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From Fast Fashion to Conscious Couture : Revealing the Need for Policy in Shaping a Sustainable Fashion Industry

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From Fast Fashion to Conscious Couture : Reveling the Need for Policy in Shaping a
Sustainable Fashion Industry

Senior Project Submitted to
The Division of Social Studies
of Bard College

by
Mikelison Womack

Annandale-on-Hudson, New York
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Dedication

I humbly dedicate my senior project to the cherished memories of my beloved grandfather Melvin Robinson, my granny Lottie Mae Womack, and my papa Oscar Womack, whose absence in my life has left an unfillable void. As I stand at the precipice of a new chapter in my life, I cannot help but feel overwhelmed with gratitude for the impact you have had on me. Your love, your support, and your belief in me continue to guide me in every step of my journey.

Though it breaks my heart that you all are no longer here with me, I find solace in the fact that your legacy lives on in my heart. The memories we shared together remain a source of comfort and strength, inspiring me to be the best version of myself and to strive towards my dreams, no matter how daunting they may seem.

I promise to honor your memory by continuing to work hard, to pursue my passions, and to make a positive impact in the world, just as you did during your time here with us. Your love and your spirit will forever be a beacon of hope in my life, and I will always carry your legacy with me, wherever I go.

Thank you for everything, my dear grandfather Melvin Robinson, my precious granny Lottie Mae Womack, and my beloved papa Oscar Womack. You will always hold a special place in my heart, and I miss you more than words could ever express.

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To my parents, Micah and Kevin Womack, I am forever indebted to you for being my rock, my constant support system, and for never letting me lose sight of my potential. Your love and guidance have been the cornerstone of my success, and I am so grateful for all that you have done for me.

To my siblings, Kamaria, Khalilah, and Kamaal, thank you for being my role models and for always inspiring me to be better. Watching you all grow into the incredible individuals you are today has been an honor, and I am in awe of your unwavering strength and resilience.

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Introduction

Fast fashion emerged in the 1990s, characterized by retailers releasing collections of trendy, low-cost, and poorly made clothing at a rapid pace (Wang, 2022). This made on-trend style affordable and accessible to a broad consumer base (Wang, 2022). Elite designer goods were swiftly adapted for mass consumption, as fast fashion retailers shortened the time between runway shows, design, and distribution (Wang, 2022). One consequence is that the rise of fast fashion has increased garment production while decreasing garment utilization over the past 20 years (World Bank Group, 2019).

The fast fashion industry's dramatic growth has negatively impacted the environment in multiple ways (Niinimäki et al., 2020). Fast fashion's extensive water use during production processes, from raw material cultivation to fabric dyeing and finishing, has significant environmental consequences (Niinimäki et al., 2020). For example, the excessive use of water to cultivate cotton has a significant effect on the local water supply (Niinimäki et al., 2020). This is evident in places overseas such as Kazakhstan and Uzbekistan as their water supply from the Aral Sea dried up due to the overconsumption to produce cotton (Niinimäki et al., 2020). Additionally, the fashion industry contributes 8% - 10% of the world's global carbon budget, making it the second-highest contributor (World Bank Group, 2019). GHG emissions are found at all stages of the supply chain, from agriculture and/or synthetics for textiles to production and transportation. If these unsustainable business models persist, the fashion industry's greenhouse gas emissions could increase by over 50% by 2030 (World Bank Group, 2019).

While this SPROJ primarily focuses on environmental impacts, fast fashion production also presents labor and human rights challenges (Kuhlman & Farrington, 2010). Sustainability encompasses more than environmental concerns; it involves balancing economic, environmental,

and social factors to ensure long-term well-being and resilience for human societies and the natural world (Kuhlman & Farrington, 2010). Fast fashion factories often subject workers to unpaid or underpaid overtime, child labor, and suboptimal working conditions (Colnago, 2019). Workers face demanding daily output goals and threats of termination (Hodal, 2018). Moreover, child labor laws are frequently unenforced, and workers are exposed to harmful chemicals (Ross, 2021). In many of the factories that make the clothes that are marketed by the major fast fashion companies, laborers are forced to work overtime hours, and/or use child labor, and have working conditions that are less than optimal (Colnago, 2019). Workers frequently face rigorous daily output goals for clothing and are threatened with termination if they don't meet them. In some cases, conditions can be so bad that workers die. For example, in 2013 the Rana Plaza in Bangladesh that hosted five garment worker factories collapsed leaving over 1200 people dead (Goodwin, 2021). Days before the collapse many garment workers expressed how there were major concerns about the building as workers began to see cracks in the foundation and walls holding the building together (Goodwin, 2021). Due to oversight this tragedy occurred and illustrates how the substandard working conditions in these garment factories can be lethal (Goodwin, 2021).

Over the past decade, the production side of popular fast fashion retailers has been exposed for their mistreatment of workers. For example, employees of a Turkish Zara supplier plant painstakingly hand-wrote aid and protest vows in the tags since the factory's terrible treatment of workers is so severe and pervasive (Buchanan, 2017). Yet major fast fashion retailers continue to exploit their workers and get away with it because they outsource their production to countries such as Bangladesh, China, India, and Mexico that either do not enforce labor rights policies or don't have any at all.

To address these issues, analysts suggest promoting green business models within the fashion industry (Centobelli et al., 2022). Green business models prioritize sustainability and social responsibility throughout a fashion company's entire value chain (Thorisdottir & Johannsdottir, 2019). The optimal sustainable fashion business model integrates environmental, social, and economic sustainability, ensuring protection for the planet and its inhabitants (Thorisdottir & Johannsdottir, 2019; Centobelli et al., 2022). This means that fashion brands may implement sustainable initiatives like using less water to grow cotton for their t-shirts by sourcing from farms that use farming methods such as rain-feeding cotton. Additionally, this could also encompass stores creating transparency by educating their customers through placing QR codes on the tags of their garments that show the life of the garment from crop to storefront. However, the challenge lies in persuading or pressuring fast fashion companies to adopt these models and change their production and supply chain behaviors (Thorisdottir & Johannsdottir, 2019; Centobelli et al., 2022).

Various approaches have been employed to promote sustainable practices within the fast fashion industry, including consumer campaigns, voluntary industry standards, and corporate commitments to adopt more sustainable practices. Recently, regulatory frameworks have gained attention as a means to enforce sustainable practices, responding to consumer demands for businesses to adopt green and socially responsible practices, but with the weight of state or international regulations to ensure changes in corporate action. (Wren, 2022).

Consumer pressure is an important element in the move to rethink fast fashion business models. It can take the form of campaigns or boycotts, as well as the development or adoption of beliefs and practices including ethical consumerism, circular economies, zero-waste practices,

upcycling, thrifting, and mending. On the one hand, some practices, like adopting a circular economy, push apparel companies to be responsible for the entire lifecycle of their products, from sourcing through disposal and reuse. However, for these ideas and concepts to solve some of the problems created by fast fashion, currently, without regulations, firms must voluntarily change their behavior. To date, those voluntary sustainability commitments by companies have had mixed outcomes.

This senior project examines the problems that fast fashion poses to our environment and climate and analyzes different forms of pressure toward making a more sustainable fashion industry. Using the case of H&M, I argue that while consumer pressure and ideas and practices matter, ultimately, the fashion industry must be regulated through policies on the state level to make the fashion industry a more sustainable one and put a stop to fast fashion firms that have no regard for the environment. So, this project also examines new/proposed regulatory regulation in New York State as a viable model for state control of fast fashion business models and a more sustainable fashion sector as a whole. Furthermore, the project analyzes how Generation Z is making a change in the way they interact with the fashion market through the actions of thrifting, mending, and upcycling. More and more people from Generation Z are partaking in buying secondhand clothing, me included. The corporate sector of the fashion industry, its contribution to voluntary action to mitigate environmental effects (or lack thereof), consumer pressure, the sufficiency or inefficiency of today's practices, and how regulation is the key to a more sustainable fashion industry will be examined to spark more discussion about the use of regulation to blow up this profit-driven pipeline that is contributing to the destruction of our environment.

This Senior Project is organized as follows, Chapter Two presents a background of the rise of fast fashion and the environmental externalities that have accompanied its growth. Chapter Three focuses on the different tactics that have been applied and that are emerging as a counter to the model of consumerism. Chapter Four will discuss the generational shifts of Gen Z and the resurgence of thrifting, upcycling, and circularity. Additionally, Chapter Four will explore the role of Sustainable Direct To Consumer fashion brands in promoting an eco-friendlier fashion industry through education, innovative marketing, and social media. The project concludes with a reflection on how fast fashion and the fashion industry lie within a web of social and environmental relationships that have contributed to (and will need to shift) environmental harms and climate change and pathways to address these complex and entangled systems.

Chapter Two: Fast Fashion

As noted above, Fast Fashion is an industry linked to the problematic use of water, energy, materials, and human labor. This chapter first lays out the emergence of Fast Fashion since the 1960s and then highlights its environmental harms, including its contribution to the ongoing climate crises.

Consumer Demands and Fast Fashion

In the 1960s, young people embraced low-cost apparel to follow new fashion trends and reject the traditions of previous generations (Idacavage, 2018). This accelerated the pace of fashion trends, leading to a boom in textile mills worldwide to satisfy the growing demand for competitively priced garments (Idacavage, 2018). American and European companies began outsourcing labor, saving millions of dollars on clothing production while often disregarding the treatment of workers (Idacavage, 2018).

During the mid-20th century, fast fashion retailers like Zara and H&M started opening smaller stores across Europe, making low-cost, poorly made apparel more accessible to consumers (Walt, 2013; Idacavage, 2018). Fashion companies such as TopShop (now ASOS) and Primark also emerged in the 1960s, adopting similar business models focused on profitability (Idacavage, 2018). Their primary goal was to produce competitively priced clothing, which gained popularity in Europe before entering the American market in the 1990s or 2000s (Idacavage, 2018). H&M first expanded to London in 1976 and the United States in 2000 (H&M Group, 2000; Idacavage, 2018). According to The New York Times, founder Erling Persson was inspired to start the company after visiting high-volume retail sites in the United States during

World War II (H&M Group, 2000; Idacavage, 2018). Similarly, Zara's founder Amancio Ortega emphasized speed as the driving force when he opened the first Zara store in Spain in 1975 (Walt, 2013).

