

FASHION AT THE **CROSS ROADS**



GREENPEACE

TIME TO STEP ON THE BRAKES

“Circularity” is being promoted as the latest solution to the environmental problems of our wasteful society, particularly by the fashion industry and policy makers.

However, it is mostly being tackled from the downstream up, pushing short term waste management approaches, such as the recycling of problematic plastic waste from other industries as the main solution and betting against the odds that a technological fix will provide an easy solution.

Instead, there needs to be a radical transformation through slowing the flow of materials and implementing long-term waste prevention solutions which would design out the waste altogether.

Since 2011 Greenpeace has been calling on major brands to eliminate the uses and releases of harmful chemicals from their production chain through their Detox commitments,¹ without which the circular dream could well become a toxic recirculation nightmare. However, even this progress could be put at

risk if brands fail to recognise that **the overconsumption of textiles is the larger problem that must be tackled.** In addition, the promotion of the circularity myth that clothes could be “infinitely recycled” may even be increasing guilt-free consumption.²

This focus on circularity is illustrated by the recently released Pulse Report on the State of the Fashion Industry,³ which projects a future where the fashion industry continues on its current growth trajectory, with big brands taking an ever greater share of the market and implementing their ‘best practices’; **the industry aims to double its use of polyester by 2030** – as part of a so-called ‘sustainable materials mix’ because it is claimed to be ‘recyclable’ (see Figure 1).

But even if it were possible to recycle all polyester textiles and close the textiles loop, **are we sure it will lead to environmental benefits? And what potential is there for recycling natural fibres?**



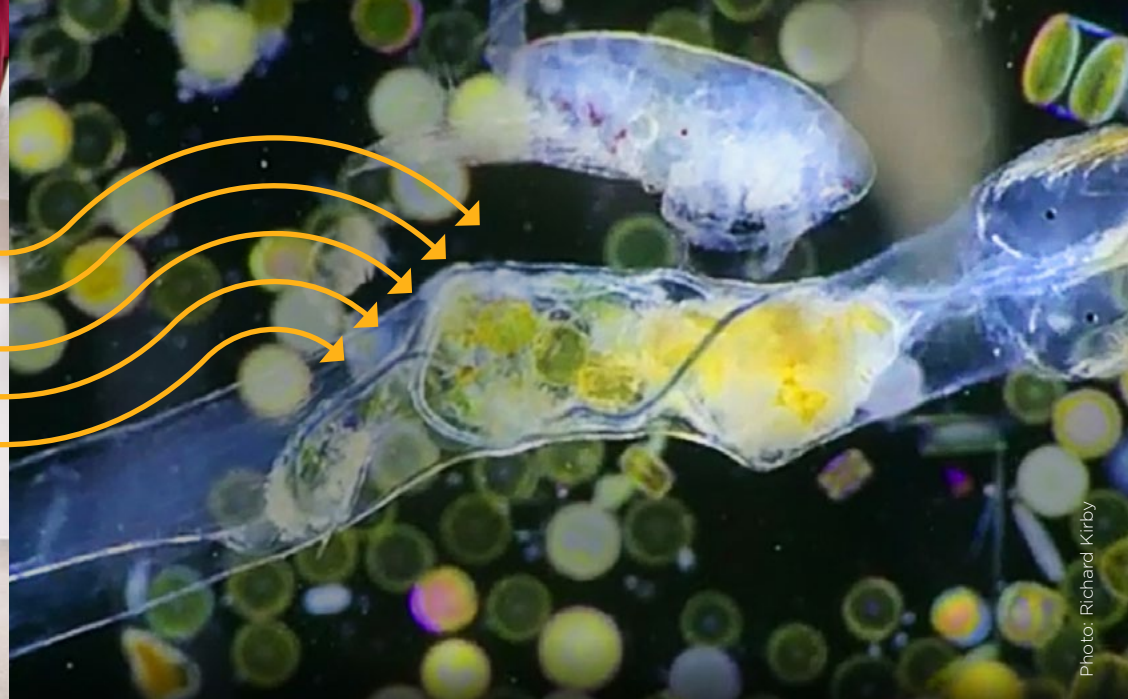
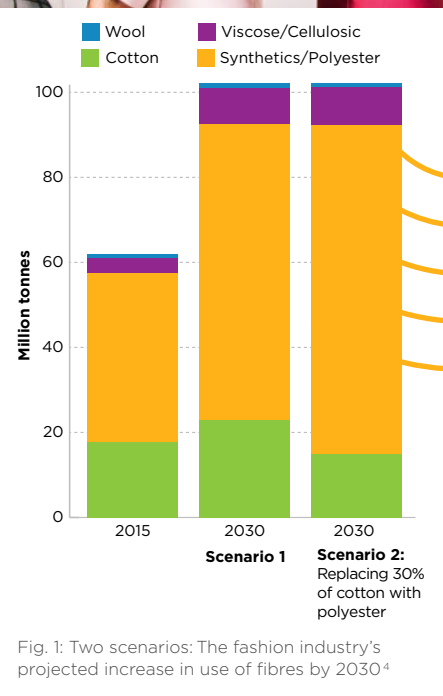


