

(IN)CORPORATION OF SUSTAINABILITY

How fashion retailers use green strategies to expand their businesses



TEKSTILREVOLUTIONEN

Tekstilpolitisk tænketank

TÆNKETANKEN TEKSTILREVOLUTIONEN

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EXECUTIVE SUMMARY

This paper examines how lead fashion retailers in the textile and apparel (T&A) global value chains (GVCs) address environmental sustainability. It questions the simplistic idea that everything done in the name of environmental protection should be celebrated as an accomplishment – as always, it's more complicated. In recent years social movements and international accords like the Paris Agreement and the United Nations' 17 Sustainable Development Goals in 2015 have highlighted rapid biodiversity loss, environmental degradation and global heating, and following this path apparel brands and retailers have intensified their engagement to be/appear greener.

This report sheds light on some of the opaquer aspects of the green transition that the industry is bound to undergo. While lead firms aim to reduce some environmental harm, they are at the same time actively using the green agenda to capture market dominance and profits. This fact is in the report exemplified by lead fashion retailers H&M Group and Zalando who 'green' their operations through investment in new technological developments such as recycling and energy efficiency as well as initiatives by international organisations such as Better Cotton Initiative (BCI) and Science Based Targets initiative (SBTi).

By pointing towards 'sustainable' production, the focus is turned away from the major issue of mass production and mass consumption. The investments leading to reductions in energy and water

consumption are celebrated as a major step for reaching a zero-impact industry. However, while the investments in ecoefficiency are a win-win cost-saving procedure for the brand, it should only be referred to as 'less unsustainable' production.

In conjunction with the global awareness of planetary problems and the need for a greener production, lead firms can justify pushing environmental requirements towards manufacturers and wholesalers that in turn have to live up to further demands without receiving proportionately higher returns. Such a supplier squeeze is possible due to the limited number of buyers in proportion to the large supplier-base. It has led to more green competition between brands and manufacturers, which of course can be advantageous for the green transition simply because it stimulates more green engagement, but lead firms' specific demands also induce particular trajectories that can end up becoming arbitrary standards for other firms' business models. Therefore brands and manufacturers are stuck in a position where they may feel obliged to do what major retailers do in order not to be excluded from the GVCs and thereby lose a key source of income.

Finally, based on these findings, the report recommends constant critical reflection on sustainability processes and outcomes instead of unquestioningly accepting any proactive approach to environmental engagement.

KEY FINDINGS

The word sustainability has lost its meaning

The term sustainability is broadly used and without a clear definition. Brands and retailers boast themselves of having sustainable practices and products, yet the term is used so inconsistently that it has lost meaning, distinctiveness and applicability.

Green initiatives have become a business case

It now makes sense to go green just in order to add to the bottom line. This fact both has potential for moving the entire industry as well as it could lead to too much attention to the non-risky parts of the green transition.

Green initiatives can lead to negative side effects

Lead firms' green initiatives can have negative side effects for other actors in the industry as well as for the green transition at large. This includes redundant mass-certification of manufactures, raising industry entry-barriers, exclusion of experimenting start-ups and that brands are forced to conform to superfluous initiatives in order to stay in the game.

Science based targets initiative distorts the picture

While it is oftentimes cited that a company has committed to a science based target, it is rarely mentioned that the targets tend only to be valid for an insignificant part of the value chain - namely the part that relates to the company's own business operations. With production being outsourced so too are emissions.

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1. INTRODUCTION

1.1 Overview of the Industry

During the last year we have witnessed major new developments in the textile and apparel (T&A) industry. COVID-19 has had an especially huge impact on apparel consumption that quickly put economic pressure on the industry (see figure 1). Due to the reduced demand for clothes, major brands cancelled, and refused to pay for, their orders which were already in the process of being manufactured in the Global South¹. While the precarious workforce in the Global South lost their livelihood, brands experienced sales stabilizing in the third quarter of 2020², particularly due to increased sales through online vending³. How-

ever, as the second lockdown is gradually being eased in Denmark and the apparel turnover once again has gained speed, the pandemic has shown how interconnected the world has become, whether in terms of a virus or international trade.

Environmental sustainability and climate change have gone to the top of the global agenda with international accords like the Paris Agreement and the 17 Sustainable Development Goals (SDGs) from 2015. With a combination of a general public acceptance of the necessity to react, civil society, non-governmental organisations (NGOs)

The global textile and apparel (T&A) industry is a hugely fragmented industry where each stage of production can be situated in different countries. Potentially, cotton may be grown in India, spun in China, dyed in Thailand, and sewn in Myanmar, to be imported by a German brand with retail in Denmark. Over the last 50 years, Western brands and retailers have outsourced production to low-wage countries to save costs. For some countries it has meant a race to the bottom where low wages and no means of collective bargaining have become the norm. Poor working conditions have repeatedly been reported, resulting in negative publicity for the industry and for some brands. In 2013, the infamous Rana Plaza collapse in Bangladesh with a death toll of 1134 put an increasing focus on responsibilities of lead firms. As a result, NGO's, consumers and civil society have demanded more transparency in the global production networks, so the lead firms cannot hide their connections to the outsourced manufacturers. In response, all T&A companies have adopted strategies for corporate social responsibility (CSR).

¹ [Clean Clothes Campaign](#), Un(Der)Paid in the Pandemic. An Estimate of What the Garment Industry Owes Its Workers, 2020

² [Danmarks Statistik](#), "Statistikbanken," last modified April 2021,

³ [H&M Group](#), Annual Report 2020, 2021

and think tanks are pushing corporations to green their operations.

Yet, as this analysis will demonstrate, corporations are already actively engaging environmental concerns. Some seek fundamental transformation through bold innovations and creative pathways, while others put a finely decorated band aid on the bleeding ecology; in other words, some CSR-strategies resonate more with shoppers than with scientists.

APPAREL TURNOVER IN DENMARK (2015=100)

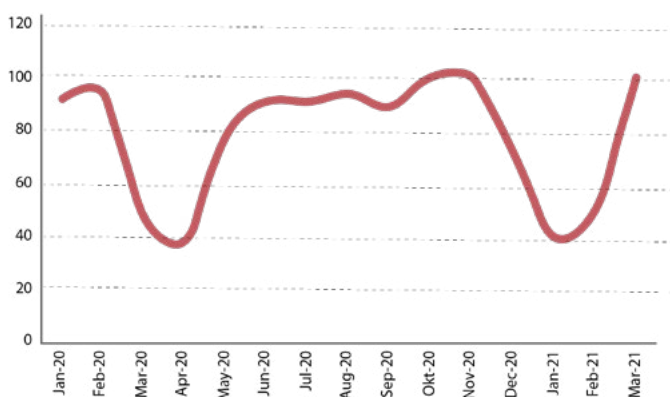


Figure 1 - Seasonally adjusted volume index. Source: Danmarks Statistik.

