

# Sustainable Fashion: Exploring the Concept of Greenwashing and New Trends in the Fashion Industry

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**Abstract:-** The fashion industry, characterized by rapid cycles of production and consumption, has emerged as a global economic powerhouse, generating significant revenue and employment opportunities worldwide. However, this growth has come at a substantial environmental and social cost, marked by extensive resource consumption, greenhouse gas emissions, and labor exploitation. This paper critically examines the environmental and social impacts of the fashion industry, focusing on issues such as textile waste, water pollution, and unethical labor practices. It explores the transition towards sustainable fashion practices, highlighting initiatives like circular fashion and consumer behavior shifts towards eco-friendly choices. The study employs a comprehensive review of current literature and case studies to analyze the challenges and opportunities for achieving sustainability within the fashion sector. By synthesizing diverse perspectives and research findings, this paper proposes strategies to combat greenwashing, enhance transparency, and foster a circular economy in fashion. Ultimately, it aims to provide a framework for stakeholders to navigate towards a more ethical and environmentally responsible future for the fashion industry.

**Keywords:-** Greenwashing, Fast Fashion, Advertising, Consumer Buying Behavior, Perception, Sustainable, Brand Image.

## I. INTRODUCTION

The fashion industry, a dynamic and influential global sector, has transformed from a modest trade into a \$2.4 trillion powerhouse by 2021. This growth is driven by increased production and consumption, with consumers purchasing five times more clothing today than in 1980, leading to an annual global demand for 80 billion garments. Despite its economic success, the industry faces significant challenges, including environmental degradation, labor exploitation, and unsustainable practices.

This paper examines the multifaceted impact of the fashion industry, focusing on its environmental and social dimensions. It starts with an overview of the industry's size and economic significance, highlighting its role as a major

global employer and the dominance of fast fashion. It then explores the environmental footprint of fashion, discussing issues like greenhouse gas emissions, water consumption, and textile waste. A central theme is the growing importance of sustainability within the industry. The paper also explores sustainability initiatives, challenges, and the shift towards eco-friendly practices, such as sustainable fashion and circular economy models. It also addresses consumer behavior and perceptions of sustainable products, emphasizing education and transparency in shaping purchasing decisions. Through this analysis, the paper aims to provide insights into the complex interplay between economic growth, environmental sustainability, and consumer behavior within the global fashion industry.

## II. MATERIALS AND METHODS

### ➤ Overview of the Fashion Industry:

The fashion industry has undergone significant growth since the 1980s, evolving from a \$500 million trade to a \$2.4 trillion global market<sup>[4]</sup>. This remarkable expansion is evident in the dramatic increase in clothing production and consumption; today, consumers purchase five times more clothing as compared to that in 1980, resulting in 80 billion garments bought worldwide each year<sup>[9]</sup>. Despite facing challenges like the COVID-19 pandemic, the industry is expected to maintain a growth rate of 7% annually until 2024, as reported by the Fashion Pact, an international coalition of textile companies dedicated to sustainability<sup>[4]</sup>. The fashion sector employs around 300 million people globally, with the fast fashion segment alone providing jobs for approximately 26.5 million individuals<sup>[4]</sup>. However, the workforce in this industry often endures poor working conditions and low wages, underscoring the urgent need for improved labour practices and ethical standards.

### ➤ Importance of Fashion Industry

Fast fashion companies excel in quickly responding to changing fashion trends. Fast fashion operates on short product cycles, meaning new collections are introduced frequently. They can swiftly bring new styles from the runway to the retail shelves, meeting consumer demand for the latest trends. By offering fashionable clothing at low prices, fast fashion makes style accessible to a broader audience, democratizing fashion and allowing people from

various socioeconomic backgrounds to express themselves through clothing. The fast fashion model, characterized by rapid production and consumption, has led to significant environmental issues, including contributing to 2–8% of global greenhouse gas emissions and producing 20% of the world's wastewater<sup>[1]</sup>.

➤ *Environmental Impact of the Fashion Industry:*

• *Contribution to Greenhouse Gas Emissions:*

The rapid growth of the fashion industry has significantly contributed to global greenhouse gas emissions. The industry, responsible for 2–8% of global emissions, is a major player in environmental degradation. The doubling of global textile production in the past twenty years has exacerbated this issue, with annual per capita consumption increasing from 7 to 13 kg, resulting in a total of 100 million ton of textiles produced annually<sup>[8]</sup>.

• *Wastewater Production:*

The fashion industry is also a major contributor to global wastewater production. The extensive use of water and chemicals in textile manufacturing leads to significant water pollution. The dyes and finishing processes employed in textile production release harmful chemicals into water bodies, affecting both aquatic life and human health. Despite the industry's efforts to implement more sustainable practices, the challenge of wastewater management remains substantial.

• *Underutilization and Lack of Recycling:*

The fashion industry's production model results in a considerable amount of underutilized clothing and a severe lack of recycling. Annually, \$400 billion worth of clothing is wasted globally, reflecting the inefficiency and wastefulness of the current fashion system. In Australia, for instance, individuals purchase an average of 27 kg of new textiles per year, with 23 kg ending up in landfills. These discarded textiles predominantly comprise man-made fibers, which can take decades or even up to 200 years to decompose<sup>[8]</sup>. Overall, over two-thirds of the textiles produced globally end up in landfills, with only 15% being recycled. The throwaway culture perpetuated by fast fashion exacerbates these environmental issues. Consumers are encouraged to frequently purchase inexpensive clothing, wear it a few times, and then discard it. This disposable nature of fashion contributes to the massive accumulation of textile waste, which poses significant environmental, health, social, and economic challenges.

