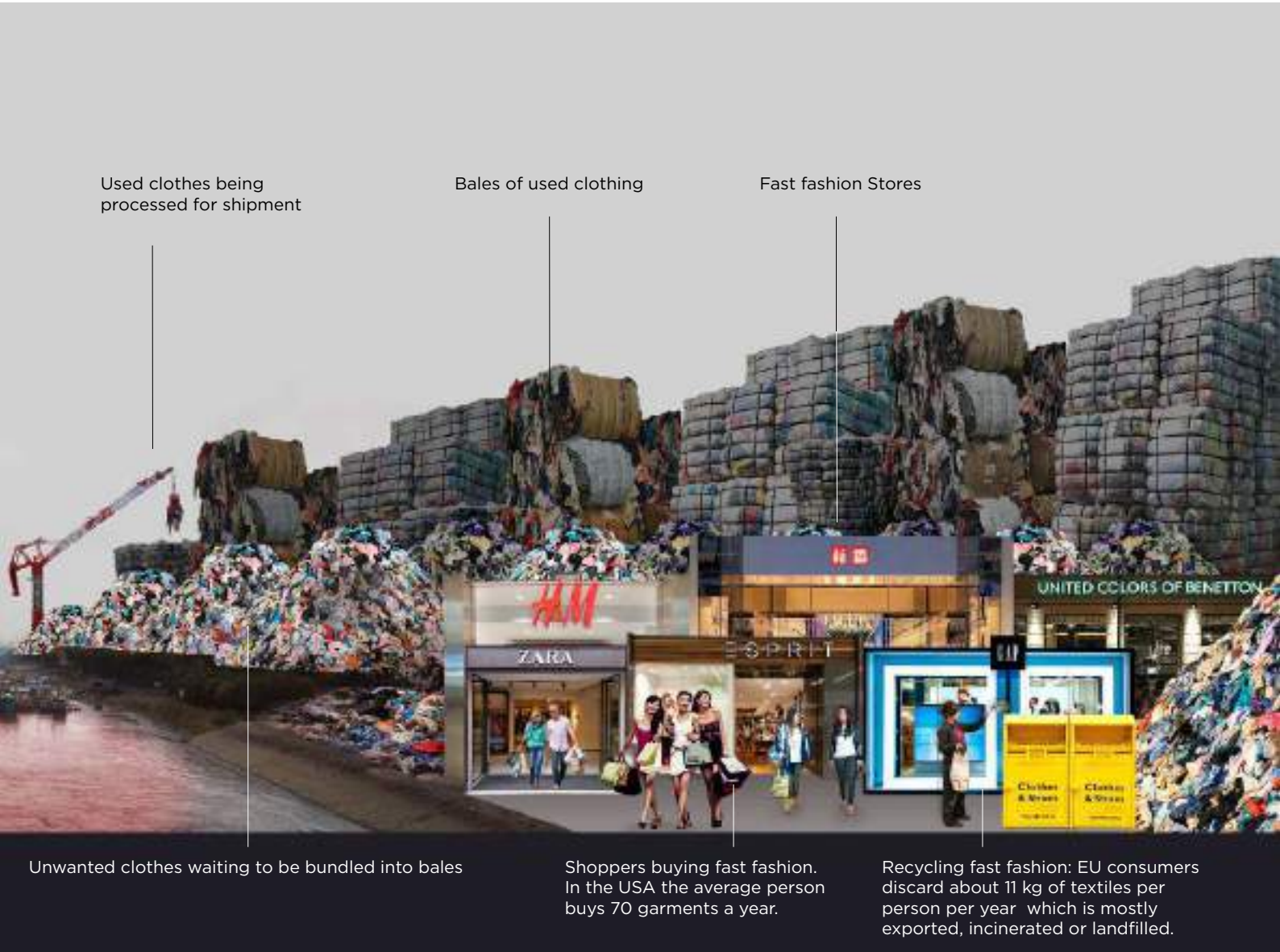
Fast fashion - from dirty production, to trends, to trash



On average, this is 10 items per German citizen in only two months. Their fate is unclear, but in a survey of the textile industry, 9 % of retailers stated that they will probably have to dispose of them.[18]

The destruction of unsold goods is one of the most shocking consequences of overproduction. In 2018 H&M and Burberry reacted to scandals that exposed their practice of burning clothes in mint condition. While Burberry states that they ceased destroying unsold products,[19] H&M reports that they only destroy clothes if there is no other option and that this was the case for 0.03% of their total product assortment in 2019.[20] For many brands destruction of unsold stock is still standard practice. It is an even bigger problem for online retail, with Amazon, the global e-commerce leader, conducting mass destruction of new products, including textiles in perfectly good condition, as documented repeatedly by Greenpeace in Germany and in the UK.[21] The true scale of this problem is unknown, and is part of a business model that is facilitated by the complete lack of transparency, nevertheless, reports about various brands and industries destroying unsold products keep appearing. A recent report which calls for an EU ban on this practice, estimates that if all clothing and electronics shipments destroyed in Europe in 2020 were lined up one after the other, they would reach around the circumference of the Earth one and a half times, potentially rising to 6 times around the Earth by 2030.[22]

Figure 5: Fast fashion - from dirty production, trends, to trash



The rise of fast fashion

2030 = 206 billion pieces

2020: global sales of clothing dip to 160 billion pieces due to COVID-19

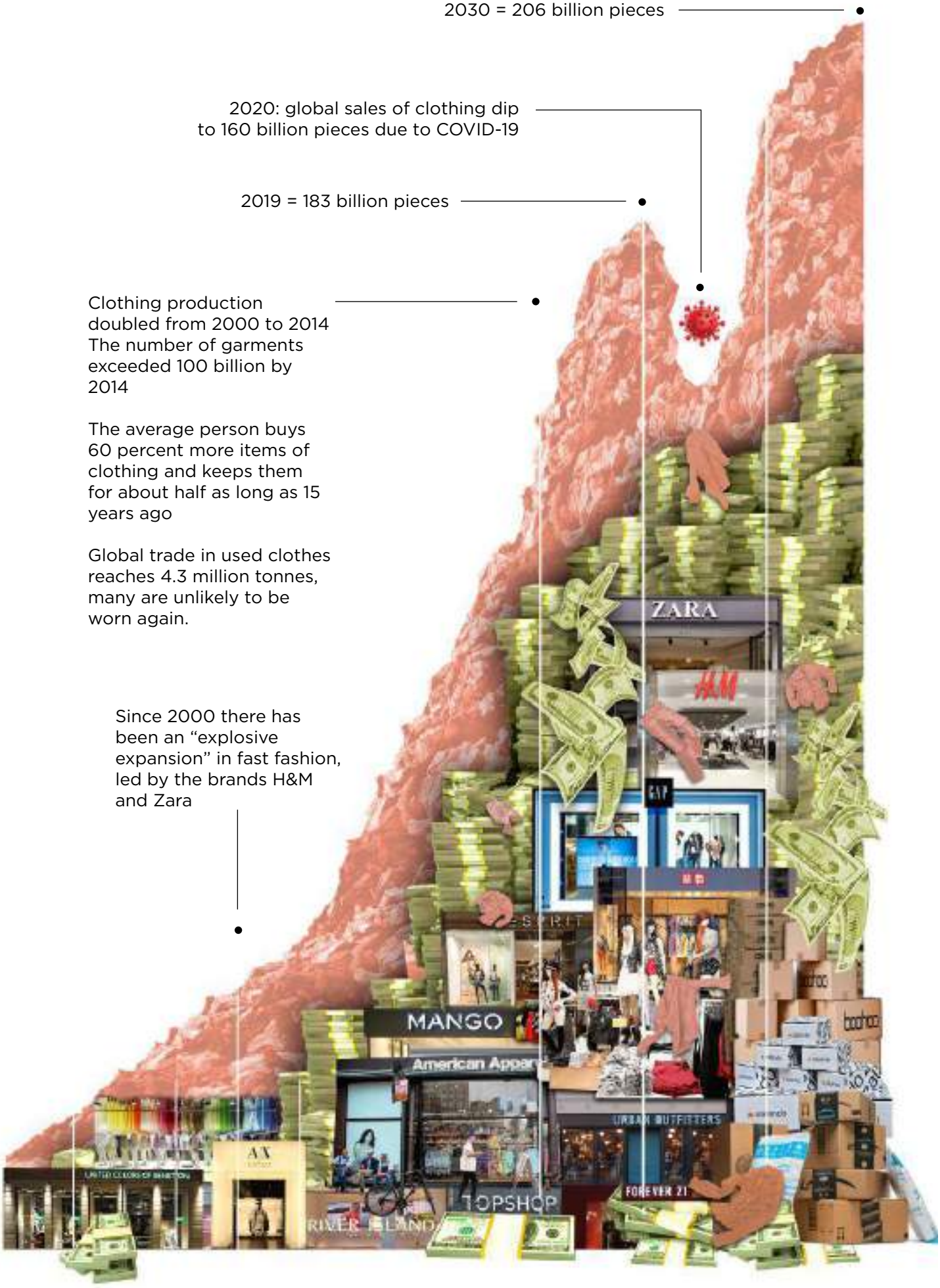
2019 = 183 billion pieces

Clothing production doubled from 2000 to 2014 The number of garments exceeded 100 billion by 2014