1.2 Brands and Sustainability

In recent years, CSR-strategies have increasingly been occupied by environmental concerns. The fashion industry contributes its fair share of greenhouse gas (GHG) emissions which some estimate to be 4%⁴, others 8%⁵ and some even 10%⁶ of global carbon emissions. Though global heating is the most common concern when discussing planetary preservation, other ecological issues deserve equal emphasis. A particularly obvious problem in the T&A industry is the water consumption in the fibre and textile production processes, that leads to reduced water availability and quantity for ecosystems and their human inhabitants. At the same time, toxic chemicals from production and manufacturing stages drain into water reservoirs and natural habitats, thus polluting the water that is available.

However, T&A production is globally fragmented, and few brands know their suppliers beyond tier 1 and 2⁷. It is therefore difficult for companies to

Tiers

The T&A GVC is comprised of many steps and actors. The term 'tier' is used to understand how actors are situated in comparison to each other. Typically, it is used in relation to a brand's outsourced production, that is suppliers and sub-suppliers. Tier 1 is the final assembly, tier 2 can be fabric production, tier 3 may spin the yarn and tier 4 could be the producer of the fibers.

⁴ [Fashion on Climate](#), Fashion on Climate: How the Fashion Industry Can Urgently Act to Reduce Its Greenhouse Gas Emissions, 2020,

⁵ [Quantis](#), Measuring Fashion: Insights from the Environmental Impact of the Global Apparel and Footwear Industries Study, 2018,

⁶ [UNECE](#), "UN Alliance Aims to Put Fashion on Path to Sustainability," last modified 2020, accessed December 18, 2020,

⁷ [UK Parliament](#), "Subject: Forced Labour in UK Value Chains," in Business, Energy and Industrial Strategy Committee, 2020

act on environmental problems in the production stages. Some brands try to promote transparency, as far as they can, to show that they have nothing to hide in their supply chains - H&M, for instance, has been particularly successful with this approach⁸ - while others are less willing to disclose their business operations. If they choose to open up, they need to have something to show. Brands and retailers have been seeking different paths to address issues such as poor working conditions and environmental pollution that may occur in their value chains. Here, certification with eco-labels has become a common way for brands to demonstrate environmental responsibility. In recent years, novel green initiatives have begun to emerge, including circular business models that consider recirculation of the garment, sourcing strategies where production is closer to the end-market, large-scale initiatives for better production of fibres, on demand production, and much more. None of these, including ecolabels, can be considered the easy fix to all problems in the industry, and in this early stage all come with caveats.

2. A WORLD OF GLOBAL VALUE CHAINS

This paper approaches the industry through a framework of global value chains (GVCs). Therefore, in this chapter the framework will be depicted in order then to highlight how the textile and apparel (T&A) industry is internationally interwoven through a web of global value chains.

2.1 Global value chains

For most of the twentieth century, production was mainly organized in vertically integrated chains in which one firm owns and is engaged in all stages from production to retail, but in the 1970's a more flexible and geographically divided production started to emerge, including outsourcing of production to subcontractors. This trend became further consolidated after the end of the Cold War when deep globalisation took speed in the 1990's. In the past 30 years, production has increasingly become fragmented in space and modes of organisation, with corporations now stretching their business relations across the globe, jumping from one country to the other⁹. Corporations in Denmark and

The term GVC refers to the full range of activities that firms, farmers and workers carry out to bring a product or service from its conception to its end use, recycling or re-use. These activities can include design, production, processing, assembly, distribution, maintenance, disposal/recycling, marketing, finance and consumer services¹⁰.

⁸ Fashion Revolution, "Fashion Transparency Index: 2020" (2020).

⁹ Peter Dicken, *Global Shift: Mapping the Changing Contours of the World Economy*, 7th ed. (SAGE Publications Ltd, 2015).

¹⁰ Stefano Ponte, *Business, Power and Sustainability in a World of Global Value Chains* (Zed Books Ltd., 2019).

Lead firms Lead firms are usually the largest and most influential firms in a sector. They have the power to change how the chain is coordinated. In the apparel sector, it tends to be major brands and retailers like H&M and Zalando. However, recently large manufacturers have been gaining dominance, like Sae-A and TAL Group. See more [here](#)

Bangladesh may both engage in trade across international borders and are thereby part of *global* value chains.

The term GVC is often used interchangeably with supply chain, yet the GVC framework seeks not only to capture how products travel along the chain but also to capture all the above-mentioned

activities that play a role in bringing a product or service to its end use. It seeks to unravel how activities are coordinated between actors involved in business transactions. All actors get different shares of the value of the final product or service, and some functions capture more value than others. The most value-added functions are connected to pre-production (R&D and design) and

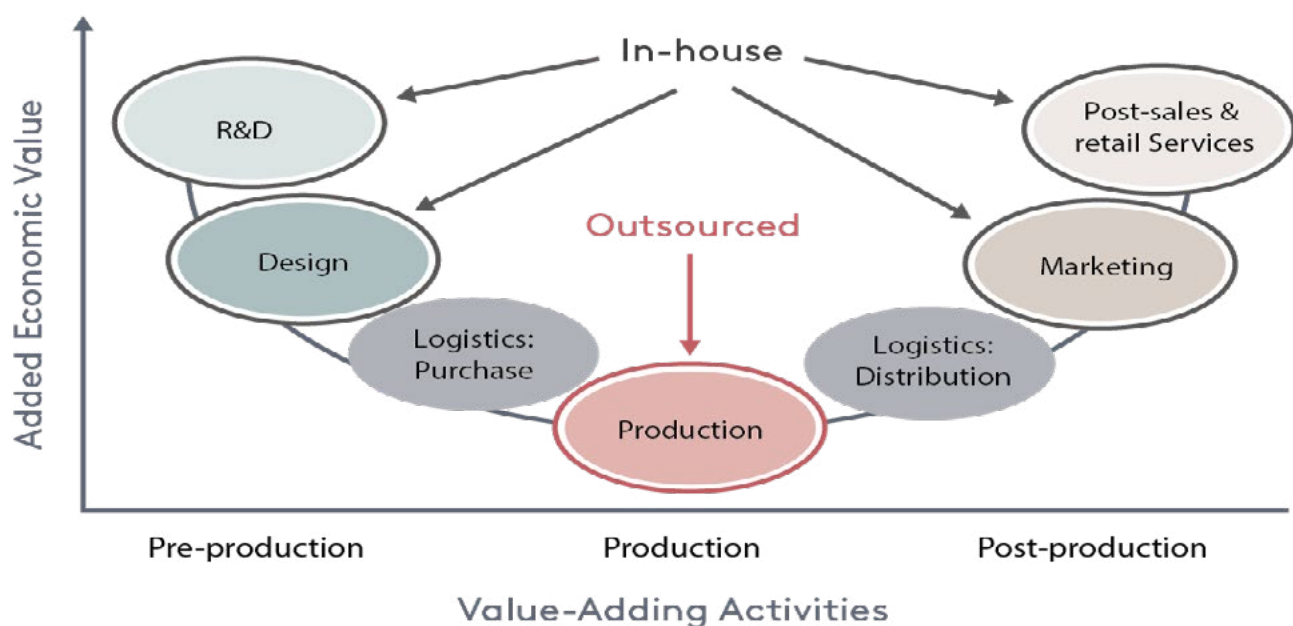


Figure 2 - Smile Curve that shows how apparel brands have outsourced production and kept high-value activities in-house. Based on Fernandez-Stark, Frederick and Gereffi (2011)

post-production (branding, marketing and after-sales services) which leaves actual production at the lower end of the spectrum¹¹. Therefore, lead firms in the apparel industry have been outsourcing production to focus on the most profitable functions as shown in the smile curve in figure 2¹².