These attitudes and beliefs moved into the mainstream as a key business model for fashion retailers, contributing to the popularity of trends while causing significant environmental damage (Ciment, 2020; Idacavage, 2018). Forever 21, one of the fastest-growing fast fashion companies, began as a small boutique in Los Angeles in 1984 (Ciment, 2020; Idacavage, 2018). When Zara first launched in New York at the beginning of the 1990s, The New York Times described its objectives as "fast fashion," noting that it would only take 15 days for a garment to go from a designer's mind to being sold on the racks (Idacavage, 2018).

Fast fashion's popularity surged in the late 1990s and early 2000s as a means to showcase one's affinity for affordable, trendy clothing (H&M Group, 2000; Idacavage, 2018). H&M's arrival in the United States was well-timed, as consumers were increasingly seeking deals and moving away from department stores (H&M Group, 2000; Idacavage, 2018). When the first H&M store opened in the United States in April 2000, it was considered "cool to spend less" (H&M Group, 2000; Idacavage, 2018). However, by the late 2000s there also emerged a growing concern by consumers and analysts over the negative externalities of fast fashion, and the following sections lay out the various debates in the literature over the ability of consumers, voluntary industry commitments and more recently, regulatory frames to address these problems.

Fast Fashion -materials, supply chains, and environmental harms

Today massive amounts of pollution result from fast fashion processes. The fashion industry is responsible for 10% of annual global CO₂ emissions. Since the number of clothing

brand seasons has expanded from two to approximately twenty-four per year, clothing consumption has increased (Idacavage, 2018). Ultra-fast fashion has evolved as a result of a major shift in the garment business over the past 15 years, during which time apparel manufacturing has doubled while consumers' wearing time has fallen by 40%. (Textile Consult, 2022). This trend has led to the manufacture of cheaper clothing with quicker turnaround times to meet the increasing demand (Textile Consult, 2022). The introduction of new technologies and more effective supply chain management systems enabled the production and delivery of garments to be accelerated and streamlined (Bhardwaj & Fairhurst, 2010).

Fast fashion retailers specifically seek to emulate designs from places such as the New York Fashion Week runway or celebrity stylists. However, these fashion retailers that use fast fashion business models don't understand and aren't aware of the effects that stem from their unsustainable business model. Today, the time it takes for a fast fashion retailer to emulate high-end couture looks, reproduce them at alarming speeds, and get them to storefronts or your doorstep is faster than ever before (Textile Consult, 2022).

Due to the interconnected nature of the fashion industry, the fast fashion business model entails several negative environmental impacts. High-volume, low-cost production has contributed to environmental degradation as a result of fast fashion (Wu, 2020). This has resulted in textile waste, water contamination, depletion of water resources, excessive carbon emissions from transportation, and the usage of toxic chemicals (Wu, 2020).

This section will evaluate the environmental repercussions of fast fashion, including textile waste, water use, carbon emissions, and climate change. It will address the emergence of fast fashion in response to changes in the fashion industry, as well as the circumstances that led to its rise. The segment also emphasizes the environmental impact of rapid fashion and the interconnectedness of the fashion industry. By examining the fashion industry's supply chain in greater detail, it will become clear how complex the industry is and how each sector contributes

to environmental devastation.

Climate Change



Climate change is a phenomenon that today is causing extreme environmental disasters and is contributing to the increase in temperature of the earth's surface. Fast fashion as a business model and the fashion industry as a whole contribute to climate change as there is a significant amount of carbon emissions produced throughout the supply chain. Fast fashion contributes to climate emissions in several ways (Leal Filho et al., 2022; Whalen, 2023). Firstly, the production and transportation of clothing in fast fashion generate a significant amount of greenhouse gas emissions, which contribute to global warming and climate instability (Leal Filho et al., 2022; Whalen, 2023). The emissions result from multiple sources, including the manufacturing process, the energy required to power factories, and the transportation of goods. These processes require the use of fossil fuels, which release greenhouse gasses into the atmosphere, thereby increasing the carbon footprint of the fast fashion industry (Leal Filho et al.,

2022). The fashion industry painstakingly pushes 1.2 billion tonnes of Carbon dioxide into the atmosphere annually and if these trends continue analysts argue that in just seven years the fashion industry's GHG emissions will increase by almost 50% (Whalen, 2023). As high amounts of greenhouse gasses contribute to global warming and climate change it also contributes to public health concerns centered around respiratory and cardiovascular diseases (CDC, 2022).

Secondly, fast fashion's business model, characterized by high turnover rates and low prices, leads to the rapid disposal of clothing items by consumers, creating an alarming amount of textile waste (Leal Filho et al., 2022; Whalen, 2023). The disposal of textile waste in landfills is a major environmental concern since it generates methane, a potent greenhouse gas that is many times more potent than carbon dioxide (Leal Filho et al., 2022). Moreover, textile waste also contributes to harmful chemicals and dyes to pollute soil and even groundwater (Huitema, 2022). Textile waste has a huge effect on the environment that many are not aware of, and many consumers don't know that they contribute to the growing number of textile waste when they incorrectly dispose of or get rid of their old clothes. Thus, the fast fashion industry's lack of emphasis on sustainability and durability in clothing production leads to a wasteful cycle that is harmful to the environment and contributes to climate change (Leal Filho et al., 2022).

Thirdly, the fast fashion industry is heavily dependent on natural resources such as water and raw materials like cotton. Cotton, which is one of the primary materials used in fast fashion, is a resource-intensive crop that requires significant amounts of water and pesticides to produce (Mogavero, 2020). Resource depletion highlights the fact that the fast fashion industry's practices lead to the depletion of already scarce natural resources and contribute to environmental degradation (Boykoff et al., 2021). Furthermore, the dyeing and finishing processes of textiles also require substantial amounts of water, creating more pressure on water resources and contributing to pollution (Boykoff et al., 2021). All in all, the fast fashion

industry's practices contribute significantly to climate change through the emission of greenhouse gasses, the generation of textile waste, and the depletion of natural resources (Boykoff et al., 2021).

Water

The extensive use of water throughout the production process, from the cultivation of raw materials to the dyeing and finishing of fabrics, is one of the most significant impacts (Niinimäki et al., 2020). The textile industry is the second-largest global water polluter, behind only agriculture. The production strategy of fast fashion contributes to this issue by producing enormous amounts of garments, which results in excessive consumption of water (Niinimäki et al., 2020). In addition, fast fashion firms frequently purchase their materials from arid places, which exacerbates the problem (Niinimäki et al., 2020). The leakage of toxic chemicals into rivers during textile dyeing and finishing is a serious consequence of fast fashion production procedures (Niinimäki et al., 2020). These substances can have serious environmental effects, such as water contamination and the destruction of aquatic habitats. Moreover, exposure to these substances may be detrimental to human health (Niinimäki et al., 2020).

The intersection between the fashion industry and water usage is a subject that warrants more attention. Most individuals fail to consider the genuine cost of their garments and the significant impact that the clothing they buy has on the world's water resources. Water-intensive crop cultivation and dyeing processes contribute to a host of environmental problems that result from the fashion industry. These issues include an increase in wastewater discharge from textile dyeing and, even more concerning, the fashion industry's utilization of water can leave underdeveloped nations with limited water supplies and contaminated groundwater. Moreover, the fashion industry's heavy reliance on water in producing natural fibers, such as cotton, presents a significant challenge (Mogavero, 2022). This reliance exacerbates the already existing

water scarcity issue, making it even more crucial to find sustainable solutions for water usage in the fashion industry (Mogavero, 2022).

When we take a look at the material most clothes are made out of you'll find that unsustainable practices on the agriculture and textile production side that water use can be intensive and can become polluted (Mogavero, 2020). Cotton cultivation demands an enormous amount of water. For example, it requires 7,000-29,000 liters of water to yield 1 kg of raw cotton (Mogavero, 2020). The extensive irrigation needed to grow cotton puts pressure on local water sources and depletes aquifer and groundwater reserves (Mogavero, 2020). Furthermore, conventional textile production necessitates a substantial amount of water, using approximately 100-150 liters of water to process 1 kg of fiber (Mogavero, 2020). This process results in severe water pollution, environmental harm, unsafe working conditions for employees, and significant health hazards for individuals residing near production plants (Mogavero, 2020). To transform raw materials into textiles, approximately 8,000 synthetic chemicals are employed, and textile treatment and dyeing account for roughly 20% of global industrial water pollution (Mogavero, 2020). These processing facilities are primarily located in China and India, which exacerbates the challenges faced by these already vulnerable communities due to high population density and poverty rates (Mogavero, 2020). Fast fashion also pollutes water through microfibers, as synthetic fabrics like nylon and polyester release microplastics that do not degrade over time when washed and end up in the ocean (Vivek, 2023).

Textile Waste

The textile industry is a resource-intensive business that requires a substantial quantity of natural resources for manufacturing including water, energy, and raw materials (Pervez et al., 2021). Cotton, one of the most widely used natural fibers in textile production, requires a great deal of water for cultivation, whereas synthetic fibers such as polyester and nylon demand a

great deal of energy to make (Pervez et al., 2021). The creation of textiles also requires natural resource-derived raw materials such as dyes, finishes, and chemicals (Pervez et al., 2021). The phase of the textile industry is a large contributor to greenhouse gas emissions (Pervez et al., 2021). This is owing to the vast amount of energy necessary for textile manufacture and transportation, as well as the emissions resulting from the usage of synthetic fibers and the chemical processes employed in textile production (Pervez et al., 2021). The textile industry's emissions of greenhouse gasses contribute to climate change, which has far-reaching effects on the environment and human health (Pervez et al., 2021).

Although the production of textiles themselves poses environmental challenges, the fashion industry also contributes to environmental issues through the disposal of garments by consumers and clothing companies. Shockingly, tons of textile waste are accumulated annually, with much of it being sent to municipal waste sites instead of being recycled or reused (Uddin, 2018). The consequences of this practice are dire, as waste sites end up being burned or buried, leading to the release of microplastics and harmful toxins into groundwater and soil (Uddin, 2018). Even worse, the chemicals used in dyeing clothing and the plastics in elastic clothing can be released into the atmosphere, exacerbating air pollution (Uddin, 2018).