The average person buys 60 percent more items of clothing and keeps them for about half as long as 15 years ago

Global trade in used clothes reaches 4.3 million tonnes, many are unlikely to be worn again.

Since 2000 there has been an “explosive expansion” in fast fashion, led by the brands H&M and Zara



1995 2000 2015 2025 2030

Box 1: Fashion supply chains and their contribution to the climate crisis

Information on the release of greenhouse gases (GHGs) from the whole life cycle of fashion is hard to find, however, production in the supply chain has the largest carbon footprint, with estimates varying between 3 - 10% of global GHG emissions. One study calculated that in 2015, GHG emissions from textiles production totalled 1.2 billion tonnes of CO2 equivalent,[23] more than all international flights and maritime shipping combined; in comparison, washing and drying clothes by consumers released 120 million tonnes of CO2 equivalent. A 2018 report[24] found that apparel and footwear contributes to 8% of global GHG emissions and identified the most energy intensive life cycle stages as dyeing and finishing (wet processing), responsible for 36% of GHG emissions, followed by fibre preparation (spinning), at 28%. Both these processes are highly dependent on fossil-fuel based energy and wet processing suppliers are also the focus of the Detox My Fashion campaign for the elimination of hazardous chemical discharges. When GHG emissions from supply chains of all sectors are considered, fashion is the third largest single sector, responsible for >5% of global supply chain emissions, behind food and construction.[25]

Some global brands have signed up to Science Based Targets Guidance[26] for the apparel and footwear sector, although few have set their target as 1.5°C.[27] This Guidance (written with feedback from representatives of several major brands) proposes two primary ways for the sector to reduce emissions in line with science:

- Aggressively deploy energy efficiency and renewable energy across the value chain.
- Substitute materials with lower environmental impacts.

However, given the projected increase in the volume of fashion (see Figure 6), it's unlikely that these measures alone will be enough to bring emissions down to within the 1.5°C target. - in fact there is evidence that major fashion brands which committed to meet this target will fail without more serious actions in the supply chain. The Guidance also proposes that "companies can also reduce emissions by producing and selling fewer items, although they would need to create business models (e.g., rental) that support such an approach". All three of these steps will need to be implemented across the entire fashion sector.

Opposite Figure 6: The rise of fast fashion
Above Figure 7. The biggest climate impacts of our clothes are from their production in Global South countries

This growing problem of overproduction and consumption has devastating impacts on the environment and is increasingly depleting natural resources which we should be looking after for the sake of future generations. In the EU, private consumption of textiles is the fourth largest cause of environmental pressures after food, housing and transport, using about 1.3 tonnes of raw materials and more than 100 cubic metres of water per person annually.[28] While polyester, as a fossil fuel plastic, is inherently a problem, conventionally grown cotton has many issues too: cotton is grown on only 2.4% of the world's cultivated land but uses 6% of the world's pesticides, (and 16% of insecticides), more than any other single major crop,[29] as well as using large amounts of water and fertilizer, degrading the land. While companies bear the main responsibility, because they limit people's options to choose alternatives such as renting, sharing, repairing and second hand with their monolithic business models, changing our own shopping behaviour can also have a big impact: for example, if every person in Germany reduced the number of new clothes they buy every year by only two items, this would save on greenhouse

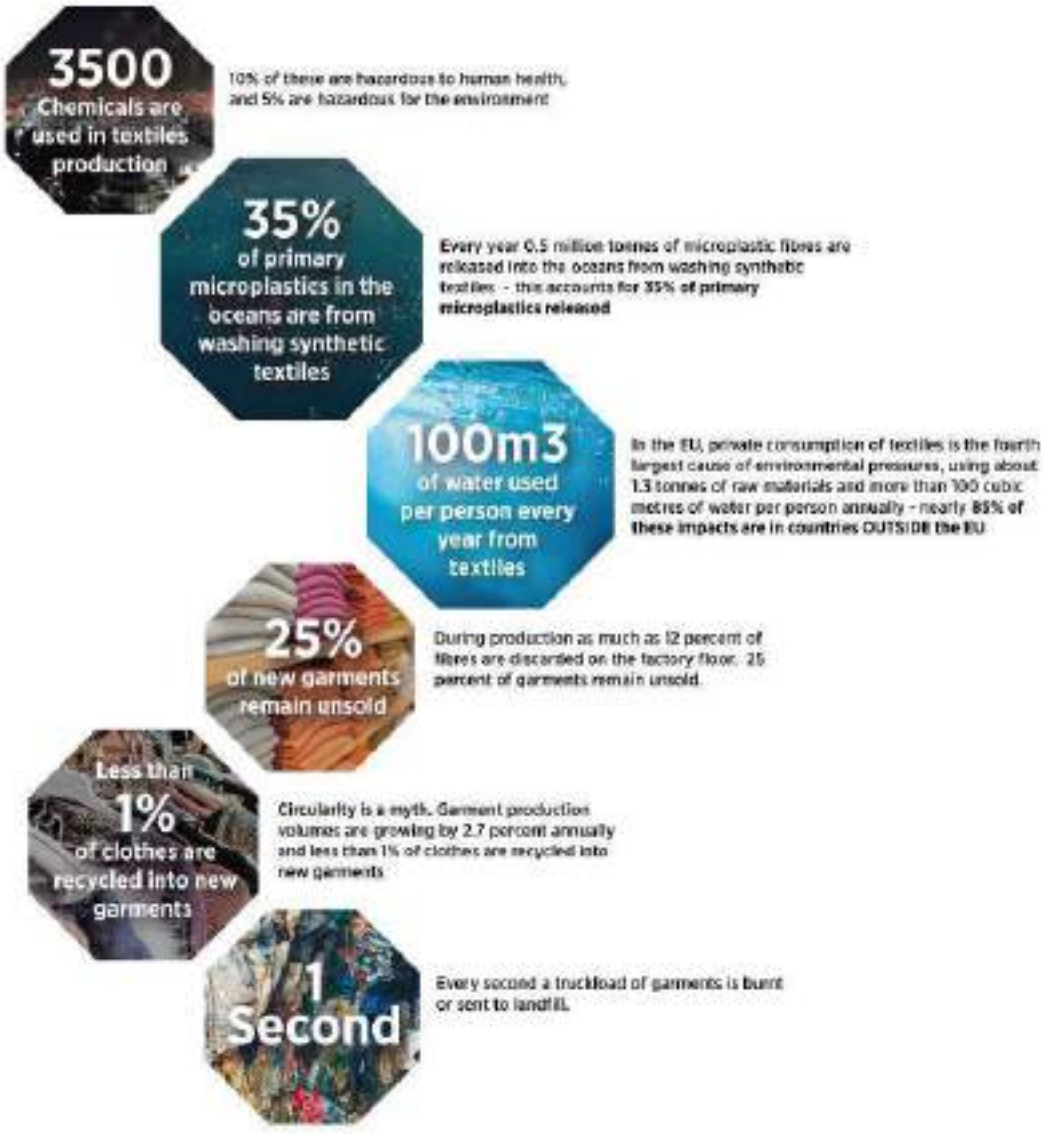


Figure 8: Six fashion facts

gas emissions equivalent to all of Germany's domestic air traffic.[30]

But fast fashion is not only bad for the environment, overconsumption also has negative effects on our wellbeing. A Greenpeace report "After the Binge – the Hangover",[31] looking at the psychological effects of shopping, shows that people already own too much and they know it. Around 50 percent report that their shopping excitement wears off within a day, with one third feeling even more empty and unfulfilled afterwards.

