The Role of Circular Economy Practices in Enhancing Sustainability in Global Apparel Supply Chains: A Case Study of Hennes & Mauritz (H&M)

Alimamy Abdulai Jalloh (MBA)[1], Mohamed Jessie Koroma (M. Tech)[2]

[1]MBA - Student Indian Institute of Sustainability, Gujarat University, India

[2]M.Tech. Student Indian Institute of Technology Dhanbad

Abstract

The global apparel industry remains among the biggest producers of environmental destruction while it generates major emissions and waste and water pollution. New sustainable supply chain solutions evolved in response to major environmental difficulties to become known as the circular economy. The global apparel supply chain at Hennes & Mauritz receives analysis regarding its sustainability benefits from circular economy methods in this research study. The research employs a case study method to analyze how Hennes & Mauritz integrates Circular Economy concepts starting from eco-source materials and continuing to sustainable manufacturing and green supply chain management for recycling-based consumer programs. The analysis demonstrates Hennes & Mauritz's substantial progress incorporating circularity throughout its operations but the company continues to deal with various hurdles related to limited resources and supplier co-operation and environmental misinformation concerns. The research model contains conclusions to enhance the apparel industry's adoption of Circular Economy together with sustainability analysis for worldwide supply chain impacts.

Keywords: Circular Economy, Sustainability, Global Apparel Supply Chain, Hennes & Mauritz, Fashion Industry, Sustainable Manufacturing.

Introduction

The worldwide clothing business maintains its position as a core economic growth engine that provides employment to numerous millions worldwide. The industry produces substantial environmental and social effects because it generates 10% of worldwide carbon emissions together with 20% of industrial wastewater pollution (Ellen MacArthur Foundation, 2017). The fast fashion movement with its fast production speed combined with low-cost manufacturing and mass product buying has intensified sustainability issues because it triggers resource exhaustions and textile discards. The circular economy practices have emerged as an effective solution to reduce environmental degradation. The CE model enhances resource efficiency by using practices which include repeated material reuse as well as product lifespan extension design. The circular economy design philosophy aims to minimize waste through loop-closing practices which cut down on production waste and environment-based effects from the industry.

Statement of Research Problem

The combination of increasing public awareness and regulatory requirements has not stopped numerous clothing businesses from achieving efficient CE practice implementation. Issues such as supply chain complexity, cost considerations, and consumer behavior present obstacles to circularity. The fashion retailer HENNES & MAURITZ (H&M) stands at the forefront of sustainable fashion by implementing CE strategic practices throughout its business operations worldwide. Several experts question how well the applied circular economy practices impact large-scale implementation.

Research Objectives

This paper aims to:

- ❖ Assess the role of CE practices in enhancing sustainability within the apparel supply chain.
- ❖ Evaluate Hennes & Mauritz (H&M) adoption of CE strategies, including material sourcing, production, distribution, and end-of-life management.
- ❖ Identify the challenges and opportunities associated with CE implementation in the global apparel industry.
- ❖ Provide recommendations for strengthening sustainability practices within fashion supply chains.

Research Questions

- ❖ How do CE practices contribute to sustainability in the global apparel industry?
- ❖ To what extent has HENNES & MAURITZ (H&M) successfully integrated CE principles into its supply chain?
- ❖ What are the key challenges and limitations in implementing CE in the apparel sector?
- ❖ How can fashion brands enhance CE adoption for long-term sustainability?

Significance of the Study

Understanding circular economy adoption in the apparel sector is critical for driving industry-wide transformation. This study contributes to academic literature by examining how a leading fast fashion brand navigates sustainability challenges. Furthermore, it provides insights for policymakers, industry practitioners, and researchers on best practices and areas for improvement in circular supply chains.

Literature Review

The concept of Circular Economy in the Fashion Industrial

The circular economy (CE) works as an economic model that reduces waste production to achieve maximum resource value through reuse and recycling combined with production cycles which circle back to themselves (Kirchherr et al., 2017). The circular economy offers an alternative framework compared to conventional linear economics because

it uses take-make-dispose patterns which cause considerable environmental destruction and waste resource exploitation. The fashion industry implements Circular Economy by using the following methods. Eco-design serves as an approach to create durable items which available for repair along with recycling capabilities (Ellen MacArthur Foundation, 2017). The sustainable sourcing of materials entails selecting organic and recycled and biodegradable materials as described by Fletcher & Grose (2012). The reduction of waste originates from promoting models where consumers reuse products through resale or rentals (Brydges, 2021). The process of turning discarded textiles into fresh products occurs because of advanced recycling methods described in Karell & Niinimäki (2019).

Sustainability Challenges in the Apparel Supply Chain

The global apparel supply chain is one of the most resource-intensive and polluting industries. Sustainability challenges in fashion supply chains include:

Environmental Impact

High Carbon Emissions: The apparel industry is responsible for approximately 10% of global carbon emissions (McKinsey & Company, 2020). Water Pollution: Textile dyeing and finishing contribute to 20% of global industrial water pollution (Ellen MacArthur Foundation, 2017). Textile Waste: Fast fashion leads to overproduction, with 92 million tons of textile waste generated annually (Global Fashion Agenda, 2021).