2.2 GVC Governance

GVCs are rarely completely market-based with interaction between the firms purely depending on price. Instead, lead firms lay out strategies and manage access to final markets. They decide whether to produce in-house, to outsource to suppliers, or establish hybrid solutions with different kinds of long-term supplier relations. If they outsource, they need to define the specifications of the goods and services to the manufacturers; price, volume, and the required qualifications and attributes of suppliers – lately such qualifications and attributes of suppliers also include sustainability performance¹³.

In 1994, Gary Gereffi proposed a way of understanding GVC governance in which chains were mainly driven either by producers or buyers¹⁴. The textbook example of producer-driven value chains is the automobile industry where large manufacturers like Volkswagen or Toyota man-

age the chain. They have the power to decide when, where and how to produce and distribute. The car-dealers and retailers, in this case, wait for the manufacturers to supply them with new products, and do not have a say in what the next model should look like. Vice versa, in a buyer-driven value chain, the buyers decide how products should be made, even though production is usually in the hands of somebody else. A typical buyer-driven chain is found in the apparel industry. Here, brands are only present in pre- and post-production stages, and not in the manufacturing of the clothes. Designers specify how the apparel should be produced by external firms and when the brands have bought said finished product by suppliers, they may engage in branding, marketing and vending to the end user.

2.3 GVCs reaching the Danish sector

As described earlier the fragmentation of production means actors in Denmark predominantly do not own factories, nor produce goods in any other way. They buy finished products from garment manufacturers in South and East Asia, Southern and Eastern Europe¹⁵ and increasingly some African countries¹⁶. These tier 1 suppliers may source from other countries, who again source from others - et cetera down to tier 4 or 5 where the fibres

11 Ibid.

12 Karina Fernandez-Stark, Stacey Frederick, and Gary Gereffi, [“The Apparel Global Value Chain: Economic Upgrading and Workforce Development,”](#) *Duke Center on Globalization, Governance & Competitiveness*, no. November (2011),

13 Ponte, *Business, Power and Sustainability in a World of Global Value Chains*; H&M Group, H&M Group Sustainability Performance Report 2019, 2019.

14 Gary Gereffi, “The Organization of Buyer-Driven Global Commodity Chains: How US Retailers Shape Overseas Production Networks,” in *Global Value Chains and Development*, 2018, 43–71.

15 Dicken, *Global Shift: Mapping the Changing Contours of the World Economy*.

16 Lindsay Whitfield, Cornelia Staritz, and Mike Morris, “Global Value Chains, Industrial Policy and Economic Upgrading in Ethiopia’s Apparel Sector,” *Development and Change* 51, no. 4 (2020): 1018–1043.

are produced. Since the products typically are shipped on large container ships, long lead times necessitate planning in advance. Some brands plan more than a year ahead for their upcoming collection. After the brands have bought the garments, there are different paths to take. Generally, they sell the collection through their own physical stores, through their online platforms, or they sell it on to other businesses, for example retailers. A buyer (e.g. a brand) can be a unitary actor or be a part of a group of brands like H&M Group or Bestseller. While most brands have their own online platforms where they can sell their products, consumers are inclined to use only a few larger platforms where all the various brands' clothes can be purchased in one place. An e-commerce survey suggests that Zalando was the most used platform of the total online vending in Denmark in all sectors with 4.4% of respondents having bought through their website last time they purchased a product online, even surpassing Nemlig.com (2.2%), H&M (1.9%) and Boozt.com (0.9%)¹⁷. Zalando is an online fashion retailer which primarily procures finished clothes from brands and thus only has contact with garment manufacturers through their own smaller clothing lines. The need to reach end-consumers through a digital presence is not new. However, the COVID-19 pandemic has accelerated the development, as fewer people ventured into physical stores to buy new clothes. This trend also incentivises online retail-

ers to develop digital technologies, like trying on clothes virtually powered by augmented reality, or gamification, to get costumers to interact and play with products virtually¹⁸. Even though Zalando already was Europe's biggest online fashion retailer, the online purchasing trend has been further fuelled by COVID-19 and consequently further consolidated the market position of large online retailers like Amazon, Walmart and Zalando.

2.4 Capitalism and sustainability management

In the last decades the acidification of oceans, rising global temperatures and loss of biodiversity have sounded the alarm and led to an increasing focus on climate change and environmental issues. Yet, while there is a general consensus in the Danish population to react to these threats, it is still intensely debated how to react. In the high-income countries, most people have been hesitant to argue for lowering economic living standards. If consumer behaviour is remaining immobile, technological innovations and creative pathways are needed in order to reduce the environmental impact of the increasing production of goods. The attention has caught the eye of corporations, that have started see this issue as a business opportunity – or as Stefano Ponte, professor at Copenhagen Business School in international political economy, points out: "Corporations are

17 FDIH, *E-Handelsanalysen 2020: Et Usædvanligt Rekordår for Dansk e-Handel*, 2021, 45,

18 McKinsey & Company, *The State of Fashion 2021*, 2020,

turning sustainability into a business"¹⁹. Instead of being an end to itself, it has become a means to profit. "Sustainability has become a commodity to be traded, bought, sold and managed like all others. Business has turned the sustainability challenge into an asset, at least in the short term"²⁰.

In the last three decades, the organisational dynamics of global economy and the GVCs therein have been driven by three capitalist dynamics: speed, flexibility and cost minimization. Firms have balanced these three features to maximise continued capital accumulation through technological remedies and spatial fixes in the global economy²¹. Additionally, Ponte argues that sustainability management is starting to emerge as yet another dynamic of capitalism²². He describes sustainability management as the set of conscious strategies adopted by lead firms in GVCs regarding environmental issues²³. While corporations were deterring or trying to defeat environmental regulation a few decades ago, they are now directly addressing ecological concerns – partly because it is now possible to capture green value in GVCs through green capital accumulation. In other words, "Lead firms in GVCs are now actively using sustainability to help mitigate reputational risk, add to the bottom line, create new product lines, enhance brand loyalty, and in-

crease their power"²⁴. But what does this sentence mean?

An initial profitable way to manage sustainability is incorporating eco-efficient processes such as reducing GHG emissions and water use, optimize packaging, and improving recycling, as they can reduce costs in operations and therefore ensure more profits on the bottom line. For the public eye this, of course, is done in the name of the environment. With such hands-on strategies lead firms can also mitigate reputational risk. Good sustainability management and CSR-strategies can prevent negative media exposure and NGO campaigns that could damage brand reputation and possibly resulting in faltering brand loyalty. Lead firms are also mitigating supply chain risks by establishing closer ties to suppliers - during natural disasters, conflicts or pandemics, supply chain disruptions lead to resource shortages, and closely monitored links with suppliers ensure predictability and stability²⁵. Therefore, whilst sustainability engagement is framed as good heartedness, it is also good for business.