In recent years "Circularity" has been promoted as the latest technical solution to the environmental problems of our wasteful society, particularly by the fashion industry and policy makers. However, at the moment there are still huge challenges to solve before circularity becomes more than a sustainability buzzword: less than half of used clothes are collected for reuse or recycling when they are no longer wanted and only 1% are recycled into new clothes.[32] This is because textile-to-textile recycling is still a big technical challenge and more of a dream than reality at the moment, also because most garments are made of mixed fabrics and are therefore difficult or impossible to recycle at all.

Taking all the above into account, it becomes very clear that the solution to the growing problem of overproduction and consumption is not a technical dream of cycling more and more resources around faster and faster. Fast fashion can never be sustainable. The textile industry needs to slow down and not just "close the loop" but "slow the flow" (by reducing both production and consumption). In these times of climate crisis, fashion brands need to finally take responsibility to reduce the impact of clothing. There is a global consensus to address global warming and comply with the Paris Climate Agreement, and keeping global emissions within 1.5°C is an irreversible imperative. In the face of this existential threat, Fashion needs a new raison d'être: how can it continue to exist and thrive in a new world where emissions are kept within the 1.5°C boundary, and where a new wave of environmental protests is being driven by the people most interested in fashion, the younger generations? Drastic system change is the only answer and requires fashion brands to shift the focus of their business models from making and selling, to providing services to repair, reuse, rent, share and re-sell secondhand clothes.

Textiles waste from imported second hand clothes being dumped in the Kpone landfill in Accra, Ghana: designed to last 15 years it is now closed after large volumes of textiles waste filled it up after five years and led to a huge fire. Now the textiles are discarded in informal dumps. The landfill's closure threatens the livelihoods of hundreds of waste pickers who are calling for government support for their recycling efforts and their right to work. © Dean Saffron for Women in Informal Employment: Globalizing & Organizing (WIEGO)

Detox Fashion Show by Greenpeace group Dresden. Members of Greenpeace group in Dresden organising clothes swap and a fashion show in the Baerenzwinger. © Thomas Victor / Greenpeace

Image: 'Giant Girl' in Upcycled Dress Action in Hong Kong
© Greenpeace / Patrick Cho

Fast fashion needs to slow down: a paradigm shift is needed, from the idea of closing the loop towards the reality of slowing the flow

In light of the increasing urgency of the problem of fast fashion and overproduction, in 2015 Greenpeace's Detox campaign added a demand for global fashion brands to integrate goals to "slow the flow of materials and close the loop" into their Detox commitments. While many brands who joined the Detox campaign before 2015 did not update their commitments with these goals, we decided to have a closer look at what all of the 29 Detox committed brands are doing to slow the flow and close the loop for this report, since most of them have integrated "circularity" into their sustainability programs. Because it is difficult for suppliers to drive the kind of systemic change that we are looking for, they are not included in this part of the assessment.

To categorize and compare brands measures, we defined the two concepts of "slowing the flow" and "closing the loop" as follows:

Concept of **slowing the flow**

1. Long lasting design (produce less of better quality, make it repairable and reusable)
2. Extend product life (care & repair)
3. Multiple use of a product/material (reuse, repurpose, second hand, renting, sharing, upcycling)

Concept of circularity or **closing the loop**

1. Circular design (make it recyclable)
2. Take back systems
3. Recycling

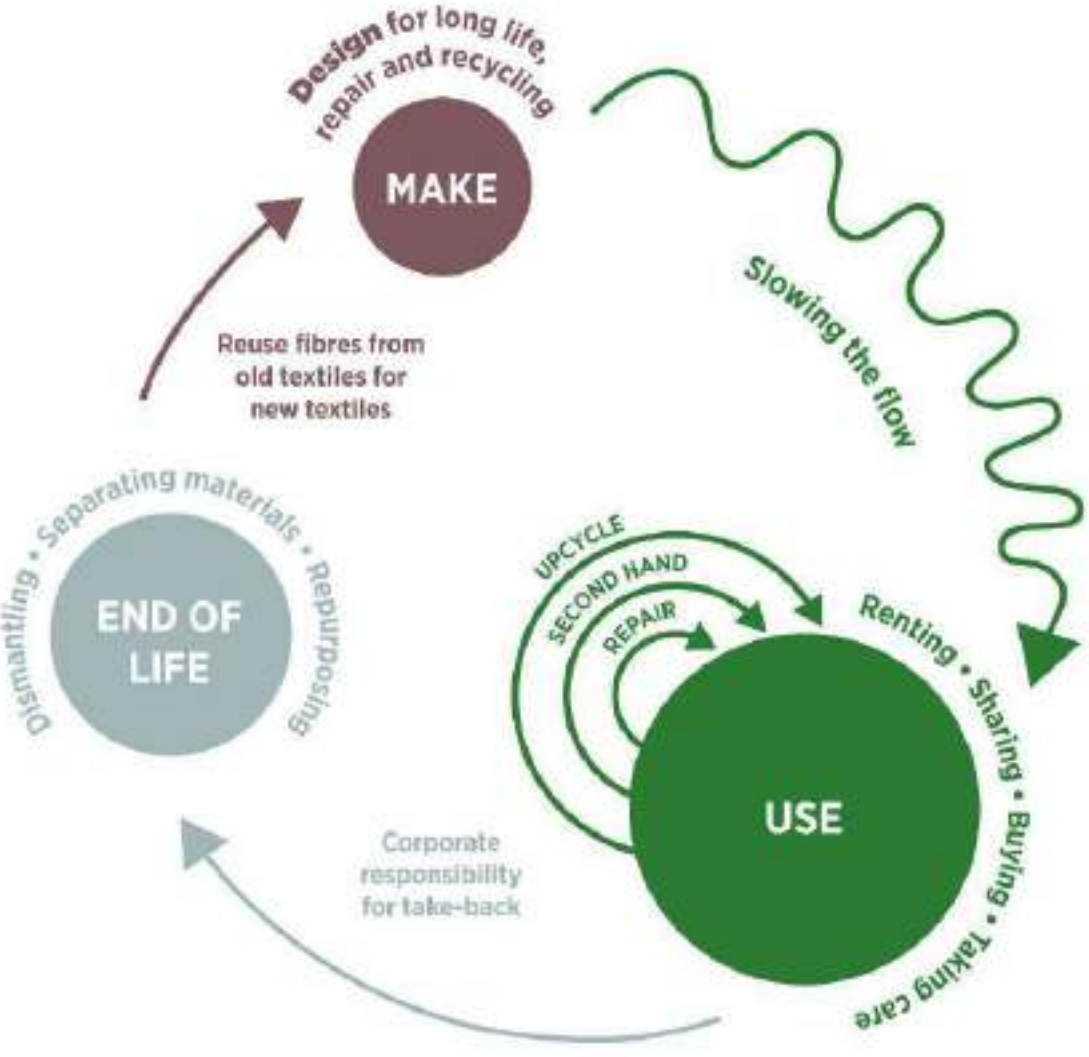


Figure 9: Slow and circular business model

Manufacturing of 100% organic cotton T-shirts for Greenpeace at Utenos Trikotazas in Lithuania, a Detox Committed company which also fulfils the hazardous chemicals and transparency requirements of Greenpeace's own Standard for textiles procurement. © Jiri Rezac/Greenpeace

The two concepts are interlinked, but to solve the problem, slowing the flow takes priority over closing the loop, because overproduction makes **closing the loop** impossible to achieve.

This assessment is focused on the products and their design. Actions that are taken further down the supply chain that are not included in this assessment are:

- The **use of sustainable materials** (eg. organic, fair, use of natural materials vs synthetic). This is a prerequisite for both concepts that we expect any responsible brand to implement, starting by reporting the material breakdown of their annual production, ensuring each category (eg. for cotton: organic, Better Cotton Initiative (BCI), recycled, conventional) is listed separately.