Social and Ethical Concerns

Labor Exploitation: Many fast fashion brands outsource production to countries with low wages and poor working conditions (Ross, 2019). Health and Safety Issues: Incidents like the Rana Plaza collapse (2013) highlighted unsafe garment factories in Bangladesh.

Circular Economy Strategies for Sustainable Apparel Supply Chains

Sustainable Raw Materials and Eco-Design

The use of organic cotton, recycled polyester, and biodegradable textiles reduces environmental impact (Shen, 2014). Brands like HENNES & MAURITZ (H&M), Patagonia, and Stella McCartney focus on bio-based and circular materials (Fatima, 2022).

Circular Business Models in Fashion

Resale and Rental Models: Brands like HENNES & MAURITZ (H&M), The North Face, and ThredUp invest in second-hand and rental services (Brydges, 2021). Closed-Loop Recycling: Technologies like chemical fiber-to-fiber recycling are advancing circular production (Ellen MacArthur Foundation, 2017).

Reverse Logistics and Waste Management

Garment Collection Programs: Hennes & Mauritz (H&M) Garment Collecting Initiative allows customers to return used clothes for recycling (Rana & Tajuddin, 2021). Product Take-Back Systems: Brands implement collection schemes to recover and repurpose old textiles (Shen, 2014).

Hennes & Mauritz (H&M) Circular Economy Initiatives: A Review

Sustainable Sourcing and Manufacturing

HENNES & MAURITZ (H&M) is a member of the Better Cotton Initiative (BCI) to promote sustainable cotton farming (HENNES & MAURITZ Group, 2021). The brand invests in closed-loop recycling technologies for textile reuse (Fatima, 2022).

Recycling and Circular Business Models

Hennes & Mauritz (H&M) Garment Collecting Initiative collected over 29,000 tons of textiles in 2021 (H&M Sustainability Report, 2021). The company launched rental services in select markets to promote product longevity (Fatima, 2022).

Green Distribution and Logistics

HENNES & MAURITZ (H&M) has reduced carbon emissions by 14% in its logistics operations (Shen, 2014). The company uses sea and rail transport to minimize emissions (H&M Group, 2021).

Theoretical Framework: The Triple Bottom Line and Circular Economy

The Triple Bottom Line (TBL) Framework (Elkington, 1998) assesses sustainability in three dimensions: Environmental Sustainability: Reducing waste and emissions through CE strategies. Social Sustainability: Ensuring fair labor practices and ethical sourcing. Economic Sustainability: Enhancing long-term profitability through sustainable innovation.

Circular Economy Model in Supply Chains

The Ellen MacArthur Foundation's CE Model emphasizes:

Closed-loop production: Recycling and reusing materials, product-as-a-service: shifting from ownership to rental models, extended product life cycles: encouraging repair and reuse.

Summary of Key Findings from Literature

Existing literature highlights the potential of Circular Economy in the fashion industry, but challenges remain:

Lack of scalable recycling infrastructure limits the impact of take-back programs (Fatima, 2022). Greenwashing concerns arise when brands overstate sustainability claims (Brydges, 2021). Consumer participation is essential but not guaranteed; incentives may be needed (Rana & Tajuddin, 2021).

Methodology

This section outlines the research design, data collection methods, and analytical approach used in this study. Given the focus on Hennes & Mauritz (H&M) circular economy (CE) practices, a qualitative case study approach was selected.

Research Design

A case study research design was adopted to explore the role of Circular Economy practices in enhancing sustainability within Hennes & Mauritz (H&M) supply chain. The case study method is well-suited for analyzing real-world sustainability strategies and assessing their effectiveness within a complex industry context (Yin, 2018). This research is descriptive and exploratory, aiming to: Describe how HENNES & MAURITZ (H&M) integrates CE practices in its supply chain. Explore the challenges and opportunities of CE adoption in the apparel industry. qualitative approach was chosen to capture nuanced insights into sustainability practices, industry trends, and corporate strategies.

Data Collection Methods

Secondary Data Analysis**:** This study relies on secondary data sources, including:

HENNES & MAURITZ (H&M) Sustainability Reports (2017–2023): Provides insights into the company's circularity goals, achievements, and challenges. Peer-reviewed academic literature: Articles on CE, sustainability, and supply chain management (e.g., Rana & Tajuddin, 2021; Shen, 2014). Industry reports: Publications from organizations such as the Ellen MacArthur Foundation, Global Fashion Agenda, and McKinsey & Company. Government and NGO reports: Data on textile waste, carbon emissions, and circularity trends.

Content Analysis of Hennes & Mauritz (H&M) Circular Economy Initiatives

A qualitative content analysis was conducted on Hennes & Mauritz (H&M) sustainability communications, including:

Corporate reports (e.g., Circular Strategy, Conscious Collection). Official press releases and interviews with HENNES & MAURITZ (H&M) executives.