Fig. 2: Microplastic fibres from polyester fashion entering the ocean foodchain

In this examination of current practices by Greenpeace⁵, we witness a different reality. In countries with dominant consumer cultures, **the vast majority of old clothes are thrown out with our household waste** and end up in landfills or incinerators, amounting to millions of tonnes of textiles waste worldwide. This is the fate for over 80% of clothes thrown out in the EU. Recycling technologies for the one hundred percent recycling of both natural and synthetic textile waste into new fibres are at an early stage. **Much of the current recycling of polyester by the textile industry does not even deal with textiles**

waste; instead this “open loop” recycling focusses on PET bottles, removing responsibility from the food and beverage industry for single use plastics (see Figure 2). Initiatives by some brands for recycling plastics waste reclaimed from the sea has more impact on their public relations profiles than on the huge problem of plastics pollution of the oceans. **The industry is mostly turning a blind eye to the inherent problems of polyester, in particular its reliance on fossil fuels and its contribution to the problem of microplastic fibres in the aquatic environment.**

Instead of acknowledging these problems and endorsing producer responsibility, the Pulse report echoes **big industry’s stance of blaming consumers** for their supposed buy-and-throw behaviour and unwillingness to pay for more sustainable garments. This attitude allows the industry to avoid a legitimate debate around the physical and emotional durability of clothes and the role of their own marketing and advertising strategies in influencing consumer behaviour. The Pulse report also depicts public authorities either as an unwelcome regulatory threat or as a cash cow

to distribute grants and subsidies for R&D and investments. **This “privatise benefits, publicise problems” approach** completely ignores the legacy of the irreversible pollution already out there, the water and land scarcity, the mountains of waste and the human toll, the lives of workers blighted and the damaging changes to the mindsets of a generation of ‘shopaholic’ consumers.

MAPPING A NEW DIRECTION OF TRAVEL FOR FASHION

In this review, Greenpeace identifies and evaluates initiatives by companies in the clothing and footwear sector that attempt to both slow the flow of materials and close the loop, reflecting the synergies and the dialectic between these two approaches. The diverse initiatives on clothing, shoes and accessories were classified according to **three design concepts** that act directly on the 'manufacturing - use - end-of-life' cycle and **two "systems and models"** which facilitate these interventions (see Figure 3). Together, these make up **a holistic framework which addresses the whole life cycle of clothing and textiles**, including the way that such initiatives interact with each other, instead of tackling individual parts of the system in isolation.