  The use of polyester - also so called recycled polyester - is driving overproduction, as reported in Fashion at the Crossroads, and more recently the Changing Markets report Fossil Fashion. Polyester is plastic made from fossil fuels which need to be phased out to tackle the climate crisis, large amounts of hazardous chemicals and greenhouse gas emissions are released during its production in the supply chain, and finally, it creates problems with waste from discarded textiles and the release of microplastic fibres into the environment during use, especially during washing. Therefore where polyester is concerned, even "closing the loop" does not resolve these fundamental problems in most cases.

- **Minimising production waste** and environmental impacts during manufacturing, which can have a significant impact and is implemented by both brands and suppliers.

The results of the assessment on slowing the flow and closing the loop are presented in Part 2 of this report; Table 2 provides an overall assessment for each brand, with further details on all the criteria in Tables 3 and 4.

Box 2. The recycled polyester sustainability myth

A new video by Changing Markets, Why making clothes from plastic bottles will not solve fashion's waste crisis, summarises the problem of recycling PET plastic bottles into recycled polyester for use in textiles as follows:

1. Once bottles are recycled into clothes this material is not likely to be recycled again; there is no system for the large-scale recycling of textile fibres[33] and the material will therefore be thrown away once it is discarded.
2. In contrast, waste PET bottles are one of the only types of plastic that can be recycled if they are from clean, separated waste streams, and could be part of a circular system where they are made into new bottles, which can be collected and recycled multiple times, as long as they are not made into textiles.
3. Recycled polyester clothing does nothing to solve the other problems of plastic fashion, such as the microplastic fibres released into rivers and seas when clothes are washed.
4. Brands' token use of recycled polyester is tiny compared to the huge amounts of virgin polyester used in clothes.
5. Making fashion from plastic bottles is a greenwashing tactic, and the belief that the clothes are sustainable encourages people to buy more.

There are also examples of clothes being labelled as 'recycled' with no evidence or traceability to verify this. The EU Commission has evidence that such fake declarations are widespread on the market, especially in the textile sector, when in fact the PET (the plastic that polyester is made from) is virgin plastic.[34]

Finally, the fundamental issue with plastics recycling in general is that it cannot resolve the plastic pollution problem - globally, as of 2015, only 9% of all plastic waste ever created has been recycled. This is despite the decades-long focus on the recycling of plastics which is in fact used by the fossil-fuel industry as a smokescreen to enable increased plastic production and divert attention away from the systemic changes that are needed.[35]

ENI Plant in Brindisi
ENI petrochemical plant in Brindisi, Puglia.
© Giuseppe Lanotte / Greenpeace

Strategies and efforts towards slowing the flow

The outcome of this assessment shows that most brands are starting to work towards circularity (closing the loop), and for many it is a very prominent topic in their sustainability reporting, but only a few of them have started on measures to slow the flow. Since slowing the flow is the most effective way to reduce the environmental impacts of fashion, we will first give an overview of what brands are doing on that before focusing on closing the loop in the next section.

To solve the urgent problem of overproduction and consumption, we need a radical change: brands have to move away from fast fashion, slow down and simply produce less clothes of better quality that are made to last, to be repaired and used multiple times. If a global fashion brand is serious about slowing down, this means that a change in business model is required: small pilot projects and fancy circular "token" products, used mainly for marketing purposes or even greenwashing, are not enough and will not make a difference. For the sake of justice for future generations, in these times of climate emergency, we can no longer afford fast fashion. Only those brands that can transform from being a traditional retailer that only sells newly produced, single-use clothes, towards becoming a service provider where better quality clothes can be rented, re-sold, shared, and repaired, will have a business model fit for the future.

The results of this research underline this clearly. The 29 Detox committed brands assessed in this research include: fourteen fashion brands, three sports brands, two luxury brands, seven retailers and three outdoor brands. The potential for a brand to "slow the flow" and the effectiveness of its strategies and efforts largely depend on the category it belongs to and are defined by its business model.

The following example illustrates this well: H&M, the typical example of a fast fashion brand, also known for its sustainability marketing, mentions in its sustainability report that its platform Afound, "now offers unsold H&M Group clothing in four markets, alongside unsold and pre-owned clothing from third-party brands. The brand saw a 216% increase in preowned sales between November 2019 and September 2020". This sounds good but a check of the second hand and vintage sections (where pre-owned clothing is sold) only reveals products from third party high end and luxury brands and no H&M products. This is not surprising, since it's more profitable to resell expensive clothes and ship them to a new user, rather than cheap ones from H&M. It shows that unless a fast fashion brand like H&M radically changes its business model, moves away from fast fashion, and starts producing long lasting good quality garments that are worth more and cost more, any effort to extend the lifetime of its products will fail.

Italy's Textile District Pledges to Detox
Jessica Marini (co-owner), Francesco Marini (co-owner, Marini Industrie Spa) - Twenty textiles companies coming from Prato, the biggest textile district in Europe, commit simultaneously to Detox, the highest standard in toxic-free fashion production. Prato is home to Italy's oldest textile manufacturers and most extensive fashion supply chain, which exports over $2.5 billion Euros of clothing annually to global brands including Burberry, Prada, Valentino, Armani, and Gucci. The agreement will affect over 13 thousand tons of yarn and raw materials as well as over 13 million meters of fabric every year. 21 Committed companies include yarn, fabric, textile raw material manufacturer, dyeing companies and chemicals suppliers. © Andrea Guermani / Greenpeace

Some brands are starting to make efforts to slow the flow

Less than a third of brands (9 out of 29) monitored seem to be serious about slowing the flow, or are at least making some significant efforts towards this. These brands have either already incorporated longevity of products into their business model, or are making significant efforts towards producing less of better quality. Some of them also combine this with exploring ways for a product to be used multiple times, (such as reuse, repurpose, second hand, renting, sharing, upcycling). Here is a short overview of their key measures (for a more detailed overview please refer to table 3):

Increasing the longevity of products (long lasting design, repair & care)

The most effective way to slow the flow, is of course to make fewer products that are designed to last longer, are repairable, and provide repair services. The following brands have all incorporated some of these aspects into their business models, with different levels of information and measures.

Benetton and Esprit are the first two fashion brands brave enough to take a stance against fast fashion and have started moving away from it by producing less of better quality: Esprit reduced its collections to four, its style count by 28% and overall quantity by 26%. Benetton made efforts to reduce its product volume while increasing the quality and durability of products through its "B-long" strategic project which entails reorganising its production chain and working with its suppliers. Esprit also has a repair service, but so far only in its German shops, and Benetton has a "Wear. Care. Repair" guide on its website.

Levi's states that it has always made **products that are built to last** and is actively exploring new ways to extend the life of its garments further, mentioning its in-store Tailor Shops at flagship stores around the globe where people can **bring their denim to be repaired or repurposed**, extending the life of garments as a key element of that effort. In addition, it recently launched its new campaign "Buy better wear longer" - where the brand openly talks about the over-consumption crisis - aimed at convincing its customers to wear their products as long as possible.

Luxury brand Burberry also states that its products are made to last, but gives no further details on measures it takes to achieve this. It does offer a **repair and replacement service** though.

Swiss retailer Coop (well known for its 100% organic cotton brand Naturaline) states that it is saying no to fast fashion and firmly believes that life cycles in the textile industry must not only be closed, but also slowed down. It reports that therefore, timeless design and long-term wearability are key when developing its own-label brands and that it focuses on a standard range with basic models, supplemented by **only two new collections of selected seasonal pieces each year.** The retailer does not mention any repair service however, which would support the longevity of its products.

While the fast fashion trend has become inherent in the business models of nearly all fashion and sports brands, outdoor brands have traditionally promoted long lasting and durable products. However, in recent years, there are signs that the fast fashion trend is also spreading to the outdoor sector, with "lifestyle outdoor products" becoming increasingly prominent. The three Detox committed outdoor brands **Vaude**, **Paramo** and **Rotauf** are all resisting this trend and maintaining their leadership by embedding

long lasting and timeless design in their business models (see table 3 in Part 2 for more details). In addition, all of them have their own **repair services** for their customers. On top of that, Vaude has also developed a Repair Index, a tool to evaluate the reparability of VAUDE products, and is collaborating with iFixit for "Do it Yourself" repair instructions. Paramo has a lifetime guarantee for its products.