News articles and sustainability blogs discussing Hennes & Mauritz (H&M) CE performance.

Key themes were identified based on Hennes & Mauritz (H&M) approach to CE, including:

Sustainable material sourcing, recycling and take-back programs, green distribution and logistics, consumer engagement strategies

Case Study Framework

The Circular Economy Mediated Sustainability Capability Measurement (CEMSCM) Framework (Rana & Tajuddin, 2021) was used to evaluate Hennes & Mauritz (H&M) sustainability efforts. This framework assesses sustainability in three key areas:

Table 1: Shows the framework of Hennes & Mauritz (H&M) Circular Economy practices align with sustainability capabilities.

Dimension	Key Factors
Perfect Duty	Commitment to circular economy principles in all operations.
Specific Goals	Defined sustainability objectives (e.g., waste reduction, CO_2 emissions).
Well-Defined Structure and Strategy	Governance, resource allocation, and supplier compliance for circular economy implementation

This framework helps determine the extent to which Hennes & Mauritz (H&M) Circular Economy practices align with sustainability capabilities.

Data Analysis Approach

A thematic analysis (Braun & Clarke, 2006) was applied to the collected data. The analysis followed these steps: Familiarization: Reviewing reports, articles, and industry publications. Coding: Identifying recurring sustainability themes. Theme Development: Grouping insights into categories (e.g., material innovation, circular business models). Interpretation: Assessing Hennes & Mauritz (H&M) performance and comparing it with industry best practices.

Research Limitations

This study has certain limitations:

Reliance on secondary data: No primary data (e.g., interviews) were collected, limiting firsthand perspectives. Focus on a single case study (HENNES & MAURITZ (H&M)). Findings may not be generalizable to all apparel brands. Rapidly evolving industry trends: Sustainability policies and CE innovations change frequently, requiring ongoing updates.

Case Study: Hennes & Mauritz (H&M) Circular Economy Initiatives

Sustainable Material Sourcing

HENNES & MAURITZ (H&M) has made significant progress in replacing conventional materials with more sustainable alternatives. The company's goal is to use 100% sustainably sourced or recycled materials by 2030. As of 2022, 84% of Hennes & Mauritz (H&M) materials were sustainably sourced.

Key Material Innovations at HENNES & MAURITZ (H&M)

Organic Cotton: 79% of Hennes & Mauritz (H&M) cotton is from Better Cotton Initiative (BCI) sources. Recycled Polyester: Made from post-consumer plastic bottles, reducing dependency on virgin polyester. Innovative Materials: HENNES & MAURITZ (H&M) partners with innovators like Circulose® and Vegea (plant-based leather) to create biodegradable textiles.

Table 2: Hennes & Mauritz (H&M) Progress in Sustainable Material Adoption (2018-2022)

Year	% of Sustainably Sourced Cotton	% of Recycled Polyester	% of Overall Sustainable Materials
2018	57%	35%	40%
2019	67%	42%	50%
2020	77%	55%	60%
2021	82%	68%	75%
2022	84%	72%	80%

(Source: HENNES & MAURITZ (H&M) Sustainability Reports 2018–2022)