Around 92 million tons of textile waste are generated each year, making them a serious environmental concern (Millward-Hopkins et al., 2023). This waste can comprise production trash, post-consumer waste, and textiles at the end of their useful lives (Pervez et al., 2021). Much of this debris ends up in landfills or is burned, creating additional environmental damage (Millward-Hopkins et al., 2023). Moreover, textile waste in landfills adds to the generation of methane gas, a strong greenhouse gas that contributes to global warming (Kumar & Sahoo, 2021). Non-biodegradable synthetic fibers, such as polyester and nylon, do not decompose quickly in the environment (Kumar & Sahoo, 2021; Pervez et al., 2021). This means that when synthetic fabrics are discarded, they might remain in the environment for an extended period of

time, adding to the accumulation of textile waste (Pervez et al., 2021). In addition, the creation of synthetic fibers needs a substantial quantity of energy, which contributes to greenhouse gas emissions and other negative environmental effects (Kumar & Sahoo, 2021; Pervez et al., 2021).

The Fashion Industry and GHG Emissions

As noted above, the fashion industry is complex and interconnected, leading to a range of environmental issues, such as climate change, excessive water consumption, and textile waste. These problems stem from both internal and external factors within the industry. Fashion companies themselves can be responsible for direct emissions of greenhouse gasses, falling under what's known as scopes 1 and 2 (Ley et al., 2021). Meanwhile, the wider fashion value chain, including suppliers and customers, is responsible for what's known as scope 3 emissions (Ley et al., 2021). This all goes to show that the environmental impacts of the fashion industry are wide-reaching and multifaceted (Ley et al., 2021). Commonly, Scope 3 frequently indicates an organization's greatest greenhouse gas impact in several industries (Ley et al., 2021).

Scope 1 Direct greenhouse gas (GHG) emissions come directly from sources under the control or ownership of an organization (EPA, 2022). For instance, on-site fuel combustion for manufacturing operations or backup generators, fuel use for fleets of company-owned or -leased vehicles, and refrigerant escape from air conditioning and refrigeration in distribution centers and office buildings are examples of such sources (Bhatia et al., 2011; Ley et al., 2021). For a fashion brand, scope 1 (GHG) emissions may include things like natural gas or other direct fuels used to heat or run stores, offices, or warehouses (Bhatia et al., 2011; Ley et al., 2021).

Additionally, fashion brands frequently account for fuel used for owned or operated vehicles, diesel used in backup generators, and refrigerant leaks (Bhatia et al., 2011; Ley et al., 2021). At the plant level, Scope 1 emissions are frequently rather simple to monitor using either sensor-generated data or emission-calculation models (Teske et al., 2022). However, there are many

challenges when it comes to fashion brands accounting for their scope 1 emissions (Teske et al., 2022). These challenges include data availability, managing and updating data, data accuracy, and the ability to compare scope 1 emissions across multiple years (Teske et al., 2022). Many fashion firms use extrapolations or estimates based on available data, assumptions for sites missing data, and using data from previous years to try to account for scope 1 emissions (Teske et al., 2022)

One example of a fashion company's scope 1 emissions is Nike. Nike has seen scope 1 emissions increase since 2016 which could be attributed to an increase in office space, distribution centers, and physical retail stores (Donald, 2022). Nike, a well-known sportswear maker, estimated their emissions to have increased from 17,975 metric tons in 2015 to 47,398 metric tons in 2021 (Donald, 2022). This is a 163% increase in scope 1 emissions (use the percent increase formula to gain this answer) (Donald, 2022). Moreover, Fast fashion brands have also started to track their scope 1 emissions such as H&M which tracks their scope 1,2 and 3 emissions the best they can (Donald, 2022; EPA, 2022). Scope 1 and 2 greenhouse gas emissions are commonly aggregated as they originate from analogous sources, such as manufacturing facilities where garments are produced (Donald, 2022; EPA, 2022). H&M 2022 sustainability reports showcase that they have set goals to significantly decrease their GHG emissions by 2030. As they have made this voluntary commitment they also provided data on H&M Group's steps toward reaching their goal of lowering emissions (H&M Group, 2022).

Scope 2 GHG emissions are defined by the Environmental Protection Agency as indirect GHG emissions caused by the purchase of power, heat, steam, or cooling (EPA, 2022). Due to the organization's energy consumption, scope 2 emissions are taken into consideration in a company's GHG inventory even if they are produced in the manufacturing facilities where goods like garments are made (Spiller, 2021; EPA, 2022). Scope 2 emissions Depending on a company's position in the value chain, the impact of scope 2 emissions can vary (Spiller, 2021;

EPA, 2022). For instance, scope 2 emissions might be less significant for a brand compared to scope 3 because they are produced on a larger scale, but scope 2 GHG emissions could make up the majority for a clothing cut and sew facility or yarn spinning plant (Spiller, 2021; EPA, 2022). The typical source of scope 2 emissions for brands and merchants is purchased electricity; but, for manufacturing, purchased steam or cooling may be more appropriate (Spiller, 2021; EPA, 2022). Similar to Scope 1, estimating Scope 2 emissions necessitates knowing how much energy, heat, steam, and cooling a company purchases before applying the appropriate GHG emissions factors from the electricity system where each facility is situated (Spiller, 2021; EPA, 2022).

The first set of data shown in the H&M Circularity, Climate & Nature KPIs section showcase H&M Scope 1 and 2 GHG emissions as compared to the retailer's 2019 baseline (H&M Group, 2022). In 2020 H&M achieved a 15% reduction in emissions however the following year in 2021 emissions increased by 22% (H&M Group, 2022). This could be due to the company opening more distribution centers, retail stores, or offices as these are the entities that contribute most to scope 1 and 2 GHG emissions. The second data point that addresses H&M's scope 1 and 2 emissions shows the change in GHG emissions from their operations as compared to prior years (H&M Group, 2022). In 2020 their emissions decreased by 32% and in 2022 their emissions increased by 18% (H&M Group, 2022). This indicates that H&M emissions fluctuate and should be constantly monitored. Overall, the first data point compares to a baseline year while the second data point shows percentage changes year-to-year.

Scope 3 emissions have been defined as a result of operations on resources that the reporting company does not own or control, but which are indirectly influenced by the company through its value chain (Spiller, 2021; EPA, 2023b). Scope 3 emissions are produced by all sources that lie beyond an organization's scope 1 and scope 2 boundaries. Scope 3 emissions, also known as value chain emissions, usually account for the bulk of an organization's overall

greenhouse gas (GHG) emissions (Bhatia et al., 2011; EPA, 2023b). Additionally, scope 3 emissions of one organization can be the scope 1 and 2 emissions of others (Bhatia et al., 2011; EPA, 2023b). Moreover, scope 3 emissions are notably the hardest to track in the fashion industry (Bhatia et al., 2011; EPA, 2023b). Transparency from suppliers and a system for tracking emissions connected to consumer product usage is necessary for measuring (Bhatia et al., 2011; EPA, 2023b). Scope 3 and ultimately reducing indirect emissions (Bhatia et al., 2011; EPA, 2023b). Fashion industry scope 3 emissions frequently relate to industries like all purchased goods and services (Bhatia et al., 2011; EPA, 2023b). As the largest amount of GHG emissions that come from fashion companies are scope 3 and stem from purchased goods and services it is important to note that this data is hard to collect (Bhatia et al., 2011; EPA, 2023b).

The fashion industry most frequently uses three methods to measure scope 3 emissions, which primarily come from purchased goods and services (United Nations Climate Change, 2020; Ley et al., 2021). These three methods include collecting supplier-specific data at the product level from products all along the value chain (United Nations Climate Change, 2020; Ley et al., 2021). Another method that focuses on average data that has already been gathered by organizations like the sustainable apparel coalition is to estimate emissions by gathering data on the mass or other applicable units of goods or services purchased and multiplying by the relevant secondary emission factors (Higg) (United Nations Climate Change, 2020; Ley et al., 2021). The economic worth of the items and services purchased is collected, multiplied by the appropriate secondary emission factors, and used by fashion retailers to estimate emissions (United Nations Climate Change, 2020; Ley et al., 2021).

Businesses can acquire electricity use information from their utility bills (Spiller, 2021; EPA, 2022) Nike can also be used as an example of seeing how much scope 2 emissions a large-scale fashion retailer produces (GlobalData, 2021; Donald, 2022). In 2021 Nike's total GHG emissions consisted of 10,942.7 thousand tonnes of CO₂ equivalents (GlobalData, 2021;

Donald, 2022). Out of this total, only 76.42 thousand tonnes of CO₂eq makes up the corporation's scope of 2 emissions (GlobalData, 2021; Donald, 2022). Moreover, in 2021 Nike calculated their scope 1 emissions to be an even smaller fraction of its total GHG emissions being quantified at 42.72 thousand tonnes of CO₂eq (GlobalData, 2021; Donald, 2022). Overall, Nike's scope 3 emissions were quantified to be 10823.56 thousand tonnes of CO₂eq which was the corporation's highest amount of GHG emissions that they emit (GlobalData, 2021; Donald, 2022). These emissions stem from the corporation's downstream transportation and distribution. In 2021 scope 3 emissions made up 98.9% of the retailers' total emissions and as of 2023 scope 3 emissions makeup 99% of their total GHG emissions (GlobalData, 2021; Statista, 2023). Overall, it can be seen that Nike has some work to do as it relates to decreasing its GHG emissions as a whole (GlobalData, 2021; Donald, 2022).

All in all, for many businesses, especially those in energy- and resource-intensive industries like the fashion industry, achieving net zero for Scope 1 and Scope 2 emissions is a tremendous technological and financial challenge (Ley et al., 2021). Taking on Scope 3 adds a further degree of complexity due to its ambiguous carbon accounting and tracking procedures, the requirement to collaborate with clients, supply networks, and industry associations, and the challenge of maintaining stakeholder interest in a challenging, multiyear transition project (Ley et al., 2021). The issue with these emissions is that all fashion retailers produce them in some capacity and using H&M and Nike as an example it is seen that these emissions are being produced by the tons. As the fashion industry today contributes to about 8-10% of the world's carbon emissions, fashion retailers must make a change as they are contributing to global warming and climate change (World Bank Group, 2019). Although there is a need for fashion companies to make a change these emissions can be hard to track especially scope 3 emissions which have been deemed the hardest to track. In the broader context, fast fashion retailers and the fashion industry as a whole have and continue to harm our environment, and its key policies

like the New York Fashion Act are implemented to create internal changes in these fashion companies that not only help mitigate the impact but also educate consumers.

Chapter 3: Pressures Towards Creating a Sustainable Fashion Industry

The growing awareness of the environmental and social harms stemming from Fast Fashion produced a set of responses from consumers, companies, and now states. Consumer awareness, roughly seen as the rise of ethical consumerism, includes consumer campaigns or movements, but also a generational change in fashion and consumption. In response to rising pressure on the industry, many companies have adopted voluntary standards -but there is substantial criticism that these standards lead to greenwashing instead of real change. Finally, this chapter looks at a promising policy option that's a first of its kind to change industry behavior. The New York Fashion Act in the US will seek to regulate fast fashion and the fashion industry as a whole.