• *Microplastic Pollution:*

Microplastics, tiny plastic particles less than 5 mm in size, are shed from synthetic fibers during washing and end up in oceans and other water bodies. These microplastics and micro-textile wastes can contaminate aquatic ecosystems and enter the food chain, ultimately affecting human health. Fish and other marine organisms ingest microplastics, which can then be transferred to humans through seafood consumption. This contamination highlights the far-reaching impact of the fashion industry's reliance on synthetic fibers and its contribution to global plastic pollution. There is an urgent

need for a clear definition of sustainable materials; certain hazardous substances, especially those polluting water, soil, and air biodiversity, should be banned with immediate effect. To reduce the environmental impact of microplastics, the textile industry should also focus on minimizing microfiber shedding.

• *The Environmental Impact*

The fast fashion industry uses vast amounts of water and chemicals in the production process and generates considerable waste from unsold garments or landfill deposits, making it one of the highest polluting industries globally. The industry's contribution to microplastic pollution in the oceans and substantial greenhouse gas emissions underscores the urgent need for sustainable practices. Global textile production has doubled in the past twenty years, with annual consumption per person increasing from 7 to 13 kg, totaling 100 million tons, while over two-thirds end up in landfills, and only 15% are recycled<sup>[8]</sup>. The disposable nature of fast fashion and a throwaway culture are leading to significant environmental, health, social, and economic issues. One of the global environmental challenges involves microplastic and micro-textile waste entering oceans, which can ultimately contaminate fish and the food chain. Annually, \$400 billion worth of clothing is wasted globally.

• *Sustainability and Fashion:*

Sustainability has become a critical issue for the fashion industry due to the complex environmental and social impacts of fast fashion. The significance of sustainability is highlighted by its profound effects on both production and consumption processes. There are challenges of managing sustainability within the intricate fashion value chain, encouraging more brands to set sustainability goals, enhance product traceability, and invest in consumer education. Additionally, non-governmental organizations (NGOs) actively develop and promote sustainable manufacturing methods and circularity approaches.

Sustainable Fashion, also known as eco-fashion, slow fashion, green fashion, and ethical fashion, has emerged as a focal point for long-term industry growth and reducing environmental impacts. The shift towards sustainability is no longer optional for companies; it is a necessity. As a result, the industry's marketing strategies are evolving to maintain competitive advantages by integrating sustainability into their core business models. This reflects a broader transition from linear to circular economic approaches, emphasizing the importance of sustainability in driving the future of fashion.

• *Consumer Behavior and Sustainability:*

✓ *Consumer Willingness to Pay for Sustainable Products:*

Younger generations are increasingly concerned with the current and future state of the planet, with 84% believing it is their duty to change the world. Predominantly urban dwellers, 61% of them reside in Asia. They place high value on environmentally friendly and ethical brands, with 71% expecting brands to be environmentally friendly and ethical, and 61% expecting them to connect with a cause or social

issue<sup>[6]</sup>. This demographic is notably inclined to invest in brands and products that align with sustainable values. Younger consumers increasingly prefer companies that are transparent and upfront about their sustainability practices<sup>[5]</sup>. They value ethical production and are more likely to support brands that demonstrate a commitment to environmental and social responsibility.

Many consumers, particularly younger ones, are willing to pay premium prices for bio-based clothing and products that adhere to sustainable practices. However, despite this willingness, environmental concern often ranks lower in the consumer decision-making hierarchy compared to factors such as price, value, size, quality, style, convenience of purchase, and materials. This indicates that while sustainability is important, economic factors and consumer convenience still play a more significant role in purchasing decisions.

#### ✓ *Challenges in the Second-Hand Market:*

While there is a growing interest in sustainable products, consumers are generally less enthusiastic about the second-hand market, which is a key pillar of the circular economy. This reluctance stems from various factors, including associations of second-hand clothing with poor quality, poor sanitation, brand devaluation, fraud, or social discrimination. Despite the environmental benefits, these negative perceptions hinder the widespread adoption of second-hand clothing. The challenge lies in overcoming these perceptions and encouraging consumers to view second-hand clothing as a viable and attractive option. This requires addressing concerns about quality and sanitation, ensuring brand integrity, and combating social stigmas associated with second-hand clothing. Moreover, marketing strategies need to emphasize the environmental benefits and cost savings of second-hand clothing to appeal to environmentally conscious consumers.

#### ✓ *Perceptions of Consumers:*

The model of consumer behaviour aims to explain the factors influencing buying decisions. It suggests that various external stimuli, like advertising, significantly affect individuals based on their characteristics, impacting their decision-making process. These factors include social influences such as culture and social class, demographic aspects like occupation, age, economic situation, and lifestyle, and psychological elements such as motivation, perception, learning, beliefs, and attitudes. Perception involves selecting and transforming external stimuli into meaningful internal sensations, shaped by past experiences and individual disposition. This process includes selective attention, distortion, and retention. Selective attention filters out most stimuli encountered daily. Selective distortion interprets stimuli based on pre-existing beliefs and experiences. Selective retention favours brands with positive past experiences, often overlooking negative aspects.