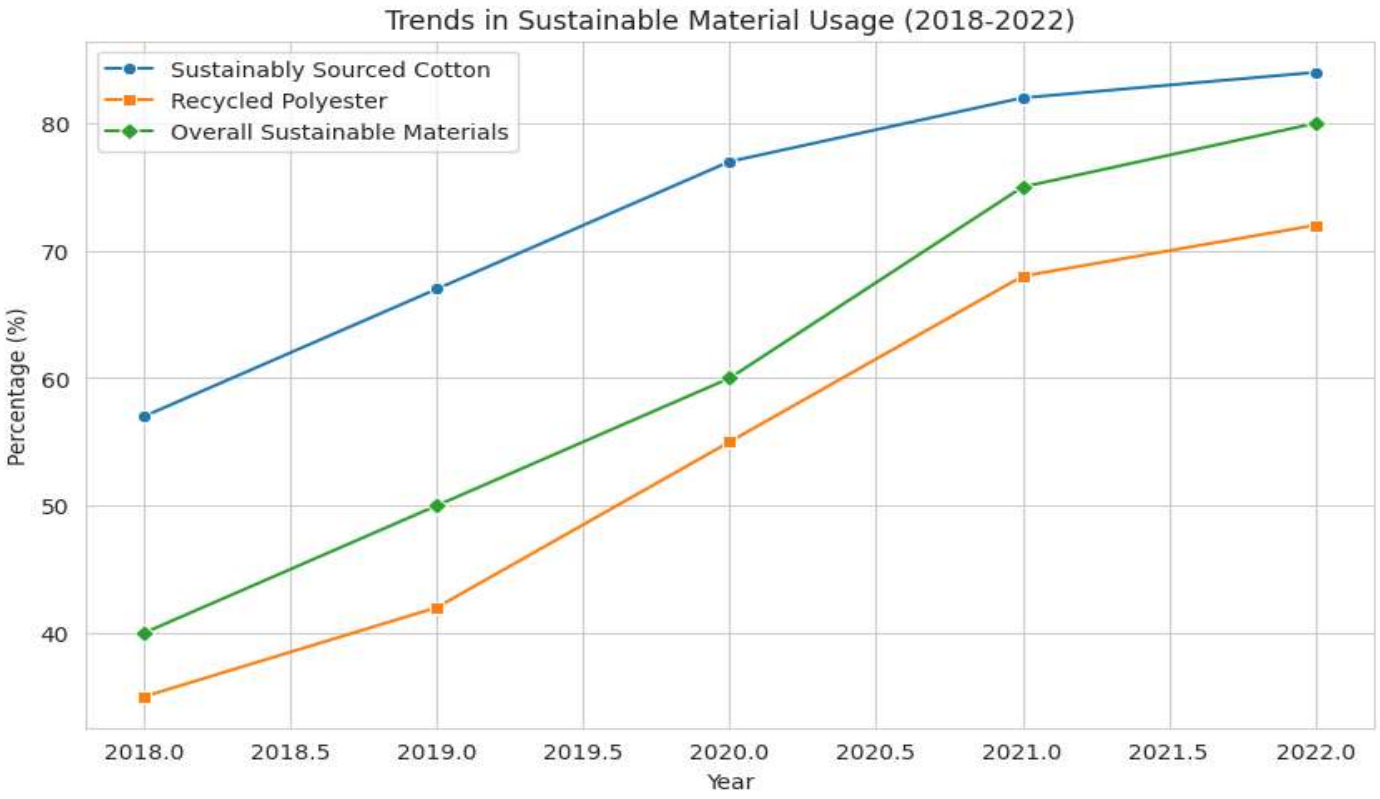


Figure 1: Hennes & Mauritz (H&M) Progress in Sustainable Material Adoption (2018-2022)

Circular Production & Waste Reduction

Garment Collecting Initiative

The Garment Collecting Initiative from HENNES & MAURITZ (H&M) started in 2013 to enable customers to return their old clothing for recycling. The processing operation divides collected garments into three utilization categories: Re-wear for resale as second-hand clothing, Reuse for cleaning fabric production, and recycle to generate new textile fibers for clothing production. The collection turns old textiles into different textile products designed as cleaning cloths. Recycle: Converted into new textile fibers for garment production. Textile recycling on a large-scale poses obstacles for HENNES & MAURITZ (H&M) while it strives to process 25,000 tons of textile waste per year through 2025. Hennes & Mauritz (H&M) operated a global reuse and recycling program, which yielded this profitable data about yearly clothing collection statistics. The worldwide pandemic decreased in 2020, and the recycling efforts steadily recovered from that point onwards.

Table 3: Garment Collection Data (2013-2022)

Year	Quantity Collected (metric tons)
2013	3,047
2014	7,684
2015	12,341
2016	15,888
2017	17,771
2018	20,649
2019	29,005
2020	18,800
2021	20,000
2022	23,000

(Source: HENNES & MAURITZ (H&M) Garment Collection Data (2013-2022)