Multiple use of a product or material (reuse, repurpose, second hand, renting, sharing, upcycling)

In addition to increasing the longevity of products, some of the brands mentioned above have also started working on strategies to use a product (or material) more than once. This includes reuse and repurpose, second hand and vintage, renting and sharing, and upcycling. While some brands came up with creative and innovative ideas, most of the projects implemented are still small-scale.

Luxury brand **Burberry** reports a couple of "**innovative solutions to repurpose products and offcut waste**", including repurposing and reinventing products by adding seasonal and on-trend embellishments, donating unsold products and excess materials to design schools, colleges and charities that are **repurposing or upcycling them**, and collaborating with sustainable luxury company Elvis & Kresse, which revalues leather offcuts by transforming them into accessories and homewares. In addition, customers can resell their Burberry products on The RealReal, a US luxury consignment marketplace. This second hand platform for luxury goods is independent from Burberry however, and also sells other brands.

Outdoor brands Vaude and Paramo both have **eBay second hand platforms** and Vaude also has an eBay Upcycling Store where residual materials that accumulate at the manufacturer are auctioned off for a good cause. In addition, Vaude tents, mattresses, backpacks, trolleys and bike bags are available for **rent online at** iRentit, in Vaude stores in Germany and at its German headquarters.

Pilot projects to slow the flow are not effective enough on their own

In addition to the nine brands mentioned above, the fast fashion brand **H&M is also "ticking the box" for many of the options to use products multiple times:** in its sustainability reporting it mentions everything from repair to second hand, renting and upcycling. However, **H&M does not have a convincing strategy to embed longevity in its business model**, and has also not set any targets to produce less of better quality.

While these pilot projects create the impression that H&M is making an effort, on closer inspection it's clear that these are all too irrelevant to be able to "offset" the incredible and growing amount of fast fashion that H&M still produces globally. All of these pilot projects are from the smaller H&M group brands COS, Arked and Weekdays, which cover fewer markets than the main H&M brand.

Here are some examples: As mentioned above H&M's **resell platform** Afound offers unsold H&M clothes, but all of its second hand or vintage products are from third party brands only. Its COS Resell platform is a **second hand platform** made by Reflaunt on which people can sell or buy COS products, but only customers from the UK and Germany can sell their products. COS is also supposed to be partnering with the Renewal Workshop to launch a COS Restore collection, but at the moment, COS is not listed as a brand member and no COS products can be found on the Renewal Workshop's website. Its **Rental platform**, launched by Arket, together with Circos, is for kids clothes only, and covers 19 markets. H&M also mentions a remade collection from Weekdays as an **Upcycling**

initiative, but a search on the platform only yields 3 products. H&M also reports that the second hand platform Sellpy, where people can sell and buy clothes from many brands, is expanding to Germany and that it now holds 70% of its shares.

Unless H&M starts producing less clothes of better quality and radically changes its business model to integrate longevity of products, these pilot projects will only serve for marketing purposes.

The vast majority have not even started to think about slowing down yet

20 out of the 29 brands assessed have not even started any efforts to slow down. They either have a statement about the longevity of their products on their websites which is not backed up in any credible way, or they report projects that are so limited that they are virtually meaningless, raising the question of whether these brands are even taking the challenge of slowing down seriously. For example, the most visible project regarding multiple use products that Rewe manages to report about is "Just bag it": "Bags were made out of Penny workers uniforms and sold to Penny staff, and the profit went to a charity." While Inditex, owner of the leading fast fashion brand Zara, only makes a halfhearted attempt with a statement about a training programme for its designers that includes design focused on extending product durability.

To conclude, although some of the brands assessed have made first steps towards slowing their flow of materials, most of them are still stuck in the fast fashion business model and struggling with efforts to slow the flow, instead of being bold enough to abandon their current business model and start the much needed transformation towards becoming service providers for making better quality clothes last longer. At the moment, none of the Detox brands has a clear roadmap, with timelines and milestones, to achieve this.

Circularity has become the new sustainability "buzzword", particularly in the fashion industry. However, while most brands talk a lot about this topic, after filtering through the websites and annual reports of the 29 Detox brands assessed, what is left in terms of tangible outcomes is quite sobering. A closer look at what is actually being implemented, reveals that most brands are focusing on recycling and take-back systems and that both of these measures are facing major challenges. Some brands have also started developing measures for circular design.

The Well Dyeing Factory Ltd in China
Coils and bundles of cloth in a production chamber of the Guotai Dyeing Factory (English name Well Dyeing Factory Ltd.) in the Gaoping Industrial Park, in Sanjiao town, Zhongshan City. © Qiu Bo / Greenpeace

A woman fetches water from the Yangtze river.
© Lu Guang / Greenpeace

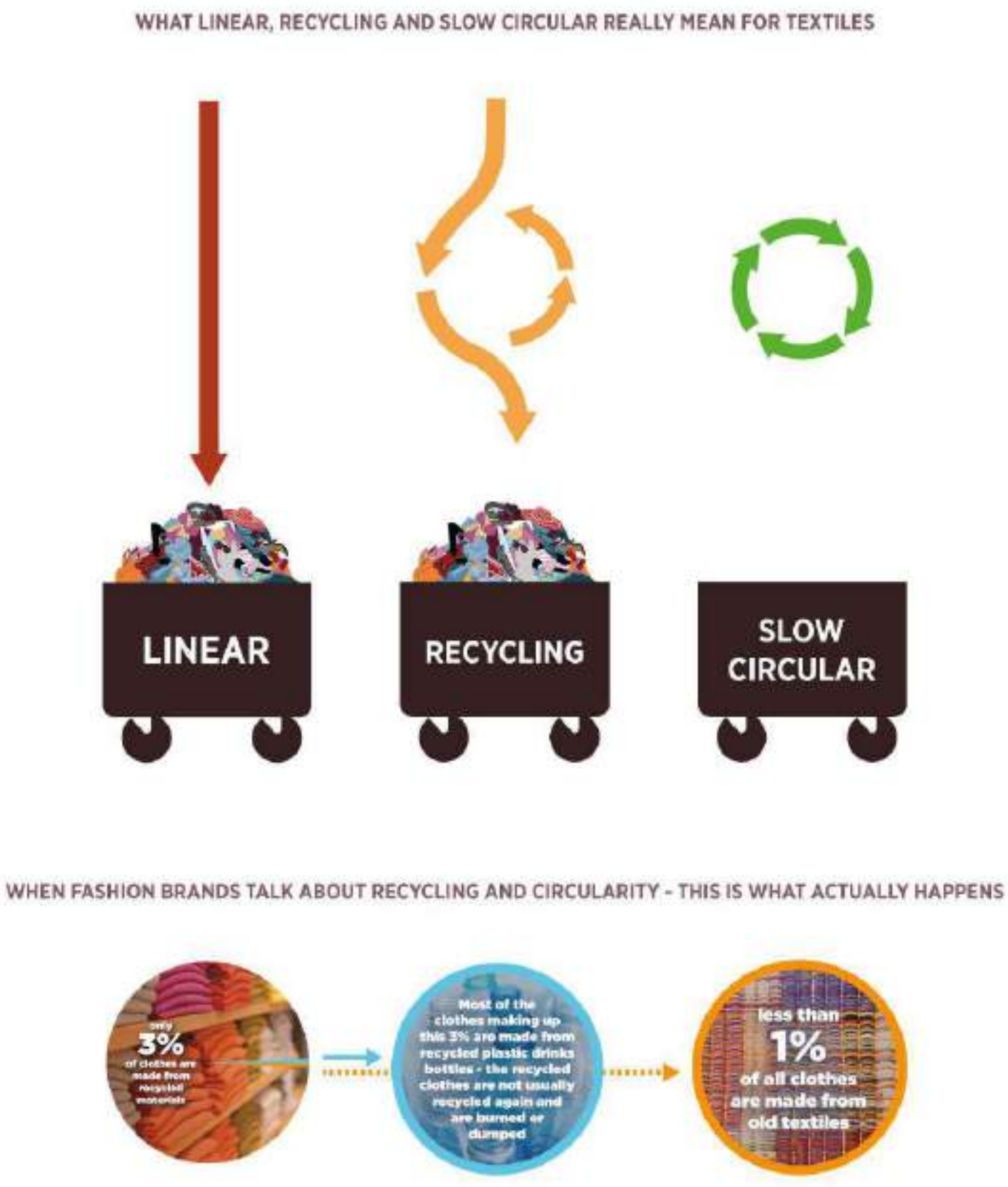


Figure 10: How fashion brands are hijacking circularity for greenwashing

Strategies and efforts towards closing the loop

The following section gives an overview of the key measures and challenges on circular design, take-back systems and recycling for the brands assessed (see table 4 for a more detailed overview).