In the name of environmental considerations and shared value, lead firms require suppliers to share more information on cost structures and operations. Obtaining this information from suppliers

19 Ponte, *Business, Power and Sustainability in a World of Global Value Chains*, 14.

20 Ibid., 223.

21 Neil M Coe and Henry Wai-Chung Yeung, *Global Production Networks: Theorizing Economic Development in an Interconnected World* (Oxford University Press, 2015).

22 Ponte, *Business, Power and Sustainability in a World of Global Value Chains*.

23 Ibid.

24 Ibid., 14.

25 Ponte, *Business, Power and Sustainability in a World of Global Value Chains*.

can, however, be used by lead firms to enhance power and to better control supply chains without having to vertically integrate. The information can give leverage and push sustainability demands upstream along the chain to suppliers. In order to stay in the GVC, these suppliers need to incorporate environmentally friendly practices to reduce negative environmental impact. However, even though suppliers then generate green value by lowering the environmental impact, they tend to not get paid for this value creation. Instead, the value ends up at the lead firms. Ponte coins this dynamic the sustainability-driven supplier-squeeze²⁶.

An example of the supplier squeeze is when buyers ask the suppliers for environmental upgrading. The factory manager usually sees it as a way for the buyers to lower their reputational risk rather than themselves gaining anything. Therefore, the “factory manager dilemma” arises when buyers have new environmental requirements yet do not want to pay extra for the added costs of investment in certifications, system modification, technology and human resources²⁷. These dynamics are additional pressure on suppliers that are already squeezing productivity out of their workforce, sometimes with truly horrendous working conditions as the result.

The rise of the sustainability agenda also brings opportunity for diversification. With some groups

of people in society demanding more conscious production and consumption, lead firms can in addition to their conventional product lines create new product lines that can be tailored to suit this segment of consumers. These green labelled product lines attract new customers without hav-

3. BREAKDOWN OF SUSTAINABILITY MANAGEMENT IN THE INDUSTRY

In this chapter, the global value chain (GVC) framework is applied more specifically on the apparel industry. The analysis is structured in two sections. In the first, the analysis examines how and for what benefits fashion retailers strategically engage with sustainability in various ways and, in the second section (chapter 4), the generated knowledge is used to examine how other actors are affected by these fashion retailers’ engagement. The analysis particularly examines the two fashion retailers, H&M and Zalando, which have both been quick to adopt green strategies. These two aren’t the only ones which could be highlighted in the report, a lot of other brands and retailers act in similar ways. Therefore, in this report, H&M and Zalando represent a wider tendency in the industry.

The global awareness of the climate crisis has gained momentum, the zeitgeist is occupied with sustainability, and corporations are forced to adopt some kind of CSR-strategy. Textile and apparel (T&A) brands and retailers have not equally

²⁶ Ibid.

²⁷ Mahwish J Khan, Stefano Ponte, and Peter Lund-Thomsen, “The ‘Factory Manager Dilemma’: Purchasing Practices and Environmental Upgrading in Apparel Global Value Chains,” *Environment and Planning A: Economy and Space* 52, no. 4 (2020): 766–789.

invested themselves in the fight against climate change, but all have some CSR answers ready for the public eye and tend to have a webpage dedicated to display how they contribute to the protection of the planet. In fact, a lot of brands are doing a lot – and that is great! – but often, the aim is at quick, easy, straight forward solutions. We need to get the solutions that aim for fundamental change into the driver's seat. Luckily, some of the best solutions are not even that far away. For instance, an incremental solution is adopting and focusing more on services instead of products. Reducing production is better for the planet than the incessant focus on having products with marginally lower environmental and carbon footprint (See page 24 for list of recommendations).

3.1 Branded as sustainable

Most larger retailers have started to brand themselves with a green image or slogan. Bestseller calls it "Fashion FWD", H&M frames it as "Conscious Exclusive" and Zalando talk about "do.More". All three now have a 'green' aspect to their corporate strategy which includes a consumer-facing CSR-strategy that contain products with a green label on it. Scrolling through their websites, now and then there appears a product which is somehow related to 'sustainability'. Zalando puts a small label saying "sustainability" on the image of some products. However, while the consumer may at first assume these products to be sustainable, they should rather be characterized as

"less unsustainable". Some products labelled as sustainable contain only 20% recycled polyester or 50% cotton from Better Cotton Initiative (BCI), thus implying a low(er) environmental impact. We will return to recycled content and BCI later in the analysis.

Now, it is worth mentioning that Forbrugerrådet Tænk, a consumer organisation, in May 2021 reported five online retailers including Zalando for greenwashing to the Ombudsman in Denmark²⁸. It is argued that Zalando is misleadingly connecting sustainability to their products without concrete specifications. One example that is given for greenwashing is that a product with the label 'sustainability' may only refer to the fact that it contains an unspecified amount of organic cotton. Further, Zalando equates sustainability with organic farming practices, yet cotton cultivation is not enough to denote the sustainable of the entire apparel production. The farming practices say nothing about later processing stages of the textile where massive amounts of chemicals are used and end up in the environment or reside in the clothes. Forbrugerrådet Tænk sees the Global Organic Textile Standard, an organic standard, as a potential benchmark for best practice/sustainability as it also includes requirements for the rest of the value chain (and also social, ethical and health aspects). We agree, green promotion is too often too vague and too many products have been linked to sustainability that are just slightly

²⁸ Forbrugerrådet Tænk, "[Stop Greenwashing: Forbrugerrådet Tænk Anmelder 5 Webshops](#)," last modified 2021, accessed May 12, 2021

related to the concept. Further, as of now, following §13 in the Marketing Act, the **guidelines for the use of environmental and ethical claims** state that documentation for environmental product claims should be available for the ombudsman on request and that it is only recommended that documentation should be available for the general public. Since brands are already required to be in possession of the documentation, we find it meaningful that it should be available for the general public too. This would be one step further down the path of a data-driven and transparent T&A industry.

3.2 H&M's sustainable sourced cotton

H&M has "conscious"-labels on products on their website. A lot of those only refer to the fact that they have set targets for recycled polyester in 2030 or similar, thus only referring to a strategy and not any improvement to the specific product labelled. Other "conscious" products include "sustainably sourced cotton", which can be any of the following three: organic cotton, recycled cotton or Better Cotton (BCI cotton). With an equal emphasis on all three, it appears to the consumer as though they are equally represented. However, in 2019, H&M's sustainably sourced cotton consisted of 16,02% organic, 0,55% recycled and 80,02% Better Cotton²⁹. In other words, "sustainably sourced cotton" may sound ideal, but there is more to it than initially meets the eye. Furthermore, corporations predict that future

consumer demands include new types of consumption. Therefore, H&M is trying out new business models, such as on-demand production, re-commerce, repair, rental, and the vending of second-hand clothing. The latter is already firmly established as an additional part of Zalando's online platforms. Zalando Zircle is a website and app for second-hand clothing that is available in several European countries. While the choice to enter such a business model is first of all to diversify the portfolio and create new product lines, it is also a business strategy to ensure their market position in emerging consumer behaviour. While Zalando can boast about environmental consideration, Zalando is tough competition for companies that were "born green", e.g. Secondtots in Denmark, which sells second-hand clothes for children.