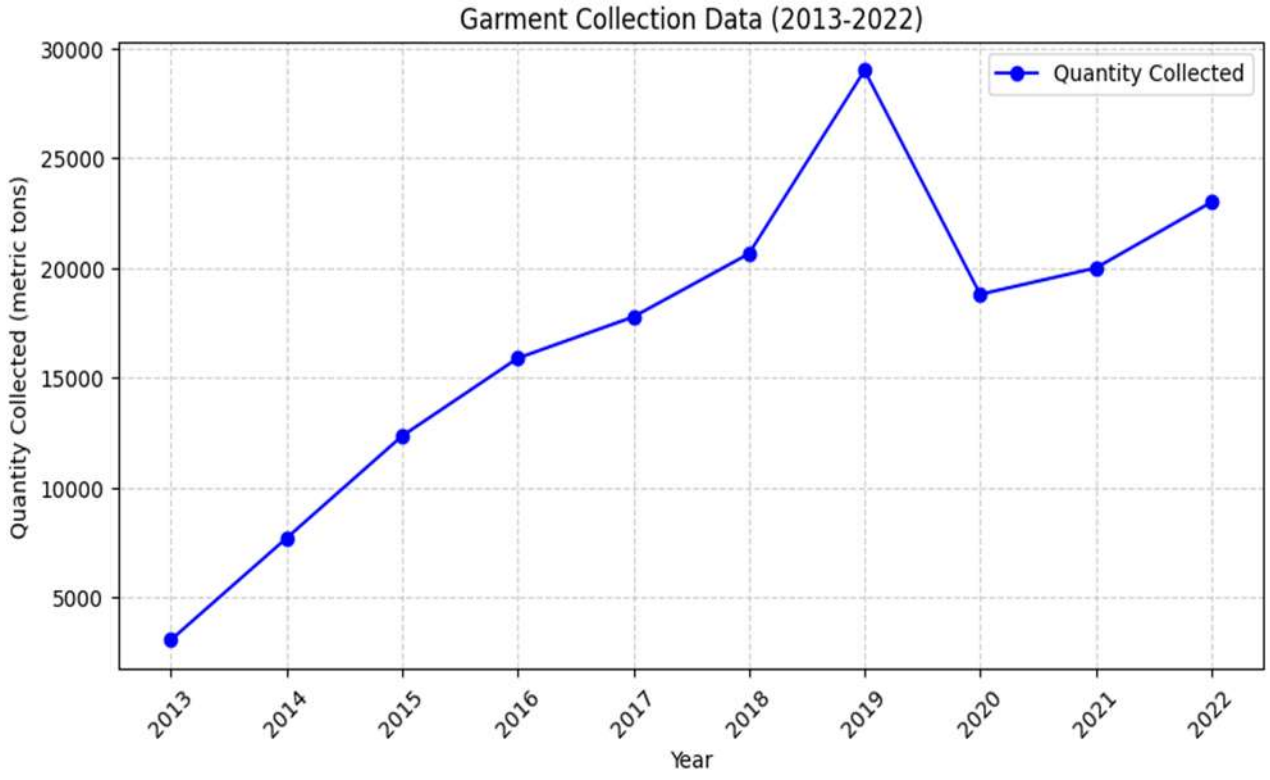


Figure 2: Hennes & Mauritz (H&M) Garment Collection Data (2013-2022

Green Distribution & Logistics

Reducing the carbon footprint in logistics is a significant focus for HENNES & MAURITZ (H&M). The company has adopted:

Low-emission transportation methods: (rail and sea freight over air transport). Energy-efficient warehouses powered by renewable energy. Optimized packaging solutions using recycled materials. Between **2018 and 2022, HENNES & MAURITZ (H&M) reduced logistics-related emissions by 14%**, aligning with its goal of achieving net-zero emissions by 2040.

Table 4: 2018 and 2022, HENNES & MAURITZ (H&M) reduced logistics-related emissions

Year	Emissions (metric tons of CO_2 equivalent)
2022	64,599
2021	55,633
2020	75,735
2019	71,757
2018	59,793

(Source: 2018 and 2022, HENNES & MAURITZ (H&M) reduced logistics-related emissions)