Circular design (recyclable and cradle to cradle products)

Textile to textile recycling in the industry still barely exists, so designing products to be recyclable is important. Sustainable material choice and the design of the original garment can improve recyclability and influence the success of recycling efforts. For example, fabrics with mixed synthetic and natural fibres are difficult to recycle, and even if polyester is recycled textile to textile, its inherent problems of microfibre release and final disposal may still not be solved (see more details on this in Greenpeace Report "Fashion at the Crossroads" Box 2).

7 out of 29 brands report on recyclable or cradle to cradle products (adidas - shoes, G-Star, Levi's (mainly cotton jeans), Lidl, C&A (various), Paramo, Rotauf (mainly polyester and wool)). While outdoor brands Paramo and Rotauf state that all of their products are mono-materials and suited for recycling, the others mention only a few specific examples or report the number of recyclable products that they have sold. They don't say what percentage of their entire collection this represents, only G-Star has set a goal for 2025 that 20% of the entire G-Star RAW collection will be made from Cradle to Cradle Certified™ fabrics.

Some brands also mention staff training for circular design. This is certainly necessary if a brand is serious about going circular, but without information on whether this training resulted in any actual changes in the design and production processes, it is difficult to know if they were effective or not.

To summarize, it is good to see that some brands have started making products that are actually recyclable, but for the moment this is a minority; most of them only have very few pilot products and do not report this as a percentage of their entire collections, or provide a roadmap to improve this. There is also no information at all about how many of these products are actually recycled post-consumer use.

Take-back systems

Garment collection systems have become a bit of a trend recently. In Germany for example, the amount of textiles collected every year has increased by more than 20% since the nineties and exceeds the amount that is actually needed by charities.[28] More than half of the brands assessed mention some sort of take-back system. However, many of them have only started in a few markets and some of them only for a few products (Levi's only for jeans and Nike only for shoes). There is very little useful and transparent information around these take-back systems: first of all, data on the amounts collected compared to the overall amount of products sold is lacking (some brands report tonnes or number of products collected, but none of them give percentages). Secondly, information on what happens to the products after they have been collected is scarce, with little detail on how much is reused, in what way and by whom, how much of it has been recycled into new fibres, how much has been downcycled (thereby delaying its disposal, so only suitable for clothes that are beyond repair) and most importantly, how much of it has been disposed of, either to landfill or incineration (where clothes are just burnt). This makes it impossible to judge whether these take-back systems actually make a relevant contribution towards closing the loop or not.

Recent evidence from Africa suggests not. Second hand markets in Ghana have become overwhelmed with 15 million used garments a week pouring in from the UK, Europe, North America and Australia. Nearly half of these garments (40%) are of such poor quality that they are worthless and end up being dumped or burned in the open, where they overflow into the streets, the open sewers and eventually into the sea.[37]

To conclude, **collection of used textiles is necessary for a circular economy** and is a good concept. However, there is a huge lack of information around take-back systems at the moment: **customers have the right to know what happens to their clothes after they bring them back** and brands need to start reporting openly about that. In addition, take-back systems only make sense if products are designed for reuse and recycling from the start, and if products are of better quality, so that reusing them is worth it. If these major challenges are solved, they can make a meaningful contribution towards addressing the problem, if combined with effective measures to slow the flow. If not, take back systems might only serve to alleviate the guilt of consumers and at the same time encourage shoppers to come back into stores and buy again, fueling their addiction to fast fashion, while the brand gets kudos for its so-called sustainability.

Recycling efforts

As shown in Part 2 (table 2), nearly all brands assessed are working on recycling. However, the amount of recycled materials used is usually small, especially for natural fibres such as cotton. Most brands do not give detailed information about the percentage of different types of recycled materials they are using. For cotton, only Esprit and Nike are brave enough to report their use of recycled cotton: it's 0.1% for Esprit and less than one percent for Nike. However, at least with natural fibres this is textile-to-textile recycling. This is not the case with the recycling of synthetic fibres, most of which is derived from post-consumer plastic drinks bottles (which are the responsibility of the drinks industry, see Box 2), sometimes gathered from the sea and used by brands as a PR stunt. These examples are a bit more prevalent (eg. adidas is using 71% recycled polyester), but another downside of this is that microplastic fibres will just be washed out into the environment, depending on the type of product made, and the products made may not be designed to be recyclable either, and will become waste again after their use.

Most brands assessed have some recycled products that they promote, sometimes with amazing stories about how these products will save the world.[38] But apart from the fact that recycling plastics into clothes will not solve the plastics problem, ocean plastic products and amazing shoes made out of waste are such a small portion of the overall volumes sold that they can only serve for marketing purposes. They can even be counterproductive, by providing satisfaction to the buyer who thinks that they have done something good for the environment. This leads to overconsumption and materialism and only perpetuates the problem. Even worse, fashion brands are distracted from the real problem, the need to change their business models to truly address overproduction and fast fashion.

To conclude, with only 1% of all clothes recycled back into new clothes at the moment,[39] **recycling textiles is more of a myth than an effective way of addressing the problem** of overproduction and consumption. If it is done using the right approach, by designing products to be recyclable from the start and using natural post-consumer materials or manufacturing waste, and if brands are doing this at a bigger scale, it can contribute towards circularity. However, brands cannot recycle their way out of this crisis, and it must not be a substitute for effective measures to slow the flow through systemic change.

Textiles waste from imported second hand clothes being dumped in the Kpone landfill in Accra, Ghana: designed to last 15 years it is now closed after large volumes of textiles waste filled it up after five years and led to a huge fire. Now the textiles are discarded in informal dumps. The landfill's closure threatens the livelihoods of hundreds of waste pickers who are calling for government support for their recycling efforts and their right to work. © Dean Saffron for Women in Informal Employment: Globalizing & Organizing (WIEGO)

3. Time for policymakers to take responsibility: regulate and level the playing field

The trend towards zero discharges by Detox committed brands and suppliers continues. The Detox Committed brands demonstrate that it's possible for global brands to take responsibility for their global supply chains and clean them up. This is proof that the elimination of the use and discharge of hazardous chemicals from textiles production is achievable. The ZDHC and others are extending the tools and methodologies to eliminate hazardous chemicals to other fashion and textile companies. But a significant majority of fashion brands still use waterways in the Global South as a convenient dumping ground for their hazardous chemicals. Furthermore, very few effective steps are being taken to stop the increasingly destructive impacts on the environment resulting from overproduction in the fashion industry and its explosive growth. These range from water pollution and hazardous chemicals, to pesticides and fertilizer, to microplastic fibres, and of course large amounts of greenhouse gases, all of which are contributing to the climate and biodiversity emergencies. Regulation is therefore needed, to make toxic free production mandatory through supply chain responsibility legislation, to force the rest of the industry to follow the Detox brands' example.

Greenpeace Recommendations for the EU textile strategy and supply chain law

Self-regulation under pressure from NGOs is a starting point, but can never be a permanent, or complete solution. Industry leaders will continue to invest in improving their practices, but the playing field needs to be levelled. Only regulation can restrict the products that can access the EU market and send a signal that will echo down the supply chain - one that will also steer green investments and accelerate the pace of change. In the face of the industry's reliance on fossil fuels and the climate and biodiversity emergencies, this is the only realistic option. Anything else will be too slow.

In the EU, there are two key policy processes going on at the moment that give governments the responsibility to act, to build on the best practice resulting from the Detox My Fashion campaign and make its principles and practices mandatory for the whole industry, and address the overproduction of fashion and its contribution to the climate and biodiversity emergencies. These are the **EU strategy for sustainable textiles** and the **supply chain or due diligence law**. The latter is important to set requirements that go beyond what can be regulated directly on the EU market which is vital given that the majority of pollution and climate impacts happen outside of EU jurisdiction.