Consumers follow a five-stage buying decision process: problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behaviour. Not all consumers go through all stages, especially if familiar

with the product. Problem recognition occurs when a consumer identifies a need, often influenced by advertising. For instance, a winter coat ad can prompt the realization of needing a new coat. The information search phase is crucial, involving gathering information from personal, commercial, public, and experiential sources. Young consumers often rely on peer experiences and commercial information, but corporate sources can be misleading. During the purchase decision process, preferences are influenced by the expected value and benefits, weighing positive aspects against negative ones like environmental or ethical impacts. Fast fashion is a trend supporting consumer behaviour, characterized by cheap, rapidly produced clothing viewed as disposable. Brands like Zara and H&M have increased their collections, contributing to this trend.

#### ✓ *Concept of Greenwashing in the Fashion Industry:*

Greenwashing is when companies falsely promote themselves as environmentally friendly, often spending more on advertising these claims than on actual sustainable practices<sup>[2]</sup>. Essentially, it's about misleading consumers with deceptive information about their environmental goals and actions. The term was coined by Jay Westerveld in 1986 when he criticized hotels for claiming that reusing towels was an environmental effort, while it was mainly a cost-saving tactic<sup>[7]</sup>. This practice poses a significant challenge as the demand for genuine sustainable marketing grows. Many brands have been accused of greenwashing to attract eco-conscious consumers, highlighting a major issue in marketing ethics.



Fig 1 Greenwashing Example<sup>[18]</sup>

#### ➤ *Examples of Greenwashing:*

##### • *H&M's "Conscious Collection":*

H&M launched a line called the "Conscious Collection," marketed as sustainable and eco-friendly. Critics argue that while a very small fraction of the collection uses recycled materials, the majority of H&M's products are still produced using traditional, environmentally harmful methods. This practice is seen to distract from the company's overall impact and create a misleading perception of sustainability.

• *Nestlé's Water Bottling Practices:*

Nestlé has marketed its bottled water brands as environmentally friendly, emphasizing their commitment to sustainability. However, the company has faced criticism for extracting water from drought-affected areas and using plastic bottles, which contribute to environmental pollution. This contrast between their marketing and actual practices has been seen as a form of greenwashing.

• *Coca-Cola's "PlantBottle":*

Coca-Cola introduced the "PlantBottle," a partially plant-based plastic bottle, and marketed it as a significant environmental innovation. However, most of the bottle is still made from traditional plastic, and Coca-Cola's overall contribution to plastic pollution remains substantial. Critics argue that the promotion of the PlantBottle diverts attention from the broader issue of single-use plastic waste

➤ *Impact of Greenwashing on Consumer Trust and Decisions:*

Research in consumption theory indicates a strong correlation between consumer values and green trust<sup>[10]</sup>. Eco-labeling and certification serve as tools to enhance consumer perception by signaling superior quality, greater value, and alignment with a desirable lifestyle. However, greenwashing can significantly erode consumer trust, leading to skepticism and distrust towards all sustainability claims, even those that are genuine. The fashion industry faces significant challenges in becoming environmentally friendly. For instance, it consumes 79 million cubic meters of water and produces approximately 1,715 million tons of CO2 emissions and 92 million tons of waste annually. These figures are expected to double by 2030 due to population growth and rising incomes in middle-class families. The industry's environmental impact, combined with unethical labor practices, underscores the need for systemic change. However, greenwashing practices hinder progress by misleading consumers and delaying genuine sustainability efforts.