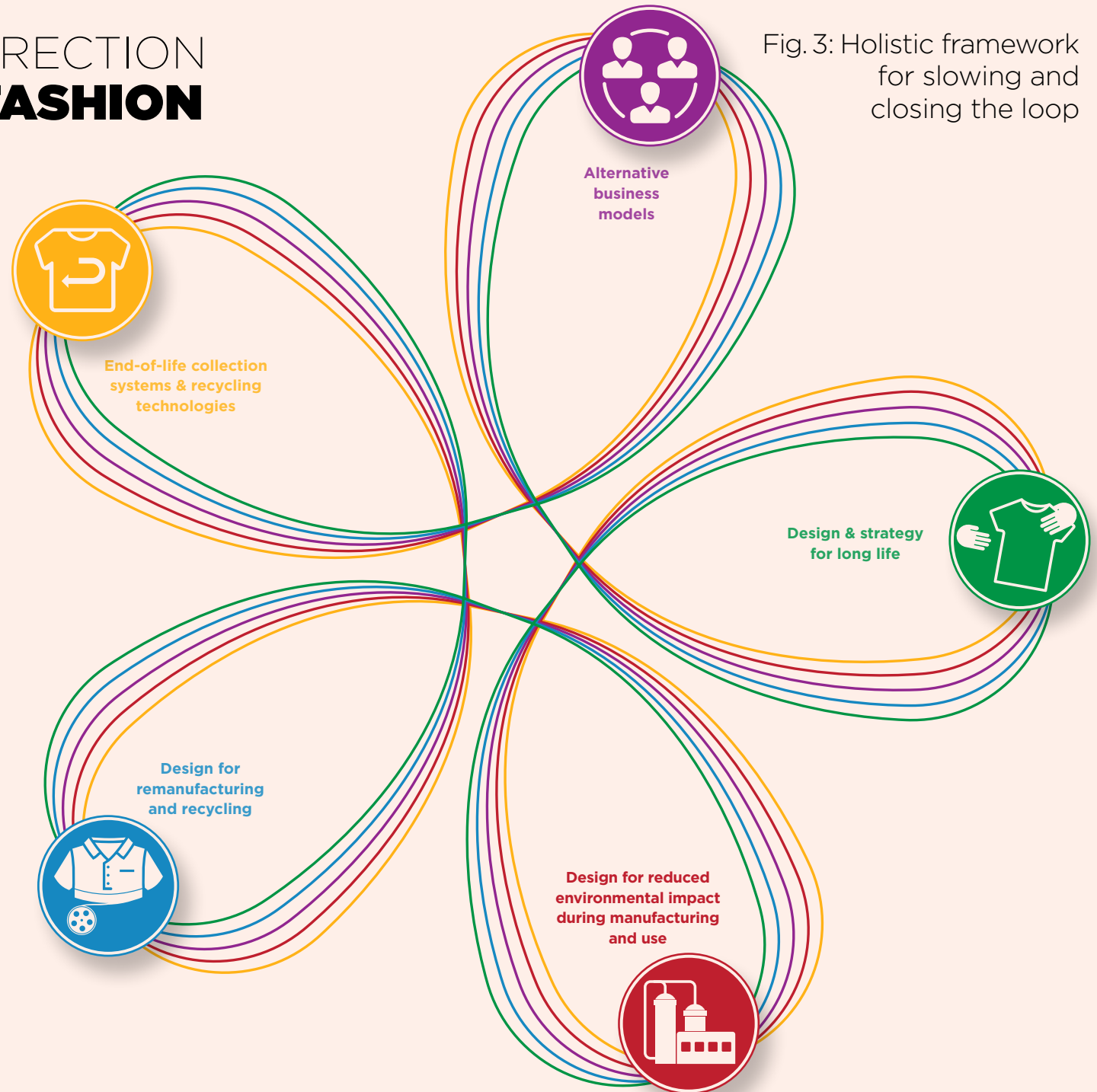


Fig. 3: Holistic framework for slowing and closing the loop

Design & strategy for long life

Unsurprisingly, and in common with design professionals and commentators,⁶ we found that **design for longer life and promoting extended use** of clothing are the most important interventions to slow down the material flow by reducing purchases of new products while addressing the environmental challenges of the current fashion system.⁷ Not only that, strategies for long life include many practical steps that can be implemented with existing skills and know-how – including long warranties, making higher quality clothes which are more durable and repairable, and creating services to repair and refurbish and encouraging more re-use. These are already mainstream practices for some sectors such as the outdoor industry, and although this could be seen as a core service for these technical products, this is exactly where the large fashion and sportswear brands are currently failing their customers and ultimately the global environment.

Smaller fashion brands are leading the way by extending not only the physical but also the emotional durability of clothes equally important for prolonging their use through style, function and fit, both of which the larger brands tend to disregard. New modes of marketing and ownership of clothes, such as sharing or renting, are also being explored in different forms, by companies outside the mainstream.