Consumer Movements

Consumers are increasingly aware of environmental and social issues, and they are willing to exert pressure on businesses to implement sustainable, ecological, green, and socially responsible business practices (Pookulangara & Shephard, 2013; Crane, 2015). Consumer pressure encompasses not only social movements but also the development of philosophies and concepts relevant to the construction of greener business models by businesses and the reduction of consumption by consumers (Pookulangara & Shephard, 2013; Crane, 2015). For example, Ethical consumerism has also led to an increase in consumers' demand for sustainable fashion and has mobilized consumers to pressure the corporate sector of the fashion industry to do so (Pookulangara & Shephard, 2013; Crane, 2015). Ethical consumerism is a response to concerns about the environmental impact of consumer societies, which prioritize economic growth and the production and sale of consumer goods over sustainability and the conservation of resources (Crane, 2015). Advocates of ethical consumerism argue for a change like consumption, in which apparel is produced in environmentally friendly ways, and conservation of resources is

prioritized over the obsolescence of consumer goods (Crane, 2015).

Importantly, ethical consumers have no issue with supporting and buying more sustainable fashion even if it is at a higher price (Article Junction, 2013; Pookulangara & Shephard, 2013). For example, according to studies, customers are often prepared to pay a higher cost for "green" or "sweat-free" items (Pookulangara & Shephard, 2013). However, if companies don't provide sustainable clothing options, the assumption in the literature is that consumers will drive the market towards sustainability lines by mobilizing to make a change in how apparel is produced and manufactured (Article Junction, 2013; Pookulangara & Shephard, 2013). Consumer movements are defined as collective action when consumers band together to press companies for sustainable practices (Article Junction, 2013). The slow fashion movement and sustainable fashion movements are two examples of the ability of consumers to push for these slow and sustainable production practices but show the limits of those movements. (Article Junction, 2013; Crane, 2015).

Slow Fashion Movement

The rise of ethical consumerism over the past decade has given rise to social movements like the Slow Fashion Movement (Hill, 2021; Pookulangara & Shephard, 2013). This movement is an exemplary demonstration of how consumers are pushing for a transformation in the fashion industry's unsustainable business models (Hill, 2021; Pookulangara & Shephard, 2013). Scholars have been working to define the slow fashion movement, which has evolved over the past few years (Hill, 2021; Mandarić et al., 2022). In general, it advocates for fair labor practices, high-quality, small-batch operations, and sustainability in the fashion industry (Hill, 2021; Mandarić et al., 2022). The slow fashion movement offers alternatives to the unsustainable practices of fast fashion (Hill, 2021; Mandarić et al., 2022). It represents an understanding and approach to

fashion that takes into account the processes and resources required to produce clothing (Hill, 2021; Mandarić et al., 2022). Additionally, it encourages the purchase of longer-lasting, higher-quality clothes while also promoting fair treatment for humans, animals, and the environment (Hill, 2021).

Furthermore, the slow fashion movement promotes timeless styles that never go out of fashion, allowing consumers to get creative with the clothes they already own, even if they're 15 years old (Brewer, 2019; Hill, 2021). The focus on better-made and durable clothing also allows for the creation of a circular economy, as clothes are thrown away less and utilized more (Brewer, 2019; Hill, 2021). The slow fashion movement empowers communities and demands a more sustainable fashion industry (Brewer, 2019; Hill, 2021).

The term "slow fashion" emerged from Kate Fletcher of the Centre for Sustainable Fashion in 2007; they created the term in response to the slow food movement (Hill, 2021). As with the slow food movement, Fletcher believed the fashion industry needed to slow down as the impact of the industry on the environment started to become damaging (Hill, 2021). Slow fashion is in opposition to fast fashion business models that are embodied by brands such as H&M, Zara, and Forever 21 (Hill, 2021; Mandarić et al., 2022). Slow fashion refers to a philosophy of awareness that is mindful of its various stakeholders such as designers, buyers, and retailers, and the impact producing fashion has on workers, consumers, and eco-systems (Fletcher, 2008). The slow fashion movement can essentially impact everyone although the most important are retailers and clothing corporations (Fletcher, 2008).

In the ideal world of slow fashion, clothing manufacturers and brands would prioritize the creative expression of customers over seeking profit (Fletcher, 2008; Edie Newsroom, 2020). The slow fashion movement promotes apparel that is intended to be durable rather than

disposable, to benefit rather than harm the environment, persuade brands to choose stability rather than continual expansion, and develop strong relationships with their clients and suppliers (Fletcher, 2008; Edie Newsroom, 2020). The slow fashion movement has made a list of promises and demands that look to hold the consumer responsible for their actions while also looking to hold clothing brands accountable (Edie Newsroom, 2020; Mandarić et al., 2022). The demands the slow fashion movement presents aim to create substantial social and environmental changes and put a spotlight on not only retailers but also the government and advertisers to do more (Edie Newsroom, 2020; Mandarić et al., 2022). The list of demands the slow fashion movement wants includes a demand for transparency from companies, and every company, starting with the 10 largest fashion companies, has to be transparent about their material use by the end of 2021 (Fletcher, 2008; Edie Newsroom, 2020). Moreover, There are demands to target governments, including the United States government, to ensure that the fashion industry adheres to the Paris Agreement and measures its environmental impact (Edie Newsroom, 2020). Lastly, There is a demand for accountability for advertisers, including fashion magazines, which are expected to do more than simply act as PR for the industry and should also hold brands accountable for their environmental and social impact (Edie Newsroom, 2020). Overall, the slow fashion movement simply expects everyone to do better as it relates to consumers investing in more sustainable clothing and becoming more educated about the impacts consumers can have on the environment indirectly from shopping with fast fashion retailers. Not only this but the slow fashion movement pushes for corporate behavior to become and think more sustainably in all aspects from products to marketing.

Pookulangara & Shephard conducted a study that investigated the impact of slow fashion on the textile and garment industry. Using personal interviews and focus groups, the study

collected data from a convenience sample of students from two Southwestern universities (Pookulangara & Shephard, 2013). The questions were designed to clarify the definition, beliefs, characteristics, consumption patterns, and impact of slow fashion on the retail business (Pookulangara & Shephard, 2013). The data analysis yielded four topics, including slow fashion defined, slow fashion product qualities, slow fashion as a lifestyle, and slow fashion entering the mainstream retail market (Pookulangara & Shephard, 2013). According to the report, customers lack sufficient awareness of slow fashion to make informed purchasing judgments (Pookulangara & Shephard, 2013). Economic factors prevent people from purchasing ecological and ethical items, despite their desire to do so (Pookulangara & Shephard, 2013). In addition, slow fashion is not yet mainstream and requires retailers' aggressive marketing and education to be effective (Pookulangara & Shephard, 2013). The study indicates that slow fashion can improve the way enterprises in the textile and clothing value chain conduct their operations (Pookulangara & Shephard, 2013).

In short, the slow fashion movement is one driven by consumers wanting to shift the fashion industry to act sustainably (Pookulangara & Shephard, 2013). Slow fashion, however, is not yet mainstream and requires retailers' aggressive marketing and education to be effective (Pookulangara & Shephard, 2013; Brewer, 2019). The slow fashion movement works to empower consumers to build a community around fighting fast fashion business models and investing more in eco-friendly fashion (Pookulangara & Shephard, 2013; Brewer, 2019). However, as this movement encompasses consumers it doesn't affect big corporations profiting from non-sustainable practices (Pookulangara & Shephard, 2013; Brewer, 2019).

Sustainable Fashion Movement

The sustainable fashion movement is centered around the awareness of the environmental and social impacts of the fashion industry (The Honest Consumer, 2018). This movement has been ongoing since the 1990s, with a focus on how consumers can invest in more eco-friendly fashion trends that simultaneously mitigate their impact on the environment. With a particular focus on consumers, the movement has prompted and marketed ways and ideas that change can be made as it relates to the garments, shoes, and accessories that are made and sold. The main concepts that are promoted are thrifting, upcycling, and pushing to buy from clothing brands that have built-in or adopted green business practices (The Honest Consumer, 2018).

Consumers describe thrift shopping as buying in second-hand locations, particularly thrift shops, but also at estate sales, auctions, and garage sales (Bardhi, 1970). Thrifting is an action taken by consumers to buy old or vintage clothing (Farida et al., 2022). Thrifting is an action that celebrates recycled clothing and the use of second-hand clothing, and this action is seen as sustainable (Farida et al., 2022). Thrifting promotes a circular economy that keeps clothes in rotation and circulation extending the life cycle of a garment (Farida et al., 2022). Thrifting is a popular way to support sustainable fashion because of the lower cost and chance of finding unique items (Harrison & Jacobson, 2021; Farida et al., 2022). With a trade value of US\$152 million in Canada, thrifting has also gained popularity due to the use of social media influencers who produce content about creating fashionable looks from used clothing and post it on online platforms like Instagram, Tik Tok, and YouTube (Harrison & Jacobson, 2021; Farida et al., 2022). The pricing of clothing in thrift stores appears to reflect the popularity of thrifting as it has grown through social media, and this has led to the loss of its historical function of supporting low-income communities (Ronobir et al., 2020). As the concept of thrift stores gentrifies, it is

now thought of as white environmentalism (Ronobir et al., 2020). The act of thrifting, however, does precisely that because the focus of this senior project is on the environmental effects of the fashion industry and how to counter fast fashion business models (Ronobir et al., 2020).

Other than thrifting, the concept of mending and upcycling is also promoted by the sustainable fashion movement as a way to decrease the feed-in and consumption of new clothing (Farida et al., 2022). Mending is a method of restoring the beauty and functionality of clothing that has stains, holes, or other wear-and-tear. It's geared to shift consumers' mindsets to make the most of what they have by accepting flaws, mending what's broken, and dispelling the notion that newer is better (Fulop, 2020; Farida et al., 2022). Upcycling is fairly similar to mending in the sense that it takes old clothing and recycled materials to alter the original garment to fit consumers' styles (Fulop, 2020; Farida et al., 2022). Upcycling has been defined by industry professionals as taking materials that have been used previously or that have been discarded and transforming them into new products that can be more valuable than the originals (Kell, 2022). These concepts that have stemmed from the sustainable fashion movement and the rise of ethical consumerism are a few ways for consumers to create a positive impact and decrease consumption (Fulop, 2020; Farida et al., 2022). As the sustainable fashion movement's primary focus is on consumer behavior, there is also the promotion of sustainable clothing brands in which buyers can invest their money (Fulop, 2020; Tidswell, 2022). Brands and corporations big and small are known to be promoted through the sustainable fashion movement (Fulop, 2020; Tidswell, 2022). Brands such as Patagonia and Stella McCartney have been promoted due to their commitments to being socially responsible and founding businesses with green business models and sustainability in mind (Tidswell, 2022).