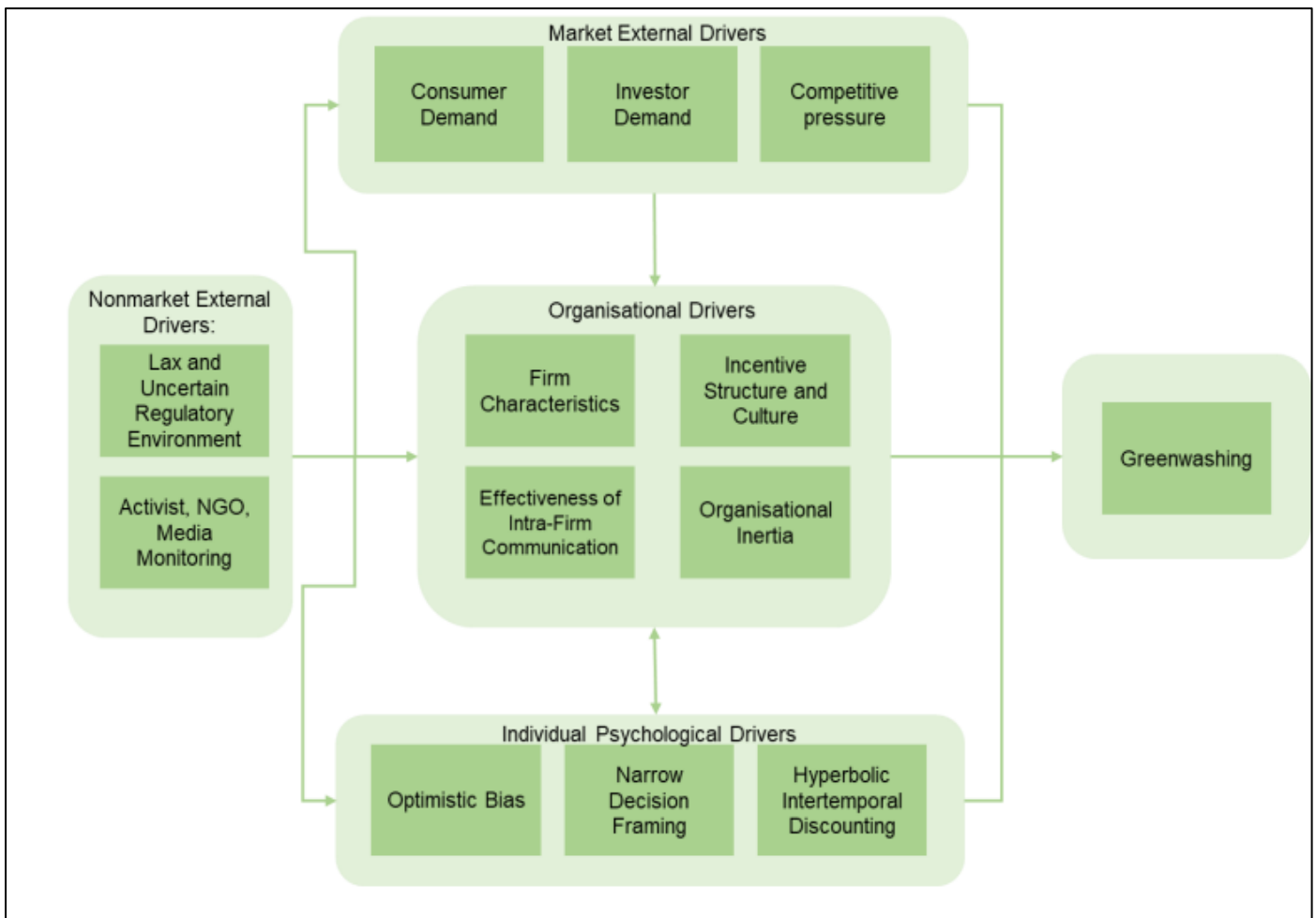


Fig 2 Drivers of Greenwashing <sup>[3]</sup>

➤ *Strategies to Combat Greenwashing:*

To combat greenwashing, governments and international bodies should enforce stringent regulations that define and standardize sustainability claims, while independent third-party organizations conduct regular audits and certifications to assess companies' entire supply chains.

Companies must adopt transparent reporting practices, disclosing detailed information about their sustainability initiatives, progress, and challenges through annual reports that include third-party verification results. Enhanced regulations are also essential; governments and regulatory bodies need to enforce stricter guidelines and environmental

labelling, as seen in the European Union's "EU Green Deal" action plan, which utilizes Environmental Footprint assessments to validate claims. Consumer education is crucial, with collaboration among companies, NGOs, and governments to raise awareness and provide tools for identifying genuine sustainability claims. Establishing robust accountability mechanisms, including financial penalties and public disclosure of violations, is essential. Companies should collaborate to set higher standards, share knowledge, and innovate collectively, while involving stakeholders such as employees, suppliers, and community members in sustainability initiatives. Utilizing Life Cycle Assessments to evaluate products' environmental impacts from cradle to grave will provide a comprehensive view of sustainability and highlight areas for improvement<sup>[11]</sup>.

- *New Trend Towards Sustainable Fashion – Circular Fashion*

Circular fashion is grounded in the cradle-to-cradle and closed-loop ideologies, striving to develop recyclable and biodegradable textiles, products, and entire collections. The core principle of circular fashion is design for circularity.

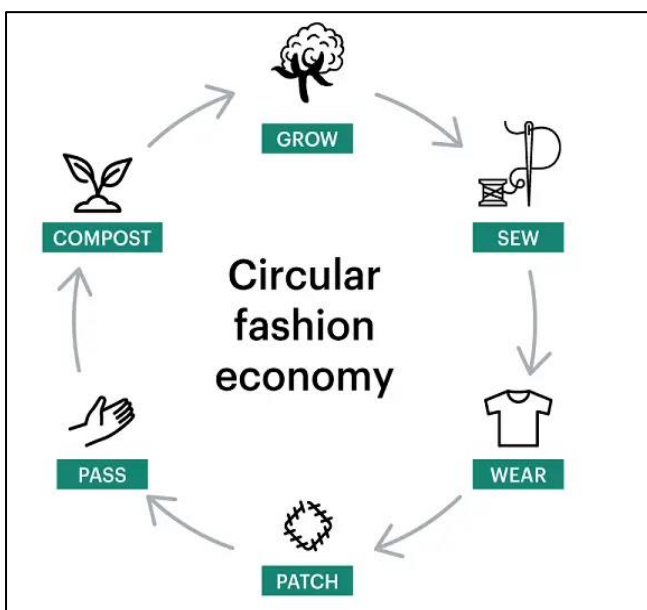


Fig 3 Circular Fashion<sup>[15]</sup>

- *Designing for Circularity:*

Implementing design for circularity in the fashion industry comes with the risk of greenwashing. Challenges like insufficient material information, lack of transparency, and reluctance to share information can worsen greenwashing practices. To counter these risks, practical measures such as educational programs and the active participation of all

stakeholders throughout the circular value chain are essential. Improving traceability and standardization is also crucial, and this can be achieved through the introduction of a Digital Product Passport (DPP) with the Product Environmental Footprint (PEF) identified<sup>[11]</sup>. This ensures better social acceptance and inclusion along the entire value chain. Natural Fibers derived from plants, such as cotton and hemp, or protein-based materials like wool and silk, are beginning to reclaim their place in the sustainable fashion industry. However, it's crucial to recognize that these fabrics are not free from environmental impacts. Issues like extensive land use, fertilizer application, associated greenhouse gas emissions, and soil degradation must be addressed. Therefore, even natural fibers must be produced sustainably to prevent overexploitation of environmental resources, and consumers need to be aware of these effects.