Recommendations for the EU strategy for sustainable textiles

The **EU strategy for sustainable textiles** [40] aims to help the EU shift to a climate-neutral, circular economy and to ensure that the textile industry recovers from the COVID-19 crisis in a sustainable way. Its adoption is planned towards the end of 2021.

In Greenpeace's view the COVID-19 EU funds and the European Green Deal provide a unique opportunity for governments to change economic conditions and promote slow and truly sustainable fashion. The funds should be used to restructure the textile industry and only be given to those businesses that are in the process of transforming from fashion retailers to fashion service providers (eg. repair, reuse, renting and sharing services) and not to those who do business as usual that is harmful to the climate and to biodiversity. Alongside this, it is necessary for the textiles industry, like every other sector, to adopt a binding sector goal to prevent damage to the climate and to biodiversity across their entire supply chains.

With the industry adopting more and more circular initiatives, it is vital that these lead towards actual resource-use reduction. We need to make the economy smaller as well as

circular. It's time for an EU-wide quantitative target for material and consumption footprint reduction with specific objectives for textile products.

The fast fashion trend has turned clothes into throwaway items like disposable packaging. Because they are mostly made of mixed materials, they have practically become non-recyclable, like hazardous waste that poses serious disposal problems and is often incinerated (every second a truckload of textiles is dumped or burned in an incinerator globally). [41]

In view of the above, Greenpeace is calling for the following key points to be included in the EU strategy for sustainable textiles:

To slow the flow and close the loop

Strategies to slow down the flow of materials need to be prioritised.

1. Slow the flow of materials

- As part of the EU's Sustainable Products Initiative, Ecodesign[42] requirements for textile products must be set. These would be high legal minimum standards for long lasting design that would ensure that the most polluting and wasteful products have no place on the EU market. They must include:
  - Guarantees on minimum product lifespan and repair
  - Product benchmarking and standards on better quality, classic styling, repairability, durability, emotional longevity.
- These rules on what products can be put on the market should be supported by binding requirements on labeling as well as through new rules to tackle brands' unsubstantiated green claims - ie. greenwashing.

2. Extended Producer Responsibility (EPR) regulations with:

a. A **textile tax** to be paid by the brand when the product is placed on the market to fund environmentally sound collection, separation and professional reuse and recycling of textiles. The tax should be "eco-modulated", i.e. it should be lower for durable, repairable, reusable and recyclable materials, and higher for textiles containing hazardous chemicals or made from environmentally damaging raw materials, in particular synthetic fibres. This tax should also integrate the **'Polluter Pays' principle** - ie. the producer is made financially responsible for the cost of cleaning up the environmental and health damage caused throughout the supply chain, regardless of the geographical extent of the damage, for example microplastic fibres and "forever chemicals" like PFCs.

b. A mandatory repair and recycle index to measure repairability and recyclability and make informed consumer choices possible.

c. A deposit system to require brands to take responsibility for taking back their used textiles

d. A ban on the destruction of unsold and returned goods (similar to the Obhutsgebot in the circular economy law in Germany[43] and an anti-waste and circular economy bill adopted by France in 2020[44]) that also prohibits downcycling of textiles which are "as good as new". **Reduction targets for the use of synthetic fibres** and measures to reduce pollution from the shedding of microfibres.[45]

3. A fundamental change of the economic conditions to provide the right environment for alternative business models such as repair, reuse, second hand, renting and sharing services to become the new normal. Ultimately, these alternatives need

to be cheaper and more available for everybody in society to be able to access, in comparison to the costs of buying new clothes.

a. Legal requirements, with a timeline of 2030 at the latest, for city authorities to ensure that more space in city centres and shopping malls is made available for these activities, starting with at least 10% of space.
b. Lower business rates, financial incentives and facilitated investment for repair, reuse, second hand, renting and sharing services, that will also make these options more financially affordable for customers than buying new clothes.
c. Advertising and marketing for products which damage the climate and the environment should be banned.[46]
d. Give priority to alternative business models in professional training and education systems and grants for skills in these sectors.
e. Funding for professional re-training in these areas.
f. Funding for research and development in these areas.

4. Close the loop

a. Set high legal standards (eg. included in the Ecodesign requirements for textiles) for design for circularity including: use of materials which can be proven to have a lower environmental impact, use of recycled materials, design for recyclability, and preventing the recirculation of toxic ingredients.
b. Prioritize textile-to-textile recycling projects. Plans to boost recycling should not be based on turning material from other waste streams such as plastic bottles into clothes.

For toxic free global supply chain production

- Set an **overall objective of elimination of all hazardous substances**, also to allow safe reuse and recycling, reduce the chemical footprint across the supply chain and require the **disclosure of suppliers' lists and their environmental performance on a global platform**. For example:

  - Public **disclosure of wastewater test results**[47] from a defined and increasing percentage (aiming for 100%) of all supply chain facilities, including adapting the EU PRTR[48] system to include such data, creating a more universal system and ideally the coordination of PRTR systems globally (mechanism to be determined).

- Set low **limits for hazardous chemicals, in particular CMRs (carcinogenic, mutagenic and reprotoxic chemicals) in textiles, as close to technical zero as possible** to protect health and ecosystems (also see Box 2: PFCs), to reflect best practice and to generate a positive impact in the manufacturing chain, not just for product safety. Follow-up with further restrictions and/or create a RoHS[49] equivalent for the textiles industry, including for secondary materials, to avoid the recirculation of toxics through recycling.

  - **Reflect global supply chain Detox best practice** in BATs (Best Available Technologies) and Ecodesign requirements.

This Detox best practice has been demonstrated as achievable by the Detox Committed brands and companies, and the organisations that already provide tools and methodologies to implement it (industry initiatives and standards such as ZDHC, OEKO-TEX, Detox Consortium (CID), and Bluesign).

Box 3: Regulating the "forever chemicals" - PFCs

Greenpeace highlighted PFCs (also known as PFAS) as one of the priority hazardous chemical groups to eliminate. In 2015, the Detox Outdoor campaign put the spotlight on the outdoor apparel sector, well known for using PFCs in making waterproof membranes and water-repellent coatings.[50] Hundreds of thousands of outdoor enthusiasts from around the world joined the campaign to demand PFC-free gear. In response to this demand, in 2017 the major supplier of outdoor waterproofing, Gore Fabrics, pledged to eliminate PFCs of Environmental Concern from its general outdoor weatherproofing laminates and recently announced the introduction of new technology for its consumer outdoor clothing products that is completely PFC free.[51]

Nevertheless, outdoor companies still need to rapidly switch to the available alternatives. In addition, there are other sectors which use PFCs that need to be urgently addressed. In the EU five member states have written a proposal to regulate all PFAS as a group - Denmark, Germany, Netherlands, Norway, Sweden.[52] The stakeholder contribution ends in July 2022, almost one year from now for NGOs to contribute. Greenpeace supports this proposal, which includes all substances and materials with a carbon-fluorine bond in the molecule, including polymers.

There are also developments in the USA, with the state of Maine[53] enacting a groundbreaking law that will ban the use of toxic PFAS compounds in all products by 2030, except in instances deemed "currently unavoidable"".

Two PFAS, PFOA and PFOS, are listed on the global Stockholm Convention on Persistent Organic Pollutants[54] for elimination or restriction.

Recommendations for corporate supply chain responsibility (due diligence law)

The EU parliament has recently endorsed a proposed legislation on corporate due diligence.[55] This binding EU law would ensure that companies are held accountable and liable when they harm - or contribute to harming - human rights and the environment or undermine good governance. Due diligence would require companies to identify, address and remedy their impact on human rights and the environment throughout their supply chain. Sanctions for non-compliance and legal support for victims of corporations in third countries would apply. The legislative proposal is planned to be presented to the EU Commission later this year.