Alternative business models

More challenging, though promising opportunities are provided by **changes in business models** that not only focus on limiting and reducing damage but are part of a transformation in how clothes are produced, sold, shared, repaired and reused. These facilitate dematerialisation and the traceability of materials, waste and collected clothes; challenge ownership patterns; redefine sourcing and marketing strategies; and involve customers in a new narrative where there is also space for creative and cultural diversity. Although **these examples of alternative business models are dominated by smaller or medium sized** companies, there are signs that some larger companies are seriously evaluating these options for the longer term. Greater experimentation is therefore required by the big players in order to benefit from the opportunities that lie ahead.



Manufacturing using Detox principles in Italy's textile district of Prato, where wool and cashmere is regenerated using a traceable system

Design for reduced environmental impact

There are many other initiatives besides these two main paths for improvement. For example, **reducing environmental impacts** at all stages of the life cycle through more conventional means, such as better material and energy efficiency, technical solutions for achieving biodegradability, the performance of recycled materials, or techniques which can extend the life of clothing during use, and attempts to reduce dependency on oil or other virgin raw materials through recycling waste from other industrial sectors – or “industrial

ecology”. All of these initiatives are valuable, but lack a holistic and systematic approach to setting objectives and measuring actual environmental performance, often omitting some significant issues, including microplastic fibres and pesticides. Moreover, they should be considered within the context of the waste hierarchy⁸ and Detox principles⁹ on the one hand and developing common tools for strict traceability, monitoring and reporting on the other.



Collection & recycling

Take-back initiatives are also important but need to be developed and co-ordinated strategically, instead of the current piecemeal approach, with consideration of existing initiatives and systems organised by the non-profit sector. **Resources and producer financing for end-of-life logistics and technologies for recycling should not rely on corporate generosity but be made mandatory**, ensuring that externalised costs are internalised and linked to the volumes of output, if they are to have any structural value. Laws on Extended Producer Responsibility (EPR) – such as the EcoTLC system set up in France – set national collection targets and aim to level the playing field, reward design improvements, provide traceability and reporting, and raise funds for collaborative R&D across industry. Without such a strategic intervention, first movers are penalised, research efforts are scattered, there is no credibility to claims about performance and there is no obvious relationship between collection, recycling technologies, markets for recycled fibres and product design improvements for disassembly, recyclability and increased longevity. For **recycling technologies**, although the focus of the fashion industry is on the recycling of synthetics, the chemical recycling of post-consumer clothing made from natural fibres is also developing rapidly, but both are still at an early stage.



Remanufacturing & recycling

Considering the current focus of mainstream fashion brands on “circularity”, **it is surprising that there are few initiatives on design for remanufacture and recycling**, to make clothing easier to disassemble or more suitable for recycling. This tends to confirm that a holistic approach that would be a consequence of EPR laws is missing; the reliance on abundantly available PET bottles and other synthetic non-textile waste for “recycled” materials is at the expense of a textile-to-textile closed loop system. A holistic approach is also needed to ensure that potential conflicts between longevity of clothing and the need for recyclability and disassembling are tackled.

STANDING AT THE CROSSROADS



The fashion industry stands at the crossroads, with a choice of routes to follow. It can continue down the same road, leading to more of the same wasteful practices and throw-away styles, which will put greater pressures on ecological boundaries and our social fabric. Or it can be truly creative and innovative and take another route, one that will require transformative business models to enable the design of fashion with limits in mind, instead of making disposable designs to feed the wants of increasingly unhappy consumers. Such a route would reject throwaway materialism in favour of **“true materialism” – “a switch from an idea of a consumer society where materials matter little, to a truly material society, where materials – and the world they rely on – are cherished.”**¹⁰ Both slowing the flow of materials and planning for the ultimate closing of the loop are needed. However, in the immediate term, a focus on slowing the material flow must take priority. Closing the loop will only become truly achievable once the unsustainable quantities of clothes that are consumed and thrown away have been reduced

through changes in production and consumption – enabled through adjustments to the quality and design of clothes, including their repair and end-of-life. Companies need to commit to extend the emotional and physical durability of our clothes. Such a commitment needs a two pronged approach: firstly to deal with the psychological aspects, such as marketing for long life clothing that also addresses the emotional attachment of people to their clothing; and secondly, the practical questions of environmental efficiency through design for longevity – including quality, durability, repairability, low impact materials and processes. Both the above will encourage a change in attitude towards clothing, allowing for greater creativity and versatility to add to the enjoyment and novelty that fashion brings, balanced with the questions of need and value for money through quality and longevity that will reduce overconsumption.

