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Towards a redesign of the fashion and textile industry? Corporate perspectives on the EU Strategy for Sustainable and Circular Textiles

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Thesis summary

The EU Strategy for Sustainable and Circular Textiles aims at reducing the harmful environmental impacts of the fashion and textile industry. This master thesis investigates fashion companies' experiences and views on the EU Strategy for Sustainable and Circular Textiles, with emphasis on the opportunities and challenges that companies see with regard to the future implementation of this environmental policy. Additionally, it explores how companies organize themselves to adapt to climate change as addressed in the EU Strategy. Finally, it explores whether these actions are likely to lead to greater sustainability and circularity in the fashion industry by 2030.

The study was conducted by interviewing sustainability representatives of four fashion companies operating in the European market and with a particular focus on sports and outdoor activities. Interviews provided knowledge and views on the potential scenarios and outcomes of the EU Strategy.

The findings suggest that the EU Strategy for Sustainable and Circular Textiles represents a significant step towards increased sustainability and circularity in the fashion and textile industry. However, various barriers to its implementation have to be considered by policymakers and industry professionals. The implementation of the policy has just started, with much progress and development ahead: considerable efforts, motivation, time, cooperation, and resources are required in order to achieve progress toward sustainability and a more circular economy.

Overall, this research sheds light on the potential challenges and opportunities associated with the upcoming implementation of the EU Strategy for Sustainable and Circular Textiles, offering insights into the fashion companies' journey towards sustainability and circularity. This research aspires to provide an initial assessment of relevance for policymakers, fashion companies, and consumers while paving the way for further research in the realm of the EU Strategy for Sustainable and Circular Textiles.

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List of Abbreviations

CSR: Corporate Social Responsibility
DC: Dynamic Capabilities
EGD: European Green Deal
EPI: Environmental Policy Integration
EU: European Union
EU-SSCT: EU Strategy for Sustainable and Circular Textiles (or EU Strategy)
NSD: Norwegian Centre for Research Data
OD: Organizational Design
R&Ds: Research and Development
SBM: Sustainable Business Model
SME: Small-Medium Enterprise

Chapter 1 Introduction

This research explores and analyzes the experience and views of fashion and textile companies with the EU Strategy for Sustainable and Circular Textiles (EU-SSCT). The EU-SSCT was announced in 2022 by the European Commission, the main governmental power common to all members of the European Union (EU). It is presented as an attempt to put the fashion and textile industry on a sustainable and circular path. This strategy is novel for the fashion sector, as it is a systemic strategy that applies at the governmental level to all EU member states. The EU Strategy sets out an action plan to ensure that by 2030 all textiles on the EU market will be circular, climate neutral, designed to be durable, reusable, recyclable, repairable as well as energy-efficient (EU Commission, 2022a). It promises that its impact will be of global dimensions.

As climate change is currently impacting countries around the world with events such as floods, extreme temperatures, and drought, global action is urgent. Predictions, such as the ones in the IPCC's Sixth Assessment Report, show that such environmental hazards will keep increasing if we do not change our global activities (IPCC, 2022). Alongside food, housing, and transportation, clothing is one of the most polluting industries globally (EU Commission, 2022a). Clothing makes our daily life possible but belongs to the activities that are in urgent need of change. Indeed, the garment industry has numerous negative impacts on the environment, such as water degradation, greenhouse gas emissions as well as natural resources depletion, and land degradation (EU Commission, 2022a). The environmental impacts occur at multiple stages of the production, consumption, and disposal of textiles (Leal Filho et al., 2022). Currently, only a minor part of textile waste is being recycled and most of the rest ends up in landfills or is incinerated (Interregeurope, 2022). The disposal of textiles in landfills creates methane emissions, which contribute to climate change (Leal Filho et al., 2022). However, clothing consumption is not decreasing, as clothes are sold more and more cheaply, and fashion trends are continuously changing at an increasing pace. The global production of textiles has nearly doubled between the years 2000 and 2015 (Interregeurope, 2022). Textiles are increasingly made with synthetic fibers, which also contributes to the release of greenhouse gases (Leal Filho et al., 2022). In addition, dyes and chemicals pollute waterways. Finally, the technologies used in the production of garments are energy and water-intensive (Leal Filho et al., 2022).

The goal of this master thesis is to provide updated knowledge about the views of fashion companies on the EU Strategy in order to gain a better understanding of stakeholders' motivations, changes in practice, and position in regard to the EU-SSCT. Therefore, this master thesis research is motivated by the impact of fashion and textile production on climate change and the environment, and in particular, the alarming rate at which fast fashion is accelerating this impact. The research objectives guiding the thesis are to 1) examine firms' awareness, experiences, practices, and views regarding sustainability and the EU-SSCT; 2) identify barriers and concerns that affect their implementation of the EU-SSCT; and 3) use the finding to evaluate the potential and limitations of the EU Strategy in contributing to reducing the harmful environmental impact of the fashion and textile industry.