3.3 Recycling

H&M's business model is tied up with fast fashion – quickly deciphering consumer desires, with fast production at low cost. As the prices in stores are also low, they must sell in large quantities. Clearly, this does not go hand in hand with preventing the depletion of natural resources. Hence, H&M needs to either adopt a new business model so as to produce high quality clothes at higher prices, thus lowering consumption - or ensure that their production uses fewer raw materials. H&M leans towards the latter. Through technological innovations they aim at creating a business model based on circularity. Their latest battle cry is an invention

²⁹ H&M Group, "[Cotton](#)."

known as the “Green Machine”, which can separate cotton from polyester in textile products, in order to recycle fibres³⁰, something that in the future may be used on a large scale. In their flagship store in Stockholm, they also have a machine that has can recycle garment-to-garment. People show up with their old clothes which are then cleaned, shredded into new fibers, spun into yarn, and knitted into new garments - albeit with the assistance of some virgin fibers. H&M states: “The system uses no water and no chemicals, thus having a significantly lower environmental impact than when producing garments from scratch”³¹. But as the quote also indicates, recycling still has an environmental impact, even though recycling is sometimes thought of as creating a completely zero-impact loop. Both inventions have been made public in the second half of 2020. And while they announce that the technology for the Green Machine is available for everyone, they can proclaim that they are doing good. Meanwhile, H&M helps spread the idea that it is possible to consume indefinitely without impacting the environment, thus steering the industry in the direction of circularity at the cost of lowering consumption. In this sense, they can, by being in the forefront of sustainability engagement, attempt to set a trajectory for the industry that fits their business model.

3.4 Sustainability initiatives: BCI

A way to externalise sustainability actions is through multi stakeholder initiatives (MSIs). Environmental farming practices and thereby yield what they name Better Cotton³². However, the MSI has been criticised for its focus on scalability on the benefit of farmer participation³³ and recently the scheme has experienced serious allegations with much of the cotton being sourced from the Chinese region, Xinjiang. A report from December 2020 estimates that the region mobilises hundreds of thousands ethnic minorities (predominantly Uighurs) into cotton-picking³⁴. The majority of cotton output from this region is therefore likely to be involved in a coercive, state-

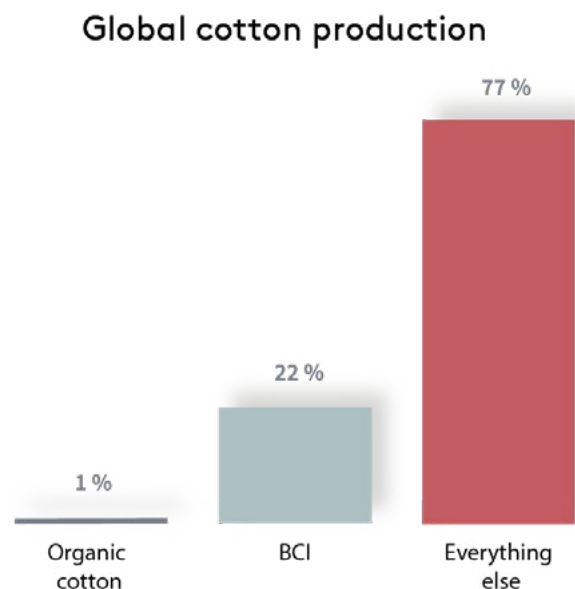


Figure 3 - Percentage of different cotton types. Source: data from Textile Exchange (2020)

30 Rikke Agnete Dam, “[Kan H&M's Nye Grønne Maskine Redde Miljøet?](#),” Børsen, November 21, 2020,

31 H&M Group, “[RECYCLING SYSTEM 'LOOP' HELPS H&M TRANSFORM UNWANTED GARMENTS INTO NEW FASHION FAVOURITES](#),” last modified 2020,

32 BCI, “[Bettercotton.Org](#),” Better Cotton Initiative.

33 Lone Riisgaard, Peter Lund-Thomsen, and Neil M. Coe, “Multistakeholder Initiatives in Global Production Networks: Naturalizing Specific Understandings of Sustainability through the Better Cotton Initiative,” *Global Networks* 20, no. 2 (2020): 211–236.

34 Adrian Zenz, [Coercive Labor in Xinjiang: Labor Transfer and the Mobilization of Ethnic Minorities to Pick Cotton](#), 2020, 3,

“Better Cotton means producing cotton in a way that cares for the environment through processes that minimise the negative impact of fertilisers and pesticides, and care for water, soil health and natural habitats”. It functions in the same way as renewable energy in a power grid. Buyers purchase Better Cotton from the cotton grid but cannot be sure that it is actually Better Cotton that they receive. At the moment, Better Cotton accounts for a staggering 22% of global cotton production and is expected to grow.

run program that targets ethnic minority groups. It is unfathomable how this went unnoticed by BCI when it was occurring on such a massive scale. Since most of H&M’s cotton is sourced through the initiative and H&M has a seat on BCI’s council³⁵, H&M has inevitably been complicit in sourcing from this region. Their official statement on the human atrocities is that they are “deeply concerned” with the reports by civil society organisations and media coverage³⁶. We have tried to get them to comment further on the forced labour in their supply chains, yet they referred to the official statement or to contact BCI for further inquiry. Although H&M are a member of BCI, they represent these allegations as external to the corporation. H&M has actively promoted transparency and has indeed ranked highly in the public eye in this parameter³⁷. Yet as this case suggests, MSIs are key in externalising risks. Also, H&M promotes Better Cotton as sustainable sourced, but while

the initiative does have a focus on sustainability, a recent life cycle assessment suggests that Better Cotton does not have a significantly lower environmental impact compared to conventional cotton³⁸. Consequently, Better Cotton should not be referred to as sustainable in any way. Meanwhile, H&M benefits from BCI’s focus on magnitude rather than quality and control since all of its cotton can be labelled ‘sustainable sourced’. Hence, while having had major sway over the formation and orientation of the initiative, H&M should not be allowed to deny responsibility for its influence as a key actor when the outcome is catastrophic, as seen with the lack of proper auditing in Xinjiang.

With continued new revelations in the Xinjiang region, H&M has been “expressing concern about reports of Uyghur forced labour”³⁹. After an intensified international focus on the atrocities on March 22nd, 2021, there came a backlash

35 BCI, “BCI Council,” [Better Cotton Initiative](#), accessed April 27, 2021,

36 H&M Group, “[Press Release](#),” Reports and Presentations,

37 Fashion Revolution, “Fashion Transparency Index: 2020”; UK Parliament, “Subject: Forced Labour in UK Value Chains.”

38 Subramanian S.Muthu, *Assessing the Environmental Impact of Textiles and the Clothing Supply Chain*, 2nd ed. (Woodhead publishing, 2020), 13.

39 The Economist, “[Consumer Boycotts Warn of Trouble Ahead for Western Firms in China](#),” *What has gone wrong?*, April 2021,

from China, aimed at brands that questioned the working conditions for cotton production in the region. H&M in particular was targeted – stores in China have disappeared on smartphone apps and their apparel products were not available on popular Chinese e-commerce apps. Meanwhile, Chinese celebrities initiated a national boycott of H&M and other critical brands. It has been a way to silence critics, and indeed many firms have been silent about the development. Recently, BCI removed an online statement of concern about Xinjiang cotton from its website⁴⁰.