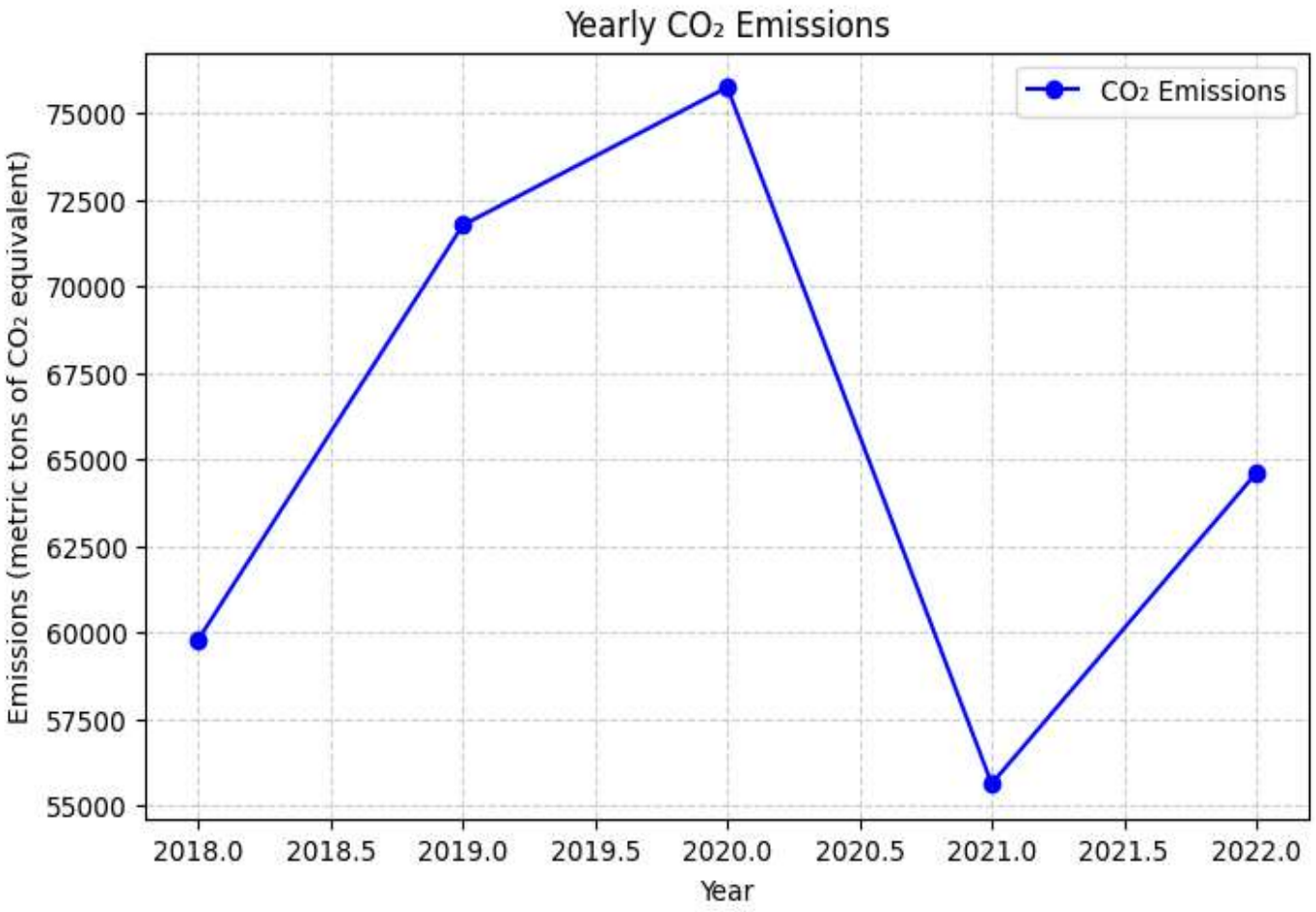
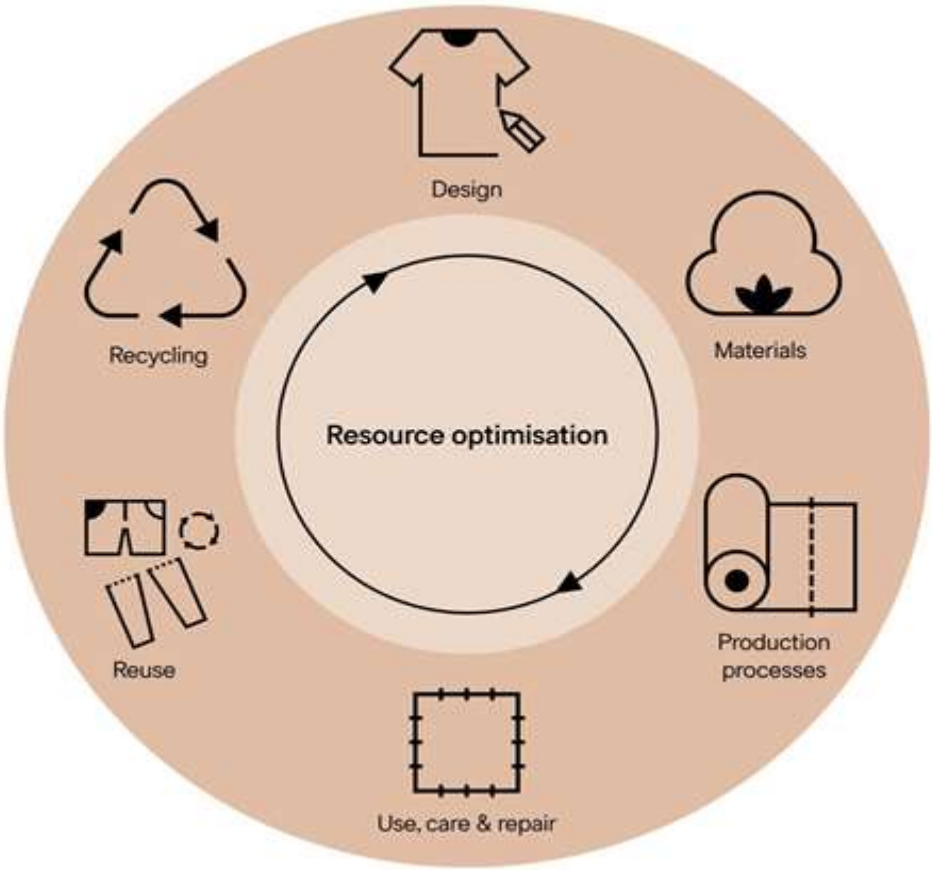


Figure 3: Hennes & Mauritz (H&M) CO_2 Emissions Reduction in Logistics (2018-2022)

Consumer Engagement & Awareness

HENNES & MAURITZ (H&M) conducts many campaigns to teach consumers about circular fashion and sustainable buying habits. The "Close the Loop" campaign works to advance textile recycling. Rental and repair services operate in certain areas to help customers expand the longevity of their products. The retail operation displays sustainability information by providing online material and displaying environmental data at stores. As part of their engagement strategy, Hennes & Mauritz (H&M) provides take-back programs, repair services, and retail resale opportunities.



Source: ***https://hmgroup.com/***

Figure 4: Hennes & Mauritz (H&M) Circular Business Model

Challenges & Limitations in Hennes & Mauritz (H&M) Circularity Efforts

The total implementation of circularity faces multiple obstacles for HENNES & MAURITZ (H&M). Hennes & Mauritz (H&M) faces criticism due to claims its CE work does not match its ongoing mass production, creating uncertainty about its operations' true sustainability. The currently available textile recycling methods cannot be expanded to meet demands, limiting their take-back program's success. The public has supplemented their recycling knowledge, but their willingness to participate in recycling initiatives does not always match their level of expertise. The challenge for Hennes & Mauritz continues to be achieving adequate compliance with CE standards and fair labor practices throughout its worldwide supply chain network of vendors.