Furthermore, it is important to remember that over 8,000 different chemicals are used in textiles. These include dyes, pigments, and specialty chemicals that provide properties such as softness, wrinkle resistance, water and oil repellency, flame retardancy, and antibacterial features. While some of these chemicals can be replaced with eco-friendly alternatives for dyeing, such as clays or supercritical CO<sub>2</sub>, or by employing alternative methods for textile wastewater treatment, significant challenges remain. For example, the safe disposal of used clothing and the assessment of their impact on human health and the environment are still practically impossible.

- *Challenges in Implementing Circular Fashion:*

In the past, individuals often crafted their own clothing, but today, reliance on the fast fashion industry presents a dilemma for those aiming to balance purchasing needs with sustainability concerns. The fast fashion sector, notorious for its significant environmental footprint, compels consumers to question the authenticity of claims regarding sustainability versus greenwashing. Despite growing consumer preference for sustainable products, discerning whether companies genuinely prioritize sustainability remains challenging. Greenwashing, though not extensively discussed in GPE or International Relations (IR), merits attention within the influential fast fashion industry. There has been increasing scrutiny of the fast fashion industry by various stakeholders including customers, shareholders, NGOs, trade unions, and public authorities, particularly concerning environmental and social impacts. However, issues persist, such as disastrous accidents in sweatshops resulting in injuries and fatalities, and environmental disasters including excessive raw material use, textile waste, and release of toxic chemicals. The overall environmental impact of fast fashion remains contentious, adding complexity to the industry's dynamics.

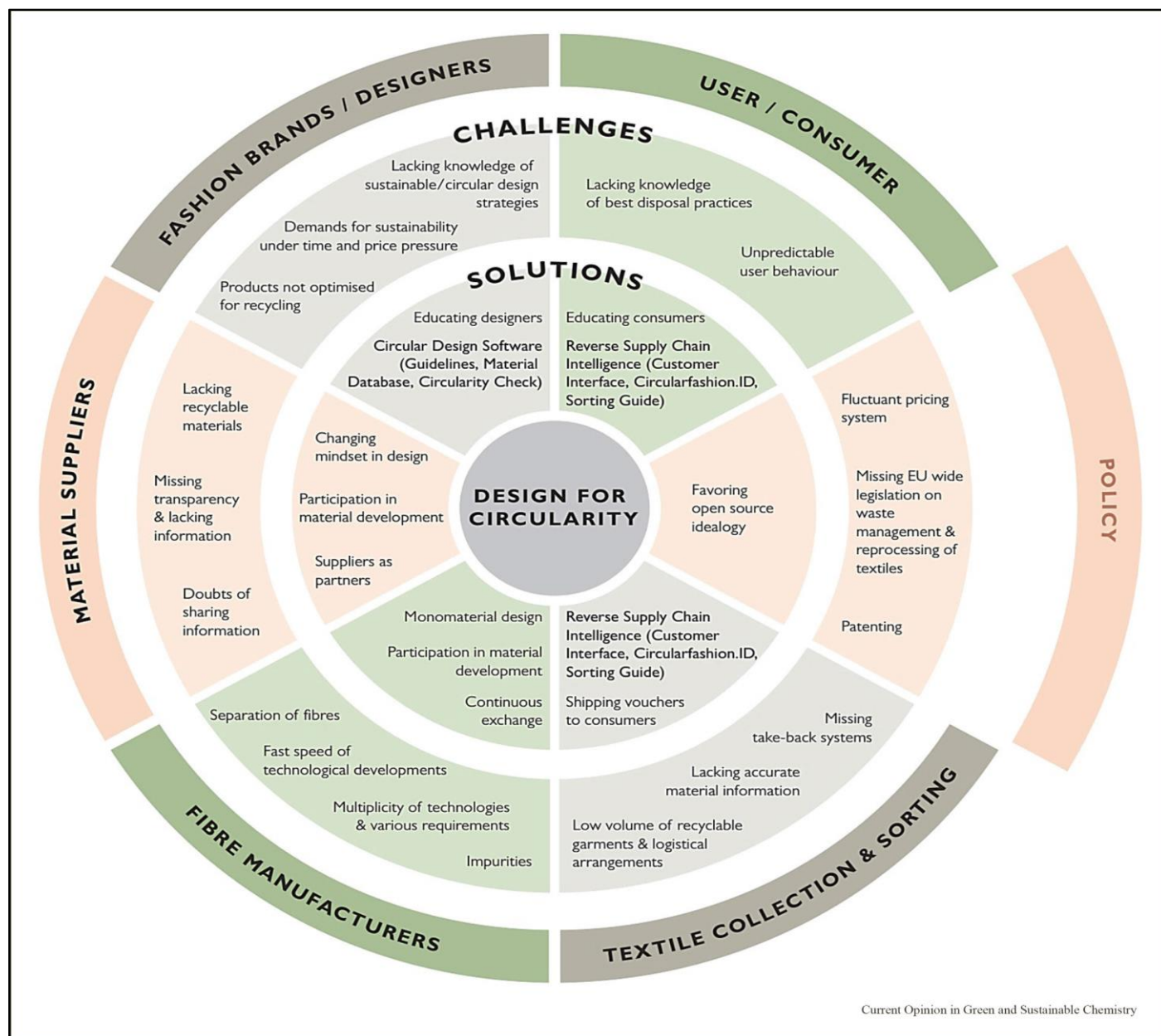


Fig 4 Challenges and Solutions for Circular Fashion<sup>[3]</sup>

➤ *Case study of Sustainable Fashion*

Three pioneering companies—circular.fashion, Refiberd, and Fruit leather—are making significant strides in sustainable fashion. By leveraging cutting-edge technology and innovative recycling methods, they are addressing the environmental impact of textile waste and offering eco-friendly alternatives to traditional materials. Their efforts are crucial in driving the industry towards a more sustainable future.