A 12 STEP PLAN TO PUT FASHION ON THE RIGHT TRACK

Slowing

All players need to prioritise strategies to slow down the flow of materials; in particular, **larger brands** can bring strategies for extending product lifetimes into the mainstream, such as:

- 1.** Stop the trend for decreasing lifespans and quality by designing for long life – including better quality, classic styling, repairability, durability, guarantees and emotional longevity.
- 2.** Put an end to the accumulation of clothes in people's wardrobes by developing services, with a priority on repair, but also take-back systems, sharing and leasing, re-selling and customisation.
- 3.** Stop reinforcing the disposable/fast fashion mindset with marketing and advertising; instead brands should promote the true value of their products and encourage a change in their customers' attitudes.

Reducing impacts

Large brands have a powerful influence on the market and need to take responsibility for reducing their demand on natural resources to stay within planetary boundaries as well as tackling the main environmental threats such as climate change, hazardous chemicals, impacts on water systems and land degradation. The priority should be given to holistic steps which help to both slow down the flow of materials and reduce dependency on fossil fuel-based materials as well as conventionally grown cotton.

There is no escaping the need to re-think the materials mix in line with a "fit for future" business, which will have to include:

- 4.** Much greater sourcing of organic and fairtrade cotton and other sustainably cultivated materials by global brands which should be prepared to pay a higher price. This is the only way to make a significant positive impact on the environmental and human costs of cotton cultivation.

5. A reduction in the use of cheap synthetic materials such as polyester for fast fashion items, leading to reductions in the overall use of petrochemical synthetics, in line with objectives to tackle climate change and protect the oceans.

6. Far greater attention on the issue of microplastic fibres from synthetics, both in virgin and recycled textile materials. The design of apparel products needs to question the purpose of these synthetics in short life, poor quality "fashion" items as a priority. Alternatives for what may be more essential and technical uses of synthetics, such as outdoor wear, should be developed within a longer term perspective.

Circularity

With textile-to-textile projects as a priority, the industry needs to connect the dots between the design of products for long life and recycling, systems for the practical collection and sorting of end-of life products and the recycling technologies, while also ensuring that the economic viability of making recycled fibres/fabrics is equally or more attractive than for virgin fibres/fabrics. All of this may require regulatory intervention. This is a prerequisite if closing the loop on textiles is to become reality.

7. Designers can make a difference. Instead of being pressurized to deliver on increasingly faster turnaround of styles, product designers have a critical role in designing for slowing the flow and closing the loop through early intervention. To do this, feedback about the practical realities of dismantling used clothing for reuse, repair and recycling is needed.

Across the system

Large brands should be taking the lead on making transparency and traceability the norm for all, including:

8. Developing more rigorous and comparable systems and metrics for measuring material flows, so that they can start challenging themselves with the right questions. This will enable the reporting of efforts in a harmonised and transparent way so that they can be measured in association with the setting of concrete milestones to slow down the material flow and progress towards circularity.

There is also an important role for **policy makers** at a local, national and international level to facilitate the systems that are needed for managing end-of-life clothing.

9. Extended Producer Responsibility (EPR) – policies should also take an individual responsibility approach to reward improvements in design that extend life, against set legal longevity standards or tests, as well as extended warranties, while phasing out the use of hazardous substances across the production chain.

Likewise, **policy makers** need to provide the right environment for diverse business models to flourish, by changing economic and market conditions.

10. Incentives and instruments that will encourage local repair economies, peer to peer models as well as business models which distribute value among those that create it.


11. Lower business rates, financial incentives, facilitated investment and access to city centres for small, fair trade & sustainable businesses to encourage them to establish themselves in local communities as well as online.

12. Platforms to facilitate the exchange of knowledge and cooperation between all sizes and types of companies, which need to also involve other organisations and academics and must reflect a holistic approach such as the one outlined in this report.