Table 5: Key Barriers to Circularity at HENNES & MAURITZ (H&M)

Challenge	Impact	Possible Solution
Overproduction & fast fashion	Offsets CE benefits	Reduce production volumes, prioritize quality over quantity
Limited recycling technology	Increases waste	Invest in fiber-to-fiber recycling R&D
Low consumer participation	Limits circularity impact	Strengthen incentives for garment collection & resale
Supply chain complexity	Difficult to enforce CE standards	Partner with certified sustainable suppliers

(Source: Analysis based on HENNES & MAURITZ (H&M) reports and industry studies)

Table 5: Summary of Case Study Findings

Aspect	Hennes & Mauritz (H&M)Achievements	Challenges
Material Sourcing	84% sustainable materials (2022)	Scaling up 100% target by 2030
Recycling & Take-back	29,000 tons collected annually	Limited textile recycling technology
Logistics & Distribution	14% CO_2 reduction in logistics	Need for greater renewable energy integration
Consumer Engagement	Launched resale & rental services	Encouraging wider adoption

Discussion

The Effectiveness of Circular Economy Practices in Hennes & Mauritz (H&M) Supply Chain

The total implementation of circularity faces multiple obstacles for HENNES & MAURITZ (H&M). Critics raise greenwashing concerns because Hennes & Mauritz (H&M) continues mass production despite its CE initiatives, which struggle to shine through these practices and sustain environmental initiatives.

Textile recycling methods presently available lack sufficient expansion possibilities to fulfill market needs which diminishes their take-back program effectiveness. Although people have gained understanding about recycling, they often do not commit to recycling practices to the extent of their acquired knowledge. Achieving sufficient compliance

with CE standards together with fair Labor practices stands as the ongoing challenge for Hennes & Mauritz across its supply chain network of vendors worldwide.

Table 6: Summary of Hennes & Mauritz (H&M) Circular Economy Achievements

Strategy	Outcome
Use of recycled materials	64.5% of materials sustainable in 2022
Textile recycling	29,000+ tons of garments collected since 2013
Low-carbon logistics	80%+ of shipments via rail/sea transport

Limitations & Barriers to Circularity

- **Greenwashing Concerns:** Despite sustainability claims, HENNES & MAURITZ (H&M) still operates under a fast fashion business model, which contradicts true circularity.
- **Limited Recycling Infrastructure:** Only 1% of collected garments are fully recycled into new clothing due to technological constraints (Fatima, 2022).
- **Consumer Behavior Challenges:** Adoption of rental and resale models remains slow, as affordability and convenience often outweigh sustainability concerns.

Comparison with Industry Best Practices

How HENNES & MAURITZ (H&M) Compares to Competitors

- Patagonia & Eileen Fisher: These brands prioritize repair and resale models, whereas HENNES & MAURITZ (H&M) still focuses on fast production cycles.
- Nike's Circular Economy Model: Nike has advanced closed-loop recycling, repurposing old shoes into new products at scale (Shen, 2014).

Table 7: Circular Economy Strategies in Leading Apparel Brands

Brand	Circularity Focus	Key Strength
HENNES & MAURITZ (H&M)	Garment collection & resale	Large-scale take-back program
Patagonia	Repair & resale	Strong consumer engagement
Nike	Recycling & closed-loop systems	Advanced material innovation

Challenges in Scaling Circular Fashion Globally

Technological & Infrastructure Barriers

- **Lack of scalable textile recycling:** Fiber-to-fiber recycling remains costly and inefficient (Brydges, 2021).
- **Limited supplier compliance:** Many manufacturers in developing countries lack the resources to adopt circular production.

Economic & Consumer Adoption Barriers

- **Cost of sustainable alternatives:** Eco-friendly materials often increase production costs, making affordability a challenge (Shen, 2014).
- **Low participation in recycling programs:** Consumer awareness remains inconsistent across markets.

Opportunities for Enhancing Circularity in the Apparel Industry

Advancing Textile Recycling Technologies

- Investments in chemical recycling could improve fiber recovery rates (Fatima, 2022).
- AI-driven sorting systems can enhance efficiency in textile waste management.

Strengthening Policy & Industry Regulations

- Extended Producer Responsibility (EPR) laws could require brands to invest in end-of-life solutions.
- Tax incentives for circular materials could encourage widespread adoption.

Consumer Engagement & Behavioral Shifts

- Incentivizing sustainable choices (e.g., discounts for returned garments) could boost participation.
- Education & awareness campaigns can drive demand for slow fashion over fast fashion.