➤ *Case 1*

In 2017, Ina Budde and Mario Malzacher co-founded circular.fashion, aiming to revolutionize the fashion industry with a sustainable, circular system. Ina's journey began during her master's studies in Sustainability in Fashion, where she realized that simply designing sustainable garments wasn't enough. The lack of a structured circular system for recycling textile waste was the real issue.

Ina built a network of contributors through freelance consulting and teaching Sustainable Design and Circular Economy. This experience highlighted the need for practical solutions and a platform to unite sustainable material suppliers, textile recyclers, and other stakeholders.

Circular.fashion, driven by the motto "Products of today become the resources of tomorrow," addresses the fact that only 1% of the over 100 billion fashion items produced annually are recycled into new materials<sup>[3]</sup>. The company offers a comprehensive package for adopting recyclable fashion practices, including a database of sustainable materials, Circular Design Software, workshops, and a Circular Product Check.

In 2019, they introduced the circularity.ID, a scannable label providing 100% transparency of a garment's lifecycle<sup>[3]</sup>. This innovation allows consumers to trace the origin and

production of their clothes and helps sorting facilities identify recyclable garments. Major players like Zalando have invested in circular.fashion's solutions, recognizing the need for sustainability. However, challenges remain, as companies often overlook the economic benefits of circularity and lack foresight in adopting sustainable technologies. Wider adoption could reduce costs and make sustainable practices more accessible.

Due to insufficient legislation, companies largely have the freedom to determine their own sustainable practices. Therefore, real-life cases are crucial for the proliferation of sustainable practices, as they can serve as proof-of-concept that encourages and motivates other stakeholders to act. Ideally, companies would also share their sustainability processes with others in the industry, as Circular Fashion does. Openness and information sharing are fundamental to accelerating the transition toward CE. Companies tend to develop sustainable solutions solely for themselves<sup>[12]</sup>. While patenting has not been widely discussed as a critical issue in previous literature, Ina Budde highlights it as a significant concern that could potentially delay material circularity.

➤ *Case 2*

In 2020, three pioneering women founded Refiberd to revolutionize the fashion industry with AI and achieve a 100% circular economy. The textile waste crisis is staggering, with 186 billion pounds discarded annually, over 80% of which ends up in landfills or incinerators. Traditional

recycling methods are insufficient, as less than 1% of textile waste is recycled into new clothing. Refiberd aimed to solve this by focusing on waste sorting<sup>[13]</sup>.

The team developed a state-of-the-art hyperspectral imaging system that detects different materials based on their chemical compositions. Their proprietary AI processes this data to identify various fibers, including blended and layered ones, enabling smarter sorting and recycling.

Refiberd's technology can divert up to 70% of textile waste to high-value recyclers, recycling 93% of the original garment into new threads<sup>[14]</sup>. Their threads are also up to 75% cheaper than other sustainable alternatives. Refiberd's journey demonstrates the power of technology and innovation in addressing critical environmental issues, paving the way for a more sustainable future in fashion.

➤ *Case 3*

In 2015, Hugo de Boon and Koen Meerkerk, the co-founders of Fruit Leather, conceptualized a unique and sustainable leather alternative. Fruit leather is crafted from surplus mangoes, which would otherwise be discarded. This innovative material is now being used to manufacture wallets, handbags, and shoes. The company's goal is not to replace traditional leather entirely but to offer a more environmentally friendly alternative. By utilizing surplus mangoes, Fruit Leather aims to reduce the environmental impact of leather production, one mango at a time.