3.5 Science Based Targets initiative obfuscates the real emissions

Another initiative that is on the rise is the Science Based Targets initiative (SBTi). In recent years, science-based targets (SBTs) have been discussed as water in the desert for firms to demonstrate trustworthy long-term commitments. Corporations like H&M, Zalando and Bestseller have ridden the tide and made commitments to reach SBTs. The initiative is developed by international

organisations including UN Global Compact and World Wide Fund for Nature. On SBTi's website it is stated that "Science-based targets provide companies with a clearly-defined path to reduce emissions in line with the Paris Agreement goals"⁴¹. After companies have submitted an application, the SBTi consider whether the target is realistically within the 1.5 or 2 °C as the Paris Agreement require. These targets are split into three scopes: Scope 1 relates to direct emissions from a company's internal operations, scope 2 includes indirect emissions, such as electricity consumption, and scope 3 is external emissions, such as GHGs emitted by suppliers. In order to make a valid target, companies have to commit to scope 1 and 2 targets that are set in a 5-15 years' time frame – including a scope 3 is only a requirement if a company's scope 3 refer to more than 40% of the combined scope 1, 2 and 3 emissions. That is the case with non-producing brands in the T&A industry like H&M and Zalando, that therefore have to a scope 3 target.

Science Based Targets initiative

Developed by international organisations including UN Global Compact and World Wide Fund for Nature, the initiative assesses whether companies' climate targets are aligned with the Paris Agreements' goal of not surpassing a global temperature rise of 1.5 or 2 °C.

⁴⁰ The Economist, "[China Pushes Back against Critics of Its Policies in Xinjiang](#)," *Govcoins: The digital currencies that will transform finance*, May 2021,

⁴¹ Science Based Targets initiative, "[Science Based Targets: Driving Ambitious Corporate Climate Action](#),"

Typical scope 1, 2 and 3 for an apparel brand or retailer

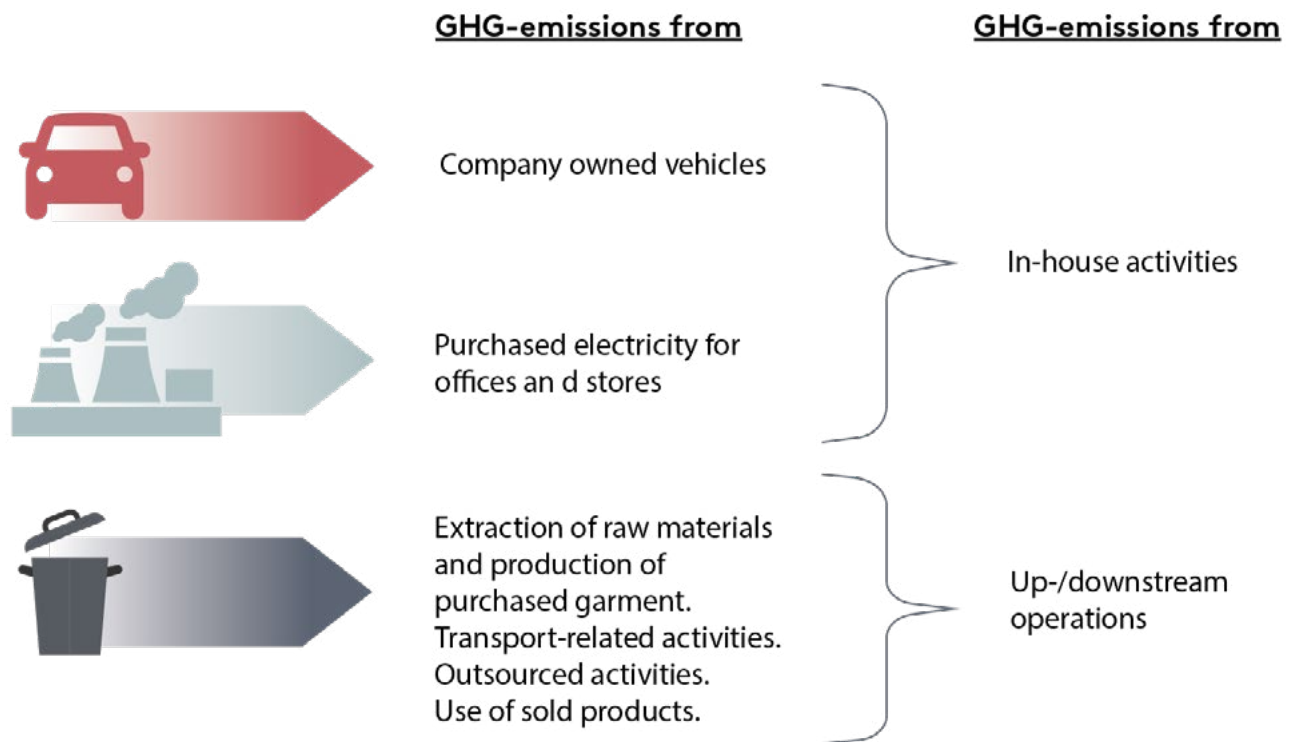


Figure 4 – Science based target scopes for a typical apparel brand. Author's illustration

H&M's target is to reduce GHG emissions with 40% from own operations (scope 1 and 2) before 2030, using 2017 as base year; and, also by 2030, to reduce scope 3 GHG emissions by 59% per piece of purchased garment. It is stated that the scope 1 and 2 target is consistent with the Paris Agreement⁴², yet scope 3 is not. Unfortunately, it is not revealed what the necessary level of reductions would have been for H&M to be within the boundaries of the Paris Agreement in scope 3. In this case, cutting 59% GHG emissions per piece of purchased garment is considerable - but if the international targets of the Paris Agreement are to be reached, then we must also set in place SBTs that will reach them.

As earlier mentioned, the apparel GVC is globally fragmented, and H&M is one of the many brands that has outsourced production. Based on Life Cycle Assessments of H&M's products, Figure 5 shows the emissions of each stage of production and consumption, as a percentage of total life cycle GHG emissions.

H&M's operations (Scope 1 and 2, at 0.35% of total emissions) have been added to the chart for comparison with scope 3 emissions (all other phases). H&M's own operations account for an almost insignificant part of the total GHG emissions. It is therefore imperative to include scope 3 if the SBTs are to have any effect. Contrary to other corporations that have developed SBTs, H&M does

42 Ibid.

include scope 3 as a commitment, albeit not one that lives up to the Paris Agreement. Yet as scope 3 refers to suppliers, suppliers need to transform their businesses in order for H&M to reach their commitment, which unfortunately generates new problems. As the H&M Group's Annual Report states: "the starting point is to select suppliers who share the company's ambition"⁴³. H&M Group aims at building up supplier capabilities so that H&M better can engage best environmental and social practices. As a part of this, H&M has rolled out a monitoring programme that gives "deeper insight into supplier performance" and includes sustainability assessment designed for constant improvement⁴⁴. No rotten apples are allowed. This push of demands towards producers further establishes GVC entry barriers, requiring environmental standards and demanding business information from suppliers. Suppliers will pay the extra costs; or at least, there are no indications in H&M's reports that they aim to compensate the suppliers for the extra costs that comes with the environmental upgrading they are bound to undergo.