So far, the industry has shown that it is not willing to tackle the overconsumption of fashion. Our assessment shows that many options already exist that can slow this down and allow progress toward true circularity, **changing the DNA of fashion** by internalising the best practices for sustainability, using the energy of creativity to re-design future pathways. Instead of continuing the pattern of “business as usual” through a “fast fashion fix”, companies have an opportunity to create products and services that represent true value and authentic experience, which also contribute to the adoption of more intrinsic values by customers and society as a whole.

Notes

1. The Detox Catwalk 2016; <http://www.greenpeace.org/international/en/campaigns/detox/fashion/detox-catwalk>
2. Fastcoexist (2016), The fascinating psychology of why and what we choose to recycle. August 2016; <https://www.fastcompany.com/3064880/the-fascinating-psychology-of-why-and-what-we-choose-to-recycle>
3. Global Fashion Agenda and The Boston Consulting Group (2017), Pulse of the Fashion Industry 2017, p.111; https://www.copenhagenfashionsummit.com/wp-content/uploads/2017/05/Pulse-of-the-Fashion-Industry_2017.pdf
4. Global Fashion Agenda and The Boston Consulting Group (2017), op.cit. See p.8, p.72, p.132
5. For the full report: Fashion at the Crossroads: a review of initiatives to slow and close the loop in the fashion industry, see www.greenpeace.org/international/Global/international/publications/detox/2017/Fashion-at-the-Crossroads.pdf
6. Nick Morley (2016), “Can clothing brands succeed and sell less (or better) stuff?” “Reducing the volume of clothing being sold in developed markets is generally seen as the greatest current challenge to sustainability in apparel”; <https://www.linkedin.com/pulse/can-clothing-brands-succeed-sell-less-better-stuff-nick-morley>
WRAP (2012), Valuing our clothes: the true cost of how we design, use and dispose of clothing in the UK, <http://www.wrap.org.uk/sites/files/wrap/VoC%20FINAL%20online%202012%2007%2011.pdf>
WRAP (2017), Valuing our clothes: the true cost of fashion, <http://www.wrap.org.uk/sustainable-textiles/valuing-our-clothes>
WRAP (2012) op.cit. and WRAP (2017) op.cit.; provide statistics on how the environmental footprint across water, waste and CO2 can be reduced if the active life of clothing is extended by 9 months.
7. WRAP (2012) op.cit. and WRAP (2017) op.cit.; provide statistics on how the environmental footprint across water, waste and CO2 can be reduced if the active life of clothing is extended by 9 months, thereby reducing the need for new purchases.
8. The EU's Waste Framework Directive (Directive 2008/98/EC) states that waste legislation and policy of the EU Member States should prioritise the order of preferred waste management options as follows: prevention (for products); for waste: preparation for reuse, recycling, recovery, disposal. <http://ec.europa.eu/environment/waste/framework/>
9. Detox principles aim to eliminate all uses and releases of hazardous substances at all stages of manufacturing by implementing a transparent, systematic and precautionary approach. See https://secured-static.greenpeace.org/international/Global/international/code/2016/Catwalk2016/pdf/Detox_Catwalk_Explained_2016.pdf
10. Fletcher, Kate (2016), *Craft of Use – Post-Growth Fashion*, Routledge, April 2016, p. 141



This booklet is an overview of a larger report “Fashion at the Crossroads: a review of initiatives to slow and close the loop in the fashion industry (greenpeace.org/international/Global/international/publications/detox/2017/Fashion-at-the-Crossroads.pdf), which examines initiatives and examples addressing the whole clothing life cycle, from manufacture to use and end-of-life. It advocates an alternative path, in response to the Pulse of the Fashion Industry report.

Authors:

Madeleine Cobbing
Yannick Vicaire

Contributors:

Alexandra Perschau
Anne Prah
Karen Miller
Melissa Shinn
Paula Tejon Carbajal

Published by:

Greenpeace e.V. Germany
Hongkongstraße 10
20457 Hamburg

Greenpeace is an independent global campaigning organisation that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace.

greenpeace.org/international/en/campaigns/detox/timeline

GREENPEACE