This research analyzes the views on the EU Strategy in small and medium size fashion enterprises (SMEs) In order to perform the analysis, I have conducted interviews with four

sustainability representatives from various fashion companies active in the European market. The selection of fashion companies encompasses a diverse range of profiles, including a global sportswear company, a Nordic outdoor company, a skiing and cycling company, and a winter sports "B-Corp" company. These companies specifically represent the perspectives and insights of outdoor and sport-oriented fashion brands.

The thesis investigates how current green strategies are being implemented within the European fashion sector. It will give a historical overview of the fashion industry, its environmental and social repercussions, its development towards sustainable integration, and how selected fashion companies are currently re-shaping their organization to meet sustainability goals in the EU-SSCT.

This thesis is structured as follows. This introduction has described the environmental and climate problematics around the fashion and textile industry and the need for a policy to transition towards sustainability, and it has identified the EU-SSCT as such a policy. Chapter Two will give background information on the world of fashion, sustainable businesses, and the EU-SSCT. The third chapter builds on this background by presenting three theoretical frameworks, namely (i) Environmental Policy Implementation, (ii) Dynamic Capabilities, and (iii) Corporate Social Responsibility and Sustainable Business Models. This gives a basis of knowledge and theoretical tools to conduct and present the research and to allow the reader to navigate the findings and discussion critically. These frameworks inform the methodology and the analysis of the findings, which are presented in the two next chapters. Chapter Four presents the research methodology, including sampling, data collection, and analysis. Chapter Five presents the companies' experience with and views on the EU-SSCT. Here, the four interviews are discussed and analyzed through the lens of the theoretical frameworks described earlier. Chapter Six, the Conclusion, sums up the main findings and presents further reflection and recommendations. The research presented in this thesis offers a new perspective on sustainable strategies for the textile industry. It documents and analyzes companies' views on the EU Strategy for Sustainable and Circular Textiles in an attempt to assess the potential of the EU Strategy in contributing to a more sustainable and circular fashion sector.

Chapter 2 Background

2.1 The fashion industry: a historical overview

According to the Cambridge Dictionary, the word *fashion* refers to "a style that is popular at a particular time, especially in clothes, hair, make-up, etc." (Online Cambridge Dictionary, 2023) but it can also refer directly to the business that produces those styles, therefore, referred as the "fashion industry". This thesis looks specifically at the fashion industry (garment industry), which encompasses the production of clothing but also shoes from textiles. In order to get a better understanding of today's state of the fashion industry, it is relevant to look back through the development of textile production. Clothing manufacturing starts with the following processes: fiber production such as cotton or wool, yarn spinning and/or weaving, and different treatments and dyes are applied before achieving the final product that is manufactured, transported, and sold (Hasan M., 2021). Here, textile and fashion have to be understood as overlapping sectors. The textile industry refers to the wider scope of fabric, yarn, and fiber production from raw materials. The fashion industry deals with the design and production of clothing (Affifah Heppy Noor, 2022). The former can be seen as the primary product and the latter as the final product.

Clothing has been a fundamental aspect of human history, serving initially for protective purposes against environmental factors like weather, dust, and parasites. During the Middle Ages, dressing became a religious matter. From the 15th century, clothing was used to denote prestige and cultural identity through the use of valuable resources and significant designs (CM Models, n.d.). The manufacturing process evolved with the Industrial Revolution and clothing production became a profitable business, enabling wider access to clothing for people of all classes (Godley, 1997). From on-demand clothes manufacturing, sizes have been standardized for efficiency matters. Today, the fashion industry is global and represents a great part of our current society's economic growth. Fashion consumption has become an omnipresent aspect of our modern life. Means of enjoying and consuming fashion can be varied: it can be made, worn, sold, gifted, and even just watched through social media platforms. Icons of fashion have been created, marketing advertisement is everywhere and promotes a desire to buy clothes.

2.2 The sustainability problem in the fashion industry

Clothing fulfills not only human physical needs but also psychological and social ones (Palacios-Mateo et al., 2021). Clothing is part of our daily life, it has become more and more accessible and textile consumption has kept increasing during the past decades (Ellen McArthur Foundation, 2017; EU Commission, 2022b; Thomas D., 2019). All of this leads to one problematic act; producing clothes. It is not so much the fact of producing the clothes that is problematic, but its pace, intensity, and how it is produced (Zero Waste Europe, 2023). Indeed, the fashion industry, and especially fast fashion, is responsible for both social and environmental harm. As the fourth most polluting sector globally, the clothing industry has been pointed out for its environmental and social impacts. Throughout history, exploitation within the clothing industry has existed since its earlier stages (Thomas, 2019; Godley, 1997).

In the British clothing industry, unpleasant local working conditions have been pointed out already in the 1850s as garments were often made by underpaid female workers (Godley, 1997). In the late eighties, fast fashion has aroused as textile businesses have come up with a new way of producing clothes in an inexpensive way and with fast renewal rates (Thomas, 2019). Trades and globalization have been a vector of intensification of the fashion production and its sweating system spread and intensified. The term "sweating" refers to practices of many garment factories involving low working wages, high-profit margins, poor working conditions, long working hours, and even child labor (Godley, 1997). Additionally, the fashion industry has been characterized by inexpensive clothing with a high renewal production rate according to the latest trends (Ellen