Zalando has also made a commitment to an SBT. They commit to reducing scope 1 and 2 GHG emissions by 80% from a 2017 base year, which is deemed consistent with reductions required to keep warming to 1.5 °C by the experts. Additionally, "Zalando also commits that 90% of its suppliers (by emissions covering purchased

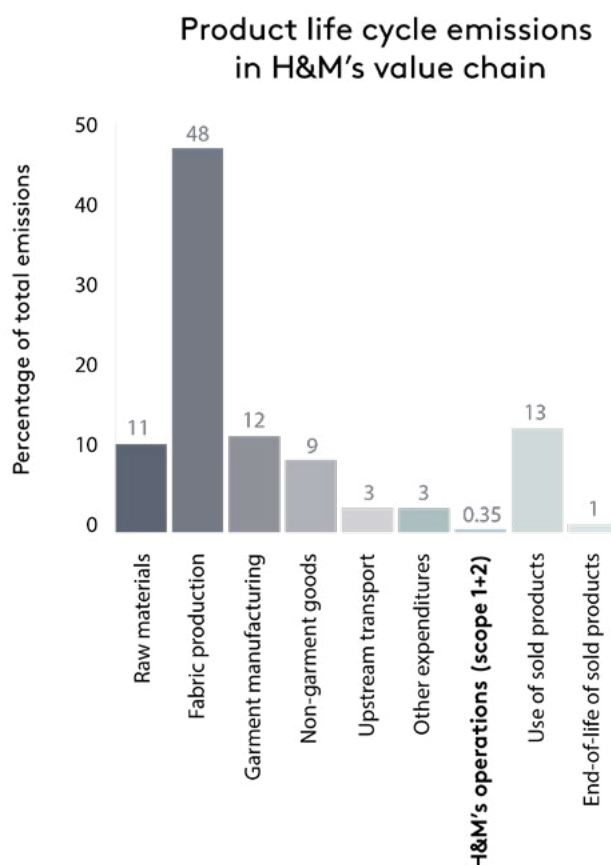


Figure 5 – Percentage of GHG emissions at each stage of H&M's value chain based on a life cycle assessment. Source: data from H&M (2019, p. 53)

goods and services sold on its platform, packaging and last-mile-delivery partners) will have science-based targets by 2025"⁴⁵. In other words, the latter commitment requires brands who want to sell their products through Zalando's platform to commit to SBTs by 2025. It may jeopardise Zalando's own market position since brands tend to sell through several outlets and may find that other outlets suffice. However, Zalando is Europe's largest online fashion retailer and has quite the market dominance, as will be discussed further in the next paragraph. If Zalando's strategy of

⁴³ H&M Group, [Annual Report 2019](#), 2019, 48,

⁴⁴ H&M Group, [Annual Report 2019](#).

⁴⁵ [Science Based Targets initiative](#), "Science Based Targets: Driving Ambitious Corporate Climate Action."

restricting access to their platform succeeds, and Zalando can promote itself with a list of 'green' brands, then it will effectually have achieved 'sustainability' without much effort. Its ambition to be a flagship for sustainability in the industry is also seen with its presence at Copenhagen Fashion Week where the *Zalando Sustainability Award* will be handed out⁴⁶. As a profit-seeking corporation, putting itself in a position in which it can pick and choose the most righteous brand seems a bit off – especially with the award named after Zalando itself. Such a sustainability award presented in Copenhagen Fashion Week will undoubtedly create connotations between Zalando and sustainability.

4. NEGATIVE SIDE-EFFECTS FROM GREEN ENGAGEMENT

4.1 How Science-based targets push demands towards upstream actors

This section will start out by describing some keen observations captured in an article by the Danish newspaper *Børsen*⁴⁷. Here, some Danish brands explain how the fashion sector increasingly is met by new demands. These demands especially come from retailers who each require different social and environmental requirements and different means of documentation. The interviewed CSR-managers of the brands see retailers' sustainability demands as a positive trend, although it requires a lot of resources to be able to meet them. Sidse Jensen, CSR-manager at the ap-

parel brand Masai, points out that the work with sustainability is nevertheless necessary in order to be a part of the industry in the future.

The article also directs attention to Zalando's SBT in which suppliers are required to commit to SBTs by 2025. Its SBT was announced in June when lockdowns due to COVID-19 had challenged the economy and online vending increasingly became crucial to reach consumers. For brands, it would be devastating to lose a vital access point to the consumer both during the pandemic but also more generally post-COVID-19. Hence, suppliers will likely modify their businesses to cope with sustainability demands from Zalando. First, the brands will have to apply for eligible SBTs, and thereafter, to comply with the commitments to reduce GHGs. Following such commitments, suppliers will have invested time and resources on the verification procedure, as well as reaching the commitments, which consequently will make them more likely to follow suit on new demands. For Zalando, this can lead to a lock-in of its supplier base, thereby consolidating its power. Just like brands are squeezing their suppliers for more value for the same price, Zalando (and other retailers) are squeezing brands to comply with their environmental targets. Therefore, when looking at GVC dynamics, it is hard to imagine that this additional pressure from retailers will not put even more pressure on suppliers.

⁴⁶ <https://copenhagenfashionweek.com/application/zalando-sustainability-award>

⁴⁷ Frederik Vincent and Louise Vogdrup-Schmidt, "[Modebranche Møder Jungle Af Krav Fra Storkunder](#)," *Børsen*, November 10, 2020,

4.2 Standardizing sustainability

Together with other fashion retailers and brands, Zalando sets high sustainability ambitions for itself as well as for suppliers. And in a time where the sustainability agenda is in focus it can be difficult to be in opposition to such demands. In Børsen, Sidse Jensen, CSR-manager for the apparel brand Masai, notes in relation to compliance with retailers' demands: "We see it as a long term investment that will contribute to ensure that we will still be relevant in five years' time"⁴⁸. Masai is challenged by the competition of major retailers even though it is itself a relatively large brand⁴⁹. In fact, a McKinsey & Company report suggests that economic profits in the T&A sector are increasingly going towards the biggest corporations, leading to a widening gap between the top and bottom, thus paving the way for a winner-takes-all effect⁵⁰.

Many people are amazed when corporations take steps towards greening their operations to do their part in protecting the planet. Mostly, the sustainability management are based on strategic decisions to ensure their market position and add to the bottom line. H&M and Zalando have both been quick to see the potentials of investing in thorough CSR-strategies. They have created new product lines, enforced supplier relations and been frontrunners in shaping ideas about what green initiatives should look like. But even though they profit from sustainability management, are

these not still steps in the right direction? They may be, since it further establishes the fact that we need green action.

Vice versa, it might force brands to just struggle to catch up on the latest requirements from retailers, rather than taking a step back to look at their own business model and supply chain - and creating a strategy that suits their unique situation. In this case, small and medium-sized brands might attempt to integrate strategies that do not fit their business model. For example, its dubious whether Zalando's SBT will actually move the industry, if the brands are busy generating arbitrary targets.