Detox Action at The North Face Store in Milan, Italy
To highlight the company's continuous failure to eliminate hazardous chemicals like PFCs (poly- and per-fluorinated compounds) from their weatherproof products, GP Italy conduct an action at The North Face store in Milan. © Alessandro Vona / Greenpeace

In addition, supply chain or due diligence laws are under discussion in several EU countries. France already has a due diligence law (Loi de Vigilance) and in Germany a supply chain law (Lieferketten Gesetz) recently passed the parliament. From Greenpeace's perspective the current version still has significant weaknesses, such as due diligence not covering the entire supply chain, no civil liability, not including smaller businesses and weak environmental standards. Therefore, EU proposed legislation needs to avoid these weaknesses, to ensure that anyone who makes global profit must also assume global responsibility, and also include both environmental protection and social justice aspects as well as requirements for verification and sanctions by regulatory bodies. Strong supply chain laws could contribute significantly towards solving the environmental and climate crisis. Studies have shown that eight global supply chains - including raw materials, transport and processing - account for more than 50% of global emissions, with fashion being the third largest emitter (after food and construction).[56] Supply chain emissions from clothing and textiles, one of six categories of consumption based GHG emissions, also contribute to GHG emissions from major cities, representing 10% of global emissions.[57]

The Greenpeace Detox My Fashion campaign demonstrates that implementing an ambitious supply chain or due diligence law is possible.[58] **Experience with implementing Detox commitments shows that a global brand can take responsibility for its supply chains, clean them up, and implement high environmental standards in a publicly transparent way.**

The following elements are key for success and need to be included in legislation for supply chain responsibility or due diligence:

- Transparency and the Public's Right to Know:
  - Public **disclosure of suppliers**[59] by companies (to the raw material level, including all manufacturing steps, using a unique identification number for facilities)
  Public **disclosure of testing and auditing results**[60]
- Institutional support for global harmonised platforms and reporting systems (such as the IPE or ZDHC disclosure platforms, although the latter is still missing public data access)
- **Best practice needs to be specified to** ensure the highest standards and proper accountability (eg. best practice laboratories and testing requirements)

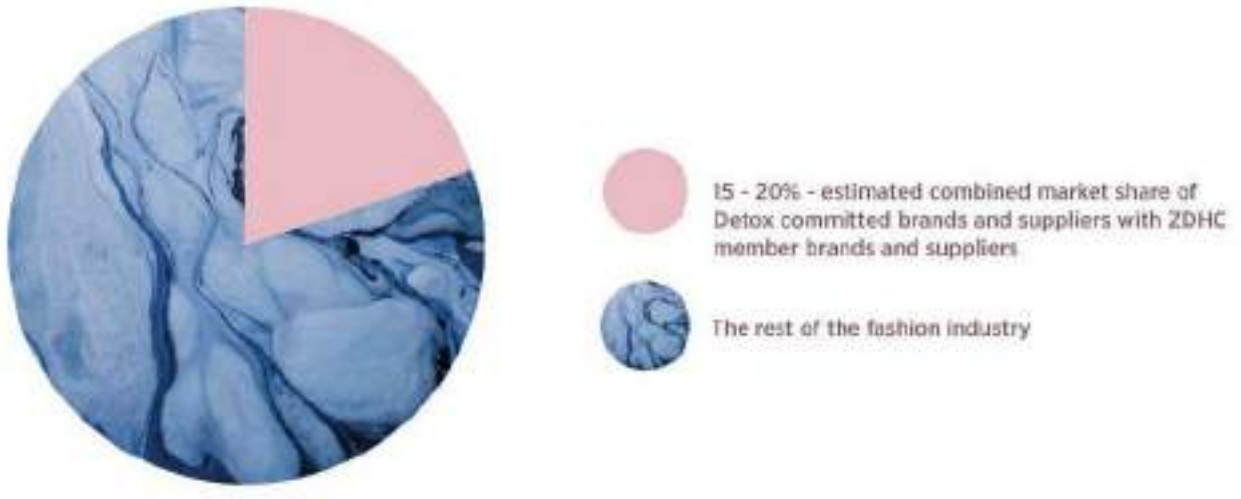


Figure 11: Estimated market share of companies which are Detox committed and/or ZDHC members in relation to the fashion industry as whole

- The ambition level for standards needs to follow the latest scientific knowledge, rather than the lowest common sectoral denominator

Without legally binding **transparency, high standards and precise requirements, producer responsibility will be toothless**, especially in regions where regulations are missing or weak. To take the implementation of the Detox commitments as an example, on chemical management, precise guidance on the scope of the chemicals, the best practice testing protocols and auditing of discharges and input chemicals are needed to ensure good accountability and comparability - elements that are vital for a fair and level playing field. **The stricter these requirements are, the more effective the regulation will be in ensuring that companies shift their business model from irresponsible outsourcing back to close oversight and, ideally in-house-sourcing (vertical reintegration), of the potentially problematic activities and even re-localisation (bringing manufacturing closer to the retail markets)**, which is the ultimate solution for creating accountability and transparency, and moving away from environmentally and socially destructive business practices.

Recommendations for Detox Committed brands and companies, and organisations supporting the wider implementation of Detox

While the overriding need is for regulation, the voluntary initiative of Detox Committed brands and companies, and industry organisations such as ZDHC, is still crucial. It shows how company responsibility for supply chain pollution can be addressed and that pushing for the best practice is absolutely achievable. So why settle for less.

At the moment the majority of the Detox brands are still reporting in a publicly transparent way about their progress and challenges, however, a few have started deprioritizing the issue, despite recent calls for more transparency on this from Fashion Revolution in its 2021 Transparency Index.[61]

This assessment also shows that a standardized way of testing and reporting wastewater is necessary to be able to compare brands and hold them accountable. The ZDHC is working on one solution to this standardized data, but for now it is only accessible for brands and suppliers. Recently, the ZDHC communicated that "98% of suppliers who carried out wastewater testing in 2020 had no detections of restricted substances from the ZDHC MRSL parameters for wastewater".[62] Although this number does not include the most challenging group of hazardous chemicals - heavy metals (which are tested separately according to the ZDHC wastewater guidelines) - this seems to be a positive outcome. However, the ZDHC needs to support this number with evidence by giving civil society access to its standardized data, and to fully implement the Public's Right to Know, suppliers' wastewater data needs to be accessible by local communities. While wastewater data remains inaccessible via the ZDHC's Detox Live platform, brands should take responsibility themselves by publishing this data on their own websites[63] as some are already doing.

Despite the progress being made towards toxic free textile production in global supply chains, this assessment shows less willingness to take a clear stance against fast fashion and tackle the problem of overproduction and consumption effectively, even among the Detox brands. Most of them are still only focusing on measures to close the loop, such as recycling efforts and take back systems, rather than prioritizing strategies to slow the flow of materials such as long-lasting design and product lifetime guarantees, and services for repairing, reuse and sharing.

To stop the increasingly destructive impact on the environment connected to the explosive growth of the fashion industry, Greenpeace

Figure 12: The majority of climate gases from fashion production can be avoided by adopting existing renewable energy technologies and process efficiencies in the fashion supply chain at very low cost

calls on Detox brands to act with the same level of urgency towards slowing the flow as they did for toxic-free production, and lead the way towards a slow circular fashion that respects environmental boundaries and the rights and wellbeing of people.

This is a much more fundamental change, which involves re-inventing the business model of fashion where success is not defined by the volumes that are produced and sold, but by the high standards in supply chains and the innovation in alternative ways to engage with customers. This is not an optional extra: if companies don't act voluntarily to change their business models to adapt to the reality of the climate crisis, ultimately the courts or governments will be forced to intervene, as in the recent cases in the Netherlands and France.[64]

Therefore, forward looking companies need to support the call for regulation, outlined above, and continue to show the way through maintaining and increasing their voluntary actions on eliminating hazardous chemicals in the supply chain. The challenge of addressing fashion's contribution to the climate and biodiversity emergencies is another step up: to be a leader, companies need to design out 'fast fashion', stop overproduction, curb the promotion of overconsumption, and re-organise the wasteful way that clothes are made, sold, and dumped.

A vision for the future of fashion

At this tipping point, where the Covid and the climate crisis have exposed the truth about fashion, its up to the fashion industry to decide whether to follow a path to the detriment of people and planet or to change its business model from "make - sell - dispose" to providing services for repairing, reusing, renting and sharing and re-selling second hand clothing. Once fashion has slowed down the flow of overproduction, the real circular economy can then take its place in the world.

'Toxic Glamour' Fashion Shoot in China
© Lance Lee / Greenpeace

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Published by
Greenpeace e.V.
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20457 Hamburg

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