Table 8: Potential Solutions for Strengthening Circular Economy in Fashion

Challenge	Potential Solution
Low recycling rates	Investment in fiber-to-fiber recycling
High cost of sustainable fashion	Government subsidies & tax incentives
Consumer reluctance	Reward-based take-back programs

Summary of Key Discussion Points

- HENNES & MAURITZ (H&M) has successfully integrated CE strategies but still faces structural and behavioral barriers.
- Compared to Patagonia & Nike, Hennes & Mauritz (H&M) reliance on fast fashion weakens its circularity impact.
- To scale circularity, the industry must improve recycling tech, enforce regulations, and shift consumer mindsets.

Summary of Key Findings

As a sustainability leader HENNES & MAURITZ (H&M) implements circular design concepts together with new material acquisition processes and large-scale product recovery initiatives. The company faces major ongoing obstacles focused on two key areas: The existing fiber-to-fiber recycling methods still need advanced development before mass production becomes possible. Most consumers have not fully embraced the H&M take-back system and product resale initiatives as these have not gained widespread acceptance. Fast fashion receives criticism through the greenwashing argument because its rapid manufacturing model works against environmental sustainability principles. HENNES & MAURITZ (H&M) has shown that circular approaches function within extensive supply chains by becoming an example for similar retailers

Conclusion

This paper explored how circular economy practices improve sustainability in global apparel supply chains, specifically by analyzing HENNES & MAURITZ (H&M). The research reveals the positive and complicated aspects of implementing circular practices in fast fashion operational structures. HENNES & MAURITZ (H&M)'s impressive work toward sustainable sourcing, waste reduction, and consumer participation has encountered continuous resistance from its business system framework and intrinsic business contradictions that stop total circularity achievement.

Table 9: Strengths & Weaknesses of Hennes & Mauritz (H&M) Circular Economy Model

Strengths	Weaknesses
Leading in sustainable material adoption	Low percentage of collected textiles recycled into new clothes
Well-established take-back & resale programs	Continued reliance on high-volume production

Strengths	Weaknesses
Investments in green logistics	Consumer engagement in circularity remains limited

Theoretical & Practical Implications

This study contributes to both academic literature and industry practice by demonstrating how CE can be applied in a fast fashion context.

Theoretical Implications

- Extends the Triple Bottom Line (TBL) framework by integrating circular economy principles.
- Validates the Circular Economy Mediated Sustainability Capability Measurement (CEMSCM) framework through Hennes & Mauritz (H&M) case study.
- Highlights the paradox of sustainability in fast fashion, calling for a new model that balances profitability with long-term environmental goals.

Practical Implications

- Provides insights for fashion brands seeking to transition from a linear to a circular model.
- Suggests strategies for increasing consumer engagement in circular fashion, including financial incentives and transparency initiatives.
- Identifies key policy recommendations, such as enforcing Extended Producer Responsibility (EPR) laws to ensure brands take accountability for textile waste.

Recommendations for Strengthening Circular Economy in Fashion

Advancing Circular Technologies

- Invest in fiber-to-fiber recycling innovation to improve material recovery rates.
- Develop AI-driven sorting systems to optimize textile waste processing.
- Scale up regenerative agriculture for sustainable cotton production.

Strengthening Regulations & Industry Standards

- Governments should implement Extended Producer Responsibility (EPR) laws, requiring brands to manage post-consumer waste.
- Establish global circularity benchmarks to measure sustainability impact.

- Enforce transparency regulations to prevent greenwashing and misleading sustainability claims.

Enhancing Consumer Participation in Circular Fashion

- Introduce financial incentives (discounts, credits) for consumers returning garments for resale or recycling.
- Expand rental and resale models by partnering with third-party platforms.
- Increase education & awareness campaigns to shift consumer behavior from fast fashion to circular fashion.

Table 7: Strategic Recommendations for Circular Fashion

Category	Recommendation	Expected Impact
Technology	Invest in fiber-to-fiber recycling	Higher percentage of materials reused
Policy	Enforce EPR regulations	Accountability for post-consumer waste
Consumer Engagement	Offer financial incentives for take-back programs	Increased participation in circular initiatives

Future Research Directions

Although HENNES & MAURITZ (H&M) has been the subject of this study as a case study, more investigation is required to apply best practices from the circular economy to the fashion sector as a whole. Future research ought to investigate: Comparative evaluations of slow fashion brands (like Patagonia) and quick fashion firms (like H&M vs. Zara). studies of consumer behaviour to comprehend the mental obstacles to implementing circular fashion. New developments in circular textiles, including 3D-printed apparel and biodegradable textiles.

Final Thoughts

The move towards a circular apparel industry stands as both vital necessity and compulsory social and economic and environmental demand. Hennes & Mauritz (H&M) proves that big brands can implement sustainability into their supply networks though complete circularity relies on shared changes across the entire industry. The fashion industry needs to advance beyond small improvements because it needs systemic innovation with strict regulations and mass consumer education for sustainability. The global apparel supply chain will need complete commitment for circular economy principles to become its standard operating model.

Contribution

Alimamy Abdulai Jalloh (MBA): Conducted data collection and prepared the initial draft of the manuscript.

Mohamed Jessie Koroma (M. Tech): Performed data analysis, final reviewed the manuscript, and finalized the write-up.

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