Although thrifting, mending, and upcycling are important trends in enabling consumers to move away from the dominance of fast fashion, as with the slow fashion movement, pressure, and life choices of consumers are not sufficient to change the business models and behavior of fast fashion firms (Fulop, 2020; Tidswell, 2022). The next section considers another policy push for standards and corporate pledges to assess if these result in mitigating the environmental harms produced by the fast fashion industry.

Voluntary Standards and Corporate Commitments

The fashion industry has little to no legal regulation. Given the widespread nature of the supply chain, most fast fashion firms source and produce their products across the globe (Niinimäki et al., 2020). In many cases, countries dependent on producing for these firms there are minimal incentives for states to regulate the industry (Niinimäki et al., 2020). However, in response to consumer pressure (and perhaps to pre-empt national or international binding regulations) some retailers and clothing companies have committed to the use of voluntary green stands, initiatives, and commitments that aim to mitigate their environmental impact (Niinimäki et al., 2020; Wagner & Gilbert, 2020). Voluntary standards have been defined as non-government consensus standards, also referred to as voluntary regulation (Wagner & Gilbert, 2020). These standards create consumer product safety guidelines that producers, distributors, and sellers of the products should adhere to (Wagner & Gilbert, 2020).

Similar to voluntary standards, corporate commitments aim to lay out a set of standards or commitments that are later adopted and embodied by corporations (Niinimäki et al., 2020; Wagner & Gilbert, 2020). Many organizations and groups provide the framework and resources needed for apparel and footwear retailers to start taking steps to become more sustainable (Niinimäki et al., 2020; Wagner & Gilbert, 2020). Entities such as the Sustainable Apparel

Coalition, Fashion for Good, and TextileExchange all provide environmental frameworks and standards that target corporations to think and act more sustainably. For example, the Sustainable Apparel Coalition has developed the Higg Index, a global strategy for successful and efficient clothing and footwear production that was established in partnership with its members (Sustainable Apparel Coalition, 2011).

This section explores some of the leading environmental voluntary standards and corporate commitments that are currently driving the fashion industry to go green and become more sustainable holistically. Moreover, this section will also look at the pitfalls of these voluntary standards and corporate commitments to explore how these standards can become ineffective and insignificant to creating positive social and environmental change.

Sustainable Apparel Coalition

The sustainable apparel coalition is an organization that caters to the vision of making the fashion industry more sustainable through a shared vision (Gunther, 2012; Feloni, 2019). This vision is founded on a collaborative, multi-stakeholder strategy for measuring, improving, and communicating performance (Gunther, 2012; Feloni, 2019). The Coalition, based in the European Union, aims to develop a common sustainability language to foster environmental and social changes in the apparel and footwear sectors (Gunther, 2012; Feloni, 2019). In 2011, the SAC introduced the Higg Index, a comprehensive suite of tools developed in collaboration with its members (Sustainable Apparel Coalition, 2011; Gunther, 2012). This index enables brands, retailers, and manufacturers to access verified data to measure, enhance, and discuss their performance concerning green initiatives (Sustainable Apparel Coalition, 2011; Gunther, 2012).

The Higg Index assesses the entire value chain on a global scale, making it the most extensive environmental and social evaluation tool used in the apparel industry (Chun et al., 2021; Luo et al., 2021). Since its inception, more than 21,000 companies and organizations worldwide have utilized the index to achieve and maintain sustainability goals (Chun et al., 2021; Luo et al., 2021). Comprising five modules, the Higg Index evaluates corporations' social and environmental performance across various aspects (Chun et al., 2021; Luo et al., 2021). Retailers such as Canada Goose, Moose Knuckles, G-Star Raw, Nike, and Boohoo have adopted the Higg Index (Chun et al., 2021; Luo et al., 2021).

However, the Higg Index has recently faced criticism for promoting synthetic fibers, providing misleading data, neglecting the full life cycle of garments, and maintaining strong industry ties (Shendruk, 2022). These shortcomings can create false narratives about companies' actual environmental and social impacts (Chun et al., 2021; Shendruk, 2022). Organizations like the Changing Markets Foundation have started to scrutinize certification programs, such as the Higg Index. George Harding-Rolls, the campaign manager at Changing Markets Foundation, describes certifications as a false promise that encourages greenwashing (Chun et al., 2021; Shendruk, 2022). In light of these issues and recent literature challenging the integrity of such tools, there is a growing need for impartial regulation that minimizes corruption risks and ensures genuine environmental and social progress (Chun et al., 2021; Shendruk, 2022). As fashion retailers and corporations adopt voluntary standards and corporate commitments like the Higg Index, recent literature questions the foundation and integrity of these tools, as they have contributed to greenwashing (Luo et al., 2021; Shendruk, 2022). Environmental evaluation techniques currently in use, such as life cycle assessment, environmental footprint, eco-efficiency, and Higg index, all have some drawbacks (Luo et al., 2021; Shendruk, 2022).

Consequently, consumer campaigns play a crucial role in promoting transparency between brands and consumers (Luo et al., 2021; Shendruk, 2022). Many clothing brands and retailers should use and promote consumer campaigns to educate their customers about sustainability and environmentally friendly fashion practices (Luo et al., 2021; Shendruk, 2022).

Regulation

It's about forcing a change in business models, even if consumers do their part, it takes corporations to move from unsustainable ways and fast fashion business models for the health of our environment (Shin et al., 2022). As consumer movements, voluntary corporate commitments, and other pressures towards a sustainable fashion industry such as DTC sustainable fashion brands discussed later are not sufficient enough it leaves room for regulatory policies on the state level to make a change. Moreover, legislative initiatives such as New York's Fashion Act indicate that the mandate for a more sustainable fashion business will not fade very soon (Shin et al., 2022). The New York Fashion Act is a trailblazer and a beginning to set the stage for greening our clothes here in the United States and more broadly through the fashion industry's global supply chain. Furthermore, the Fashion Act is being backed by major fashion brands and sustainability nonprofit organizations. The supporters include notable fashion designer/brand Stella McCartney and nonprofits like the New York City Environmental Justice Alliance. It's time for the fashion industry to do its due diligence and care for the environment.

The New York State Fashion Act may require companies to provide information about greenhouse gas emissions, water use, and chemical use while requiring them to trace at least 50% of their supply chains (Biaggi, 2022; Brightest, 2022). Outside of fashion firms in New York State having to become more transparent in their supply chain, they will also have to

provide yearly sustainable reports that present each company's environmental footprint (Biaggi, 2022; Brightest, 2022). Furthermore, companies will be required to contribute to a community benefit fund that collects money from any penalties and fines under the act and later be used to fund environmental justice issues within the state of New York (Biaggi, 2022; Brightest, 2022). The fashion act has currently been introduced and is now in committee at the state level while still having to overcome multiple hurdles such as getting on the calendar, then being passed by the senate and assembly, then having to be delivered and signed by the governor of New York State before it is enacted (Biaggi, 2022; Lawrence, 2022). If the measure is passed into law, businesses will have one year to start the necessary supply-chain mapping and an additional year and a half to start complying with the environmental and social impact reporting and risk reduction requirements (Lisa, 2022; Biaggi, 2022).

The short case study presented below highlights the potential and limitations of consumer action, market forces, and voluntary commitments by one of the industry's largest players, H&M

A Case Study of H&M's Sustainability Initiatives and the Implications of Corporate Commitments

Introduction

H&M is a corporate powerhouse that owns several fashion brands, with H&M being the most well-known (López et al., 2021; H&M Group, 2023). It is more than just a fashion shop. H&M, one of the top ten wealthiest fashion retailers globally, has a market share of 72 countries, is valued at \$18.82 billion, and has an online marketplace in 52 of those countries (Chang, 2023; H&M Group, 2023). H&M successfully serves the haute-couture and off-the-rack product lines, and they release 16 collections annually fewer than Zara (Chang, 2023; López et al., 2021). H&M

has taken strides toward sustainability by establishing corporate pledges to environmental and social issues in response to the growing trend of ethical purchasing (Ho, 2014). They offer yearly sustainability reports from their sustainability division, which present an in-depth but arguably still superficial view of sustainability in the fashion retail sector (Ho, 2014).

This case study analyzes the sustainability initiatives promoted by H&M and, more broadly, explores the implications of their corporate commitments to sustainability. In recent years, H&M has been increasingly focused on sustainability, driven by heightened consumer demand for environmentally and socially responsible products. It is crucial to investigate the steps H&M is taking to effect change, while also acknowledging the limitations within their business model and their pursuit of sustainability. This case study seeks to strengthen the argument that regulatory policies must be implemented to create genuine transformation in the fashion industry and combat the fast fashion trends that contribute to environmental degradation.

Background

Erling Persson, a Swedish businessman, founded H&M in 1947 as Hennes, a women's apparel retailer (H&M Group, 2000; Kumar, 2023). After acquiring Mauritz Widforss in 1968, the business changed its name to Hennes & Mauritz and expanded its product line to include men's and children's clothing (H&M Group, 2000; Kumar, 2023). Later, the company began using the abbreviation H&M (H&M Group, 2000; Kumar, 2023). H&M established its global influence with its forays into foreign markets in the 1970s and 1980s, which was further strengthened by the 1998 introduction of its online store (H&M Group, 2000; Kumar, 2023). The company has collaborated with renowned designers and created sustainable collections, and its

brand portfolio now includes COS, Weekday, Monki, Cheap Monday, and H&M Home (H&M Group, 2000; Kumar, 2023). Global recognition of H&M is a result of its aggressive expansion plans, fast-fashion business model, and more recently its sustainability pledges (H&M Group, 2000; Kumar, 2023). The business is committed to enhancing the customer experience, expanding into new areas, and putting money into digital and sustainable technology (H&M Group, 2000; Kumar, 2023).

H&M's Sustainability Initiatives

H&M's commitment to sustainability has led them to implement initiatives that revolve around increasing transparency in their supply chain, enhancing the use of sustainable and renewable materials, reducing their carbon emissions, and implementing recycling programs (Ho, 2014). These initiatives have been ongoing since 2019 and, as reported in the 2022 H&M Sustainability Report, these initiatives have assisted the company to take steps in the “right direction” (Ho, 2014; H&M Group, 2022). In particular, the recycling initiatives allow consumers to drop off H&M? Re-worn clothes at H&M stores, and in some cases the clothes are used to create new garments (Ho, 2014; H&M Group, 2022).

H&M created a flagship store in Sweden that showcases to consumers the company's recycling process Looop in action (H&M Group, 2020). Looop is a garment-to-garment recycling program that lessens reliance on virgin resources and advances a circular and environmentally friendly fashion business (H&M Group, 2020). This method disassembles worn-out clothing and turns it into new products by spinning yarn, knitting, and shredding fibers without the need for water or chemicals (H&M Group, 2020). Comparing this sustainable method to traditional production techniques, the environmental impact is greatly reduced (H&M

Group, 2020). Another initiative H&M has implemented is called Circularity, Climate, and Nature (H&M Group, 2022; GoodOnYou, 2022). This initiative is focused on decreasing the company's emissions through energy transitions to renewable energy and the recycling of garments (H&M Group, 2022). These goals are expected to be reached by no later than 2040 by the fashion retailer (H&M Group, 2022).

Initiatives like H&M's Circularity, Climate, and Nature and Loop are positive initiatives in moving towards its sustainability goals (H&M Group, 2022). According to H&M'S 2022 Sustainability Report, these programs have produced positive environmental benefits. (H&M Group, 2022; GoodOnYou, 2022). The H&M sustainability department reported in 2022 that with an 8% absolute reduction in scope 1 and scope 2 GHG emissions compared to the 2019 baseline and a 7% reduction in scope 3 GHG emissions, H&M has achieved significant progress in lowering greenhouse gas (GHG) emissions in 2022 (H&M Group, 2022; GoodOnYou, 2022). These accomplishments will help the corporation reach its challenging target of a 56% reduction in emissions by 2030 (H&M Group, 2022; GoodOnYou, 2022). In addition, H&M has surpassed its 2022 water reduction targets by cutting the amount of water used for manufacturing from water-intensive suppliers by 21% and recycling 21% of the total amount used for production (H&M Group, 2022; GoodOnYou, 2022). This development underlines H&M's commitment to ethical water management and the company's initiatives to reduce its environmental effect (H&M Group, 2022; GoodOnYou, 2022).

H&M Group presented a sustainable initiative in 2020, COS Resell, a digital marketplace for buying and selling pre-owned goods. The H&M Group is experimenting with circular models. However, as they begin to scale these sustainable business models and uncouple business growth from resource use, that's when things get intriguing for the company. H&M

plans for sustainability initiatives to not be irregular and dispersed by 2030. Generally, H&M's sustainability performance in the areas of water and climate indicates the company's dedication to tackling global issues as well as the potential advantages of corporate sustainability activities (H&M Group, 2022; GoodOnYou, 2022). These advances have also put H&M in somewhat of a positive light from a consumer perspective with some knowledge of sustainability (Ho, 2014; H&M Group, 2022).

The Pros and Cons of Corporate Commitments

Companies like H&M can benefit from sustainable corporate commitments in the form of enhanced brand recognition, stronger customer loyalty, and improved long-term financial performance (Amed et al., 2022; Melloul et al., 2022). By collaborating with international groups like the Sustainable Apparel Coalition and developing their corporate commitments, H&M, for instance, has taken a proactive role in sustainable efforts (Sustainable Apparel Coalition, 201; H&M Group, 2022). These initiatives are being developed not only by their sustainability division but also by the H&M Foundation, which is committed to developing a more environmentally friendly fashion sector overall (H&M Group, 2020).

The positive business argument is that H&M has positioned itself favorably in the eyes of customers by adopting sustainability (H&M Group, 2022; GoodOnYou, 2023). The corporation can appeal to a larger clientele that is concerned with sustainability by pledging to be transparent, actively tracking its supply chain, and internally adopting climate-friendly decisions (H&M Group, 2022; GoodOnYou, 2023). As a result, H&M has received favorable reviews from reviewers of sustainable fashion, such as the website GoodOnYou, which gives the business the rating "It's a Start" (H&M Group, 2022; GoodOnYou, 2023). This improved reputation can result

in more customer loyalty and better long-term financial performance, highlighting the benefits of implementing sustainable business practices (H&M Group, 2022; GoodOnYou, 2023). H&M's conscious line is an example of sustainable products H&M offers that allows them to come off as sustainable. These types of initiatives allow the company to tap into a market that's beyond the average consumer.

The advantages of making sustainable commitments are clear, but it's important to be aware of the potential challenges and criticisms that businesses like H&M may face in their pursuit of sustainability (Shendruk, 2022; Marino, 2022). These include things like greenwashing, being monitored by sustainability 'watchdog' coalitions with strong ties to the fashion industry, and the difficulty of addressing the fundamental problem of broadly changing its fast fashion business model (Shendruk, 2022; Marino, 2022).

For instance, H&M is being sued for allegedly greenwashing its Conscious Collection (Marino, 2022). The plaintiff, an American marketing student, said that the corporation misrepresented the Higg Index ratings and the usage of polyester in its products to portray the collection as being environmentally friendly (Marino, 2022). Although H&M has made admirable efforts to adopt more sustainable practices, the corporation has encountered difficulties in this transition (Marino, 2022). The class action lawsuit filed in 2022 accusing H&M of "greenwashing" is a sobering reminder of the challenges that the fashion industry may face in its quest for sustainability (Marino, 2022).

Furthermore, concerns regarding the objectivity of coalitions with strong ties to the fashion industry are raised by H&M's participation in the Sustainable Apparel Coalition, which created the Higg Index (Shendruk, 2022; Marino, 2022). Moreover, although H&M made a pledge to the Sustainable Development Goals (SDGs) in 2016 and has published yearly

sustainability reports since 2002, H&M has not addressed the underlying issue with the fast fashion model, creating more clothing than there is need for while pursuing unending profit (Shendruk, 2022; Marino, 2022). H&M should be held accountable for lowering production to a sustainable level and enhancing the durability of its clothing to support a sustainable future (Dyrnes et al., 2021; Marino, 2022). This strategy, though, does not fit the definition of a rapid fashion player (Dyrnes et al., 2021; Marino, 2022). A comprehensive transformation of H&M's business model is required for them to be in line with Goal 12 of the SDGs which is responsible consumption and production (Dyrnes et al., 2021; Marino, 2022).

Adopting reforms, laws, and legislation related to fashion, is one way to encourage this shift. Policies and legislation, in contrast to voluntary initiatives like sustainable fashion certifications, are mandatory and can successfully enforce best practices in the fashion business (Hertantyo, 2023). Initiatives like Fashion of Tomorrow's #Vote4Fashion emphasize the significance of government duty in bringing about systemic change in the fashion industry and campaign for the inclusion of fashion policy into municipal, state, and federal political agendas (Hertantyo, 2023). Because they place a measure of responsibility on governments, corporations, and brands rather than depending simply on consumer choices, fashion reforms, and laws are essential for fostering true sustainability in businesses like H&M (Marino, 2022; Hertantyo, 2023). The lawsuit against H&M serves as a reminder to the entire fashion industry to exercise caution when using its sustainability claims as a marketing ploy, and it also emphasizes the significance of promoting and putting into practice effective fashion reforms, policies, and legislation (Marino, 2022; Hertantyo, 2023).

Conclusion

The sustainability measures carried out by H&M and the effects of their corporate commitments to sustainability have been explored in this case study. H&M has made progress in addressing environmental and social issues as a major global fashion store, which has benefited its brand reputation and customer loyalty (Robertson, 2022). The difficulty of changing the fast fashion business model, accusations of greenwashing, and potential biases within industry coalitions have all been raised in response to this development (Dyrnes et al., 2021; Marino, 2022). The lawsuit against H&M serves as a warning to the entire fashion industry to use caution when using sustainability claims as a marketing gimmick (Dyrnes et al., 2021; Marino, 2022). It also highlights how crucial it is to promote and put into practice effective fashion reforms, policies, and legislation to bring about real change in the industry (Hertantyo, 2023).

Chapter 4: Gen Z and New Forms of Social Media and their influence on Fast Fashion

The emergence of Generation Z (born 1997 to 2013) has sparked a significant shift towards sustainable fashion practices discussed above, such as thrifting and upcycling. The shift has been greatly influenced by the use of social media, which provides Gen-Zers with more access to a world of information and ultimately the ability to engage with their favorite fashion retailers more intimately. Social media is powerful and utilized as a tool for sustainable fashion brands to connect directly with their customers and consumers, which bypasses normal retail channels. In particular, social media influencers have been instrumental in educating Gen-Zers about sustainable practices and fashion brands.

Sustainable direct-to-consumer fashion brands have been leveraging social media to promote their products and brand identity, further contributing to the ethical consumerism movement among Gen-Zers. This chapter will delve into how this generational shift towards sustainable fashion, as well as the growth of sustainable DTC fashion brands, is driving the industry toward greater sustainability. Additionally, we will evaluate the effectiveness of consumer movements and voluntary corporate commitments toward sustainability. Despite these efforts, it is important to recognize that the pressure for a more sustainable fashion industry is still not enough to combat the fast fashion industry as a whole.

Generation Z's Effect on the Fashion Industry

Generation Z (Gen-Z) has the greatest impact on the fashion industry today (Schneider & Lee, 2022). From wanting to develop and showcase their personality to just having a pure enjoyment of shopping, Generation Z's impact on the fashion industry today is like no other. Gen-Z is the largest generation, comprising around 25% of the world's population, and has a

disproportionate influence on culture and the economy (Schneider & Lee, 2022). The 12-to-25-year-old generation in the United States has a purchasing power of approximately \$360 billion (Amed et al., 2019). There is an immense amount of money that's just funneled into clothing and apparel by this generation alone. Fashion is the pleasure category that Generation Z spends the most money on, surpassing restaurants, video games and consoles, and music (Amed et al., 2019). The clothes Gen-Z purchases truly make them happy and allow them to explore who they are and also express themselves in ways they never have (Amed et al., 2019). With so much purchasing power comes environmental and social responsibility. For this senior project, the main focus is Gen-Z's environmental consciousness as it relates to the fashion industry and ultimately the alternatives they are promoting to fight fast fashion trends. Social and environmental problems, regarded by many as the defining issues of this day and age, are of great interest to younger customers (Amed et al., 2019). They increasingly demonstrate their beliefs through their purchasing decisions, selecting companies that match their ideals and avoiding those that do not (Amed et al., 2019).

The Gen Z population is now promoting new sustainable shopping trends that could completely shift the clothing and apparel industry (Theocharous, 2023). These trends include thrifting, mending, and upcycling, which all have the same outcome of consumers spending less on new clothing; however, putting more money into used and recycled clothes (Theocharous, 2023). These trends can be seen as a business model to some, as stores across the world have grown successfully through selling second-hand clothing (Lumos Business, 2022). This section will look at how these relatively new shopping trends could potentially shift the fashion industry and, most importantly, showcase what makes these shopping trends sustainable.

Thrifting

Thrifting is going to a thrift store, garage sale, or flea market to purchase gently worn products at reduced costs. Donated things have been well-loved by a prior owner, but they are typically still in good condition and value to a new owner (Aldrich, 2022). From 2017 to 2019, secondhand sales among millennials and Generation Z grew by 37% and 46% (Solanki, 2019). Shopping at thrift stores essentially prolongs the life of clothing and the materials that the clothes are made of (Farida et al., 2022). Thrifting embraces a bigger concept by celebrating the reuse of previously owned items, finding a new purpose for vintage items that were discarded, and the delight of envisioning what the item was like when it was brand new (Farida et al., 2022).

As thrifting extends the life of a garment and keeps garments in use it ultimately promotes a circular economy. Additionally, thrifting is seen as a sustainable shopping practice when done by consumers if they know it or not (Tripathi & Rongali, 2021). Thrifting promotes a business model that does not need labor to create clothing and the apparel is donated by members of the communities (Tripathi & Rongali, 2021). It turns out that thrifting doesn't require new materials or further manufacturing which makes it a sustainable way to shop (deMesa, 2023). More specifically, thrifting conserves energy, lessens air pollution, eliminates mountains of trash, and keeps our oceans healthier (deMesa, 2023). While thrifting offers countless options when it comes to secondhand clothing, it is also another way to preserve our environment (deMesa, 2023).

Additionally, for the younger generations, thrifting provides an opportunity for personal identity and keeping up with the most recent fashion trends, as promoted by Instagram influencers with a keen fashion sense. Nowadays, consumers can mix and match new fashion

with high-end and used items to create their unique style that reflects their individuality. The used economy consists of over 25,000 secondhand, consignment, and non-profit resale stores in the United States (Solanki, 2019). This doesn't even include the expanding number of mass-market retailers like Macy's and JC Penney who are adding resale shops to their storefronts. These resale shops will essentially house these companies' old clothes and resell them. For example, Macy's will have a section in their store that will house second-hand clothing sold by them (Bob Cut Editors, 2022). This ultimately could turn into Macy's having thrift stores themselves that will allow people to come and shop through their secondhand pieces (Bob Cut Editors, 2022). Moreover, Macy's has even worked with thrifting companies such as Thred-Up which brings a thrift shop to their customers where "New-to-you" brands and clothes are being sold (Bob Cut Editors, 2022). This sustainable initiative is called Thrift and Shout and can be found at only select locations across the United States (Bob Cut Editors, 2022).

Thrifting is an action I take part in myself. So much so that I have not bought new clothes in two years. Through my non-profit organization The Earth's Tomorrow Foundation I promote the sustainable fashion practices that consumers can do to fight fast fashion trends and be more sustainable. One of the consumer-sustainable fashion practices I promote is thrifting as it promotes a circular economy and increases the utilization and life of a garment. A big way I promote thrifting is by hosting annual fashion shows that use secondhand clothing and recycled materials to showcase how someone's old clothes can be repurposed and upcycled to fit everyday trends. I use the runway as a form of education to the communities I serve as a way to show how we can do our part in creating a healthier environment by not consuming new apparel, especially from fast fashion retailers such as Shein, Forever 21, or Zara.

It's important to highlight how social media has played a role in Generation Z and their increased willingness to consume secondhand clothing. Social media influencers can educate their audience about the issues of fast fashion and the lack of sustainability in the fashion industry (Harrison & Jacobson, 2021). Not only this but influencers can influence their audiences to also think more sustainably when purchasing apparel (Harrison & Jacobson, 2021). Moreover, social media has become a commonplace that promotes consumption (Harrison & Jacobson, 2021). Today there are influencers on these platforms that promote the consumption of sustainable fashion practices such as thrifting (Harrison & Jacobson, 2021). The low-price points and capability to find unique and one-of-a-kind clothes are what is appealing to Generation Z and social media gives this sustainable practice a global platform (Harrison & Jacobson, 2021). On their pages, social media influencers advertise their favorite secondhand stores and display the best finds they have made (Harrison & Jacobson, 2021). Like myself, some influencers go a step further and reuse the material they find to either fit current trends or create their distinctive style. Even materials and commodities from thrift stores are made into tote bags. Upcycling is a term that describes this action.

Upcycling

Upcycling is a process of transforming old garments or textile waste into items of higher quality and value (Herman et al., 2018). This practice is widely regarded as a sustainable solution, as it consumes minimal amounts of energy and resources (Herman et al., 2018; Farida et al., 2022). Furthermore, upcycling can be considered a circular approach to sustainability, since it involves repurposing old clothing and fabric scraps (Herman et al., 2018; Farida et al., 2022). Upcycling clothes can increase the lifespan of garments, thereby reducing the need for consumers to purchase new clothes (Herman et al., 2018; Farida et al., 2022). As upcycling gains

popularity, it has the potential to become a viable business opportunity, which can help educate consumers on the benefits of upcycling (Herman et al., 2018; Farida et al., 2022).

Upcycling has numerous environmental, social, and economic benefits (Bhatt et al., 2018). Its environmental advantages include conserving new or raw materials, such as organic cotton, and reducing textile waste (Bhatt et al., 2018). Doing so saves essential resources and reduces greenhouse gas emissions by lowering the water and energy needed to produce new garments (Bhatt et al., 2018). Additionally, upcycling saves clothes from ending up in landfills, where they may contribute to pollution by being burned, releasing microplastics into the atmosphere (Bhatt et al., 2018). Through upcycling, garments can be fully utilized, which is important since the average American throws away 70 pounds of clothing (Bhatt et al., 2018; EPA, 2023). As one of the greenest practices, upcycling enables customers to interact with their clothing in new ways. If done properly, it also appears to be a lucrative business enterprise. Additionally, upcycling enables users to develop new skills like sewing and can quickly develop into a hobby that is used to relieve stress. In addition to its social benefits, its environmental benefits allow consumers to take an active part in fighting fast fashion trends from fashion corporations.

Encouraging consumers to upcycle can be an effective way to promote sustainable fashion practices (Bhatt et al., 2018; EPA, 2023). Upcycling is unique in that it promotes recycling and consumes the least amount of energy when producing new garments, making it an attractive option for those seeking sustainable fashion solutions (Bhatt et al., 2018; EPA, 2023). Although upcycling clothing provides advantages for the environment, there are restrictions, especially if a corporation wants to pursue it on an industrial scale (Bhatt et al., 2018).

Upcycling has the potential to be carried out on a huge scale by fashion companies since it is the ideal sustainable fashion activity to promote sustainable fashion practices (Paras & Curteza, 2018). When it comes to bringing up cycling to a wide scale, however, there are limitations (Paras & Curteza, 2018). Large-scale upcycling has many difficulties, including trade-offs between value and quality, immature upcycling streams, problems gathering resources, uneven materials, and supply, all of which can prevent major fashion firms from making a systematic transition (Paras & Curteza, 2018). When implementing this systematic shift, inadequate understanding and awareness of upcycling clothing are also recognized as obstacles (Paras & Curteza, 2018). Even though this has favorable environmental effects, it doesn't seem to be desirable for large fashion firms (Paras & Curteza, 2018). Large fashion firms wouldn't be interested in implementing upcycling because it would result in a negligible amount of waste reduction and currently only applies to a small market (Paras & Curteza, 2018).

Direct-To-Consumer Marketing in Sustainable Fashion

Consumer campaigns are also commonly referred to as direct-to-consumer marketing campaigns (DTC) This form of marketing eliminates the middleman and promotes a product or service directly from the seller to the consumer (Parkerwhite, 2022). In the past decade have more and more been centered around sustainable fashion (Parkerwhite, 2022). Fashion brands that use DTC strategies to promote sustainable fashion are looking to increase the percentage of sustainable clothing that is being purchased (Shin et al., 2022). For example, through the use of social media and influencer marketing the DTC fashion retailers like Ahluwalia have been able to develop a tribe-like following among their customers because of distinctive inspiration (Shin et al., 2022). Designer Priya Ahluwalia of Ahluwalia based her collection largely on reclaimed vintage clothing (Shin et al., 2022). Ahluwalia's designs contradict the fashion rules that brands

such as Zara and H&M uphold, and as a result, the company has amassed a modest but devoted fan base (Shin et al., 2022).

There is a high interest in sustainable and eco-friendly apparel among millennials as 69% have shown interest in purchasing more sustainable clothing (Shin et al., 2022; Moore, 2019). However, only about 37% do purchase sustainable clothing (Shin et al., 2022; Moore, 2019). On the one hand, many factors cause a lack of purchasing of sustainable apparel amongst consumers and these reasons are deemed to be why DTC marketing isn't sufficient enough to make a substantial change to the fashion industry and mitigate the effects of fast fashion (Shin et al., 2022). While on the other hand, DTC sustainable fashion brands are seen to have reliable customers that frequent and favor their e-commerce stores which are attributed to factors that are related to the branding and innovation of the company rather than just sustainability (Kim et al., 2021; Shin et al., 2022).