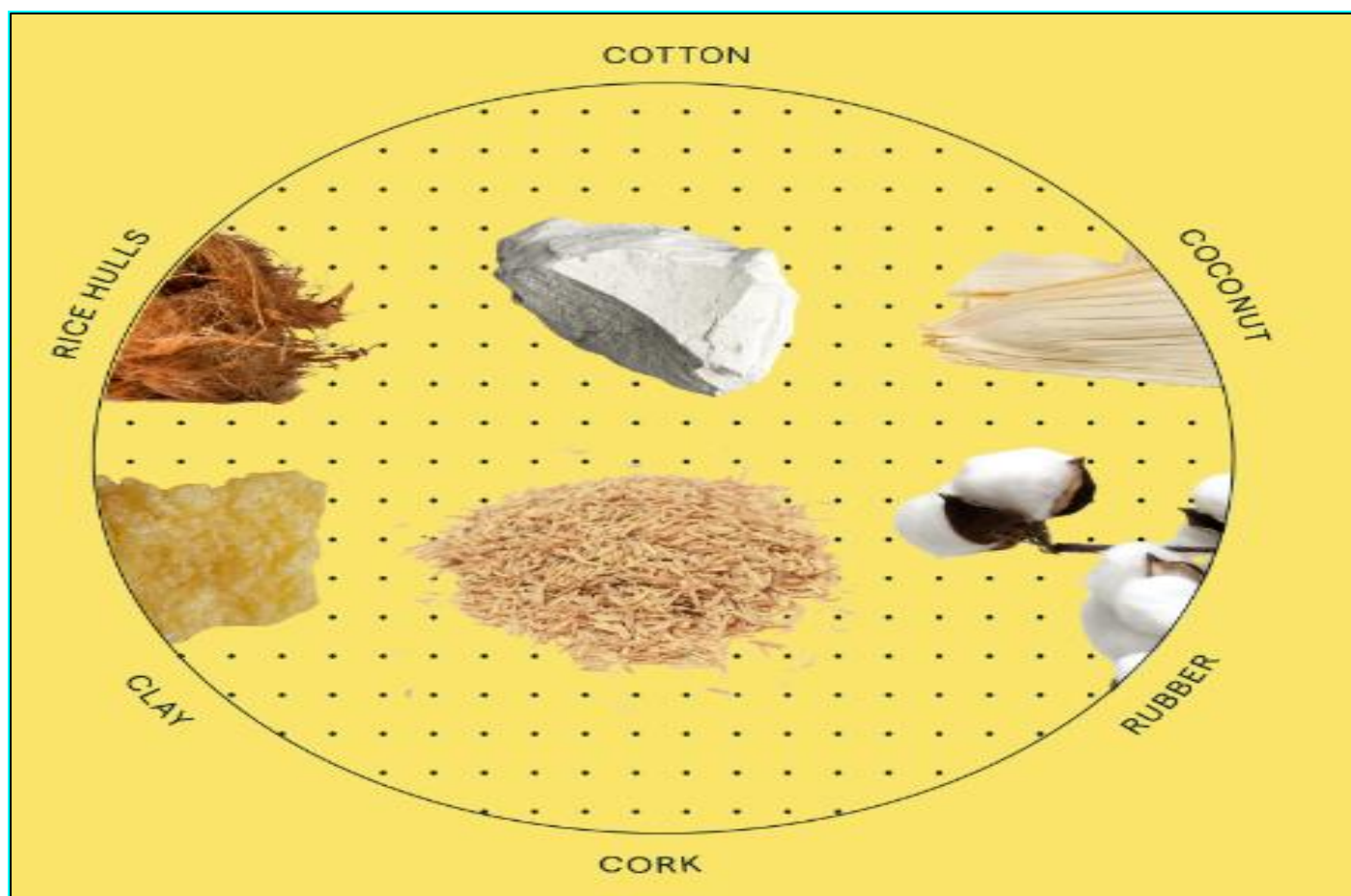


Fig 5 Materials used by Mirum by Natural Fiber Welding Leads<sup>[16]</sup>

Mirum stands out as one of the few commercially available, plant-based leather materials that are entirely free of plastics. Developed by Natural Fiber Welding, Mirum is made using agricultural waste, such as rice hulls and coconut husks, combined with plant-based rubber and colorants. These components are applied to a cotton backing to create a leather-like sheet.

Mirum's commitment to sustainability is evident in its use of 100% non-synthetic inputs, making it recyclable<sup>[15]</sup>. The production process is notably water-free, and a life cycle assessment published in 2022 highlights its lower carbon footprint compared to other leather alternatives. The material is praised for its versatility, being colored uniquely with plant and mineral pigments. It can incorporate a variety of natural filler ingredients to achieve different tones, shines, textures, grains, thicknesses, and even fragrances. This tunable nature makes Mirum suitable for a wide range of applications.

Designed for seamless integration with industry-standard infrastructure, Mirum enables plastic-free production across various sectors, including apparel, footwear, accessories, automotive, and home goods. This adaptability empowers brands to meet their sustainability goals while maintaining high standards of quality and aesthetics.

### III. CONCLUSION

The fashion industry, a \$2.4 trillion global market, has seen significant growth since the 1980s, with annual clothing consumption reaching 80 billion garments worldwide. This industry's rapid expansion, particularly in fast fashion, has resulted in severe environmental and social impacts, including substantial greenhouse gas emissions, excessive water usage, microplastic pollution, and significant textile waste. Over two-thirds of produced textiles end up in landfills, with only 15% being recycled, highlighting the inefficiencies and environmental challenges within the current production model. Additionally, poor working conditions and low wages are prevalent, emphasizing the need for improved labor practices.

Sustainability is not just a trend but a necessity for the fashion industry. The shift towards sustainable practices is crucial to mitigate environmental degradation and improve social conditions. Sustainable fashion models, including circular business practices and eco-friendly production methods, are gaining traction. Initiatives such as take-back schemes, clothing swaps, and the use of biodegradable materials are pivotal in reducing the industry's environmental footprint. Furthermore, consumer behavior is shifting, with a growing demand for ethical and sustainable products, particularly among younger generations. This change in consumer preference underscores the importance of transparency and genuine sustainability efforts by fashion brands.

➤ *To Drive Meaningful Change in the Fashion Industry, Both Stakeholders and Consumers must Actively Participate:*

- *Industry Stakeholders:*

- ✓ **Implement Sustainable Practices:** Fashion brands should integrate sustainability into their core business models, focusing on durable and recyclable materials, reducing water and chemical usage, and minimizing waste.
- ✓ **Enhance Transparency:** Clear and honest communication about environmental practices is essential to build consumer trust and combat greenwashing. Brands should adopt standardized labeling systems like Digital Product Passports (DPP) and Product Environmental Footprints (PEF) to provide verifiable sustainability information<sup>[17]</sup>.
- ✓ **Invest in Innovation:** Continuous investment in sustainable technologies and circular business models is crucial. This includes developing new materials, improving recycling processes, and promoting closed-loop systems.

- *Consumers:*

- ✓ **Make Informed Choices:** Consumers should prioritize purchasing from brands that demonstrate genuine sustainability efforts. Understanding eco-labels and certifications can help make more environmentally conscious decisions.
- ✓ **Support Second-hand Markets:** Embracing second-hand clothing and participating in clothing swaps can significantly reduce textile waste. Overcoming negative perceptions about second-hand items is crucial for broader adoption.
- ✓ **Advocate for Change:** Consumers can influence industry practices by advocating for stricter regulations and holding brands accountable for their sustainability claims. Engaging in dialogues about environmental and social impacts can drive industry-wide change.