In 2021, environmental sustainability is becoming the standard, but which particular types of green engagement it refers to is still clouded. Therefore, as all forms of green initiatives are cherished as an accomplishment, it can be challenging for a brand to oppose it – even if there might be more daring and progressive paths for it to go. This is especially the fact when retailers demand garments with fibres with certain specifications like Better Cotton, organic cotton, or recycled polyester and the respective certifications.

4.3 Circularity, recycling and mass-consumption

Returning to H&M's endeavour to come up with technological solutions that will enable recycling on a large scale: It is interesting to observe

⁴⁸ Ibid. Our translation

⁴⁹ Deloitte, Masai: Annual Report 01.07.2019 - 30.06.2020, 2020.

⁵⁰ McKinsey & Company, The State of Fashion 2021.

the interplay between circularity and mass consumption. Here, it must be stressed that not all who boast 'circular' business models see the same degree of environmental impact reduction. Regardless, it seems to have catalysed institutional motivation in the form of EU and national governmental policies that are now beginning to facilitate recycling initiatives through "extended producer responsibility", and largescale, improved waste management. Such news is promising; yet with the normalisation of circularity per se (not a complete loop) as a best practise, and while recycling in the next many years will still have a significant environmental impact, the problems of mass consumption and over production can still not be ignored.

4.4 The Jevons Effect

In 1865 William Stanley Jevons published a book named *The Coal Question; An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of Our Coal Mines*⁵¹. It was written in a time where the United Kingdom's industry was booming, which entailed increasing production and required a massive consumption of energy that was generated by burning coal. Jevons argued that Britain's reliance of coal could be a problem in the long run since access to the resource would decline and ultimately be depleted. At that time, a conventional idea was that technological innovations would conduce more efficient

energy usage and which then would reduce the rate of depletion. However, Jevons contended that energy efficiency was leading to an increase in consumption due to the rising demand from a growing economy. He therefore saw a problem in rapid economic growth that would result in a depletion of the natural resource on which society relied. This is known as the Jevons Effect and can be loosely adopted to a contemporary dilemma of whether economic decoupling from ecological degradation is happening rapidly enough in light of growing economies and increased consumption – not only in the West, but particularly in regard to a growing global middle class.

4.5 Outsourcing of emissions

Another aspect which is often forgotten in the debate about how to address climate change, is the ethical dimension that is connected to the global fragmentation of production. As Peter Dicken informs us, when corporations began to outsource-offshore production for the benefit of low labour costs "quite a lot of carbon production was simply outsourced abroad"⁵². If countries' total GHG emissions were calculated in the same way as oil, that is in the country of consumption, for all commodities, then the West would have an even larger carbon footprint – this is most evident in the T&A industry. Such a change in the means of calculation would definitely turn H&M and Zalando's SBTs upside down.

⁵¹ William Stanley Jevons, *The Coal Question: An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of Our Coal Mines*. (London: Macmillan & Co, 1865).

⁵² Dicken, *Global Shift: Mapping the Changing Contours of the World Economy*.

5. RECOMMENDATIONS

Consumer

- **Buying nothing is always better from an environmental standpoint.**

See our Impact Guide for inspiration on how to reduce your environmental footprint.

- **Be critical about 'green' messages from businesses.**

When looking at green logos and words such as 'sustainable', 'responsible', 'green', etc. then ask yourself (and the brand) what that means. If it is not clearly described, then it is probably also vaguely implemented.

- **Be critical about products that have 'saved' water and GHG emissions.**

Do not ask how much water and GHG emissions have been saved by buying this particular product – ask how much water it still consumes, and how much it still pollutes, in order to end up at your disposal.

Industry

- **Prioritize services over products.**

Develop services as a bigger part of your business model. This includes resale, rental, repair workshops, do-it-yourself workshops, augmented reality clothes or other creative ideas.

- **Dare to try out new business models or new collaborations.**

The industry is undergoing a massive change, now is the time to take a leap of faith into new ways of doing business and having partnerships across industries, for example in waste management.

- **Communicate what you do - but also what you are not doing.**

Be honest – do not make it sound like you have solved the problem. Disclose your choices and priorities. Disclose short (1-2 years) and mid-term (5-10 years) goals and make sure that the goals are concrete enough so that your customers can see if you meet them.

Politicians

- **Stricter regulations on the 'green' promotion of businesses.**

The rules need to be clearly defined and the ombudsman's power needs to be strengthened to ensure a transparent sector.

- **Extended Producer Responsibility**

Implementing an Extended Producer Responsibility will make brands responsible for the entire life cycle of the product. This will create an incentive to develop models for take-back, repair, resale, recycling and more durable products.

- **Foster long-termism**

Disincentivize short-term surges in corporate share prices. In order to enable a fundamental green transition in the textile and apparel industry, corporations should not work with, and be judged based on, year-on-year performance and their immediate stock price. Instead, policies should deter share buybacks, strengthen director's duty of care and enforce appropriate measures to restrict rapid stock trading.

A key term in this field is sustainability that usually refers to economic, social and environmental dimensions. In this paper, it is used in the context of the latter if not otherwise stated. A narrow definition of the term is not used, since the analysis is also to capture how it is applied by businesses. However, in our view, sustainability should be employed in the context of the sustainability of ecosystems at large – contrary to the current textile and apparel industry that wear out natural resources and pollutes to an extent that exceeds planetary boundaries.

6. METHODOLOGY

This paper is developed on the basis of secondary literature with academic literature setting the foundation for the analysis. The academic field of global value chains in particular has been a prerequisite to understanding dynamics between actors in the industry. Although often hidden, power plays an important part of how businesses operate within their respective value chains.

The empirical material used to qualify the enquiry includes corporate reports, consultancy reports, NGO reports, webpage content, press releases, opinion pieces in newspapers and a general insight of the industry from the point of the think tank.

ABOUT TÆNKETANKEN TEKSTILREVOLUTIONEN

Tekstilrevolutionen is an independent think tank working towards a textile industry in which production and consumption has a positive impact on the world and its inhabitants.

We believe in inspiration, information and co-creation are the tools that will bring us there. We want to develop an environment where scientists, scholars, brands, consumers, politicians and authorities are collaborating to find, cultivate and realize the best solutions.

We collect data, come up with ideas and pinpoint barriers and possibilities connected to the green transition that the industry is bound to undergo. To brands, we assist in reaching their green potentials; to politicians, we provide industry knowledge and push for progressive legislation; to customers, we share knowledge and develop tools which can guide towards informed decisions and cognizant consumer behaviour.

We want a nourishing textile industry where stock prices can grow, revenue streams flow, and business life can take centre stage, yet it cannot be on the expense of flourishing ecosystems where trees endure, rivers are pure, and all people can earn a living wage.

Abbreviations

BCI	Better Cotton Initiative
CSR	Corporate social responsibility
GHG	Greenhouse gas
GVC	Global value chain
NGO	Non-governmental organisation
MSI	Multi Stakeholder Initiative
SBT	Science-based target
SBTi	Science Based Targets initiative
SDG	Sustainable development goal
T&A	Textile and apparel

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