DTC and Fast Fashion

By emphasizing brand loyalty, DTC (direct-to-consumer) fashion firms can expand their share of the sustainable fashion market and develop the industry as a whole (Kim et al., 2021; Shin et al., 2022). Innovative brand messages and distinctive brand identity are two ways direct-to-consumer firms can establish brand loyalty (Kim et al., 2021; Shin et al., 2022) The case of the fashion retailer Reformation illustrates this point. With a vast following on multiple social media platforms, Reformation is completely transparent with its devoted customers (Barnett, 2019). Customers may make more informed purchasing decisions and more readily hold brands accountable thanks to initiatives like the RefScale, which was developed to quantify its environmental footprint per garment (calculating pounds of carbon dioxide emitted, gallons of

water utilized, and pounds of waste generated) (Barnett, 2019). Therefore, brands that innovate in sustainability and provide clients with easily available information can establish enduring brand relevance and loyalty (Kim et al., 2021; Shin et al., 2022). In contrast, companies such as Entire World were unable to distinguish themselves in the market due to their lack of differentiation (Kim et al., 2021; Shin et al., 2022). Entire World lacked one of the important elements of a successful direct-to-consumer) brand -it must have distinctive, innovative products and brand identity to match (Kim et al., 2021; Shin et al., 2022).

Some notable examples of DTC sustainable fashion brands are Naadam, The Curated, and Italic all have a focus on implementing green initiatives and sourcing from vendors in their supply chains that participate in making industries greener and eco-friendly (Eisingerich & Rubera, 2020; Berk, 2023). Sustainable DTC fashion brands strive to appeal to buyers' values and preferences, especially those who focus on ethically made products and have a transparent supply chain (Eisingerich & Rubera, 2020; Berk, 2023). This has also been found to be beneficial for DTC brands to gain brand loyalty amongst customers as their smart innovative marketing strategies with the mix of sustainable initiatives bring their customers back to shop again (Eisingerich & Rubera, 2020; Berk, 2023). DTC fashion brands with a sustainability focus shift consumer behavior to some extent as those whose shop with these brands tend to shop again rather than get a garment from fast fashion retailers (Eisingerich & Rubera, 2020; Berk, 2023).

One strategy that contributes to successful DTC fashion brands is their use of social media to promote products and to establish and form a connection with consumers (Eisingerich & Rubera, 2020; Berk, 2023). Social media has been seen to open up an avenue for sustainable DTC fashion brands to connect with consumers that share an interest in their brand mission and also gives these brands an advantage to directly interact with them as well (Eisingerich &

Rubera, 2020; Berk, 2023). These brands appeal more to millennials and Generation Z as this form of marketing exposes these consumers to products through devices and apps they use on a daily and hourly basis (Eisingerich & Rubera, 2020; Berk, 2023). By leveraging popular social media platforms like Instagram, YouTube, and Tik Tok DTC sustainable fashion brands can scale and reach a wider range of consumers who have an interest in sustainable business initiatives such as transparency in their supply chain or using recycled materials (Eisingerich & Rubera, 2020; Berk, 2023). The use of these platforms so frequently has allowed for trust to be built between consumers and sustainable DTC brands (Eisingerich & Rubera, 2020; Berk, 2023).

While brand innovation can make DTC marketing somewhat effective, its success is not primarily based on its emphasis on sustainability (Jansen, 2022; Kim et al., 2021). The development of sustainable DTC clothing brands is hampered by obstacles like the high price of eco-friendly clothes, low environmental awareness, and skepticism about sustainability claims (Jansen, 2022; Kim et al., 2021). The use of plastic and foldable packaging, which has a severe impact on the environment, is only one of the many obstacles these DTC companies must overcome to bring about significant change across the whole sector (Jansen, 2022; Kim et al., 2021) Furthermore, they frequently disregard scope 3 emissions in favor of more manageable controllable factors when setting sustainability goals (Jansen, 2022; Kim et al., 2021). Concerns have been raised about how the shift to physical retail may affect sustainability goals because the advantages for the environment depend on things like consumer travel patterns and shop energy usage (Jansen, 2022; Kim et al., 2021). While wholesale collaborations can help to reduce environmental effects, customers may now be held accountable for emissions (Jansen, 2022; Kim et al., 2021). All in all, DTC sustainable companies must overcome these challenges to

significantly minimize their environmental effect across all business elements, even though they work to combat rapid fashion and promote a greener sector (Jansen, 2022; Kim et al., 2021).

Chapter Five: Conclusion -Necessary but not sufficient

As there isn't enough voluntary action to go green and implement green business models on the corporate side of the industry, and consumers' feed-in of concepts that can lower their consumption and waste is looking slow, our last resort to making an effective change in the fashion industry that'll be sufficient enough to mitigate its environmental effect is through the use of policy and regulation (Niinimäki et al., 2020; Wagner & Gilbert, 2020). Militant action has revealed itself to be the key to blowing up this industry that cares more about its profits than those who wear the garments they create and the environment they are destroying (Lisa, 2022; Biaggi, 2022). We find today that in the United States, there is only one regulatory policy being put into place that is currently still in legislation (Lisa, 2022; Biaggi, 2022).

This section seeks to sum up why consumer movements, voluntary corporate commitments, and DTC sustainable fashion brands aren't sufficient enough to make mass change in the fashion industry. However, they do offer an acceleration or step in the right direction when it comes to making the fashion industry green and fighting fast fashion business models. Furthermore, the New York Fashion act which has been recently introduced in the United States and this section seeks to explore what it is and also what it means moving forward for brands that profit from fast fashion business models and for the fashion industry as a whole.

It is seen that consumer movements, voluntary standard and corporate commitments, and DTC sustainable fashion brands all seek to promote sustainability, in theory, to make the fashion industry more sustainable and fight fast fashion business models (Pookulangara & Shephard, 2013; Crane, 2015). However, in practice, these nudges in the right direction aren't sufficient enough to make a large-scale change and change corporate behavior. Consumer movements have been seen to focus on just that...the consumers (Crane, 2015). Using the slow fashion movement and sustainable fashion movement as an example they both cater to telling consumers how they can be the change through ideas of thrifting, mending, and upcycling (Pookulangara &

Shephard, 2013; Brewer, 2019). As both consumer movements both promote sustainable clothing brands, they do not target the brands that are contributing to the problem (Pookulangara & Shephard, 2013; Brewer, 2019).

Moreover, voluntary and corporate commitments have been found to help corporations through consultancy, resources, and coalition-made tools that look to help companies partake in more sustainable initiatives (Niinimäki et al., 2020; Wagner & Gilbert, 2020). It can be seen that some voluntary and corporate commitments provide a set of regulations and policies and even indexes that are supposed to help fashion retailers track their progress as a part of making these companies more sustainable (Niinimäki et al., 2020; Wagner & Gilbert, 2020). Using the sustainable apparel coalition as an example, recent literature argues that their Higg index is insufficient as it promotes unsustainable practices, not only this but there is much oversight when it comes to regulating (Chun et al., 2021; Shendruk, 2022). Moreover, oversight can be linked to the strong ties the Sustainable Apparel Coalition has with the fashion companies that work with them (Chun et al., 2021; Shendruk, 2022).

Next, DTC sustainable fashion brands have been seen to promote sustainable practices and initiatives within their businesses (Shin et al., 2022; Moore, 2019). These initiatives usually encompass things such as the environmental footprint of products and education about where their garments are sourced from (Shin et al., 2022; Moore, 2019). This is a form of transparency with consumers and DTC sustainable fashion brands also promote sustainability by using renewable energies or sourcing cotton from rain-fed cotton (Eisingerich & Rubera, 2020; Berk, 2023). As these particular brands have found success through social media and influencer marketing (Jansen, 2022; Kim et al., 2021). These brands' mission, values, and innovative marketing is what also helps them to retain their conscious consumers (Jansen, 2022; Kim et al., 2021). However, although these brands are taking the right steps in helping shift the fashion industry to a more sustainable one and fighting fast fashion trends, it still isn't enough to shift

fashion corporations to become more sustainable voluntarily (Jansen, 2022; Kim et al., 2021). The growth of sustainable DTC garment firms is hampered by challenges such as the high price of eco-friendly clothes, a lack of environmental understanding, and skepticism about sustainability promises (Jansen, 2022; Kim et al., 2021). The use of plastic and foldable packaging is one of the many obstacles that these DTC enterprises must overcome to significantly alter the industry as a whole, and they frequently overlook scope 3 emissions in favor of more controlled, manageable elements (Jansen, 2022; Kim et al., 2021).

Conclusion

In conclusion, the fashion industry's fast fashion business models have had a significant impact on the environment, from intensive water use in cotton production to wastewater from dyeing textiles. The industry's concerns contribute to climate change due to the production, packaging, and shipping of garments. The fashion industry must make sustainable changes since environmental harm is coming from all sectors of the dense and intersectional supply chain. This thesis has explored the environmental impact of the fashion industry and fast fashion business models, demonstrating the endless environmental effects, from textile waste being burned and contributing to toxic fumes in the atmosphere to water-intensive cotton production drying up seas.

While consumer movements, voluntary and corporate commitments, and direct-to-consumer (DTC) sustainable fashion retailers contribute to creating a sustainable fashion industry and fighting fast fashion business models, it is still not enough. Regulatory policies such as the New York Fashion Act are needed to create a more green and eco-friendly industry and slow down fast fashion retailers, especially as they contribute to the rising number of garments being produced and the reason why apparel utilization has decreased over the past 20 years.

Furthermore, this senior project examined how Generation Z is impacting the fashion industry through thrifting, mending, and upcycling, and how social media has played a role in encouraging sustainable consumer practices. However, ethical consumerism and corporate commitments are not enough, and regulatory policies are required to create real, significant change.

There are several approaches to promote or ‘green’ the fast fashion industry, ranging from consumer campaigns and market pressures below to voluntary industry standards and voluntary commitments by companies to adopt more sustainable practices. However, these two approaches have limitations and gaps that cannot shift the production and pollution issues with the fast fashion and fashion industry as a whole. Recent work highlights the need for regulatory frameworks, and decision-makers, politicians, and government representatives have started to promote sustainable fashion through public policy.

Each policy option has its benefits and limitations, and some consumers are pressing businesses to adopt sustainable, ecological, green, and socially responsible business practices. Thrifting and upcycling practices, supported by social media and influencers, are popular with Generation Z’ers who see them as a personal belief in decreasing consumption and bypassing fast fashion. However, thrift stores may lose sight of their initial purpose of serving low-income communities. The rise of voluntary sustainability standards, pledges, and ‘green’ clothing lines does show that corporations are hearing what some consumers are saying, but it is difficult for consumers to know to what extent any of these voluntary actions have altered the production practices and supply chain of fast fashion companies.

Regulations present a promising pathway, but the political challenge of regulating multinational corporations is daunting and requires national and international regulations. In summary, the profit-driven pipeline of the fashion industry that has no concern for consumers and the environment must change, and it is imperative to persuade or pressure fast fashion

companies to adopt sustainable business models and change behavior in production and supply chains.

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