Together, industry stakeholders and consumers have the power to transform the fashion industry into a more sustainable and ethical sector, ensuring a positive impact on the planet and society.

### REFERENCES

- [1]. Adamkiewicz, J. et al. (2022) 'Greenwashing and Sustainable Fashion Industry', *Current Opinion in Green and Sustainable Chemistry*, 38, p. 100710. doi:10.1016/j.cogsc.2022.100710.
- [2]. Becker-Olsen, K. and Potucek, S. (2013) 'Greenwashing', *Encyclopedia of Corporate Social Responsibility*. doi:10.1007/978-3-642-28036-8\_104.
- [3]. Karell, E. (2018). *Design for Circularity: The Case of circular.fashion*. In K. Niinimäki (Ed.), *Sustainable Fashion in a Circular Economy*. Aalto ARTS Books.



- [4]. Blesserholt, J. (2021) The ‘sins’ of greenwashing : A content analysis of Greenwashing’s role in the Fast Fashion Industry, STOCKHOLM UNIVERSITY. Available at: <https://www.diva-portal.org/smash/record.jsf?pid=diva2:1562569&dsid=-3688> (Accessed: 09 July 2024).
- [5]. Camilla, S. (2020) Effect of greenwashing on brand image and buying behavior in Fast Fashion: A Consumer Perspective, Haaga Helia. Available at: [https://www.theseus.fi/bitstream/handle/10024/347178/Sinisalo\\_Camilla.pdf?sequence=2&isAllowed=y](https://www.theseus.fi/bitstream/handle/10024/347178/Sinisalo_Camilla.pdf?sequence=2&isAllowed=y) (Accessed: 09 July 2024).
- [6]. Keeble, J. (2013) Young consumers hold the key to sustainable brands, The Guardian. Available at: <https://www.theguardian.com/sustainable-business/young-consumers-key-sustainable-brands> (Accessed: 09 July 2024).
- [7]. Nakamura, A. (2022) The history of greenwashing and its modern evolution, The Climate Club. Available at: <https://www.theclimateclub.co/sustainabilityblog/the-history-of-greenwashing-and-its-modern-evolution> (Accessed: 09 July 2024).
- [8]. Shirvanimoghaddam, K. et al. (2020) ‘Death by waste: Fashion and textile circular economy case’, Science of The Total Environment, 718, p. 137317. doi:10.1016/j.scitotenv.2020.137317.
- [9]. Thomas, D. (2019) The high price of fast fashion - WSJ, Wall Street Journal. Available at: <https://www.wsj.com/articles/the-high-price-of-fast-fashion-11567096637> (Accessed: 09 July 2024).
- [10]. Zaidi, Syed Muhammad Minhal Raza and Yifei, Lai and Bhutto, Muhammad Yaseen and Ali, Rizwan and Alam, Fahad, The Influence of Consumption Values on Green Purchase Intention: A Moderated Mediation of Greenwash Perceptions and Green Trust (2019). Pakistan Journal of Commerce and Social Sciences, Vol. 13(4), 826-848, 2019, Available at SSRN: <https://ssrn.com/abstract=3522451>
- [11]. Bardecki, M. and Kozłowski, A. (2012) Environmental impacts in the fashion industry: A life-cycle and stakeholder framework, Academia.edu. Available at: [https://www.academia.edu/9348325/Environmental\\_Impacts\\_in\\_the\\_Fashion\\_Industry\\_A\\_Life\\_Cycle\\_and\\_Stakeholder\\_Framework](https://www.academia.edu/9348325/Environmental_Impacts_in_the_Fashion_Industry_A_Life_Cycle_and_Stakeholder_Framework) (Accessed: 09 July 2024).
- [12]. Pedersen, E.R.G., Gwozdz, W. and Hvass, K.K. (2017) Exploring the relationship between business model innovation, corporate sustainability, and organisational values within the fashion industry, CBS Research Portal. Available at: <https://research.cbs.dk/en/publications/exploring-the-relationship-between-business-model-innovation-corp> (Accessed: 09 July 2024).
- [13]. Doyle, M. (2023) The needle movers: Innovations in sustainable fashion 2023-24, Good On You. Available at: <https://goodonyou.eco/innovations-sustainable-fashion-2023-24/> (Accessed: 16 July 2024).
- [14]. Our technology (no date) Refiberd. Available at: <https://refiberd.com/technology/> (Accessed: 16 July 2024).
- [15]. A Dutch company is making mango to leather (2021) Textile News, Apparel News, RMG News, Fashion Trends. Available at: <https://www.textiletoday.com.bd/a-dutch-company-is-bending-mango-to-leather> (Accessed: 16 July 2024).
- [16]. Ground rules (no date) Home. Available at: <https://nfw.earth/ground-rules> (Accessed: 16 July 2024).
- [17]. Digital product passport (DPP): The Complete Guide (2024) Protokol. Available at: <https://www.protokol.com/insights/digital-product-passport-complete-guide/> (Accessed: 16 July 2024).
- [18]. Ali, Z. (2023) What is greenwashing? top examples you need to know, KnowESG. Available at: <https://www.knowesg.com/featured-article/what-is-greenwashing-top-examples-you-need-to-know> (Accessed: 16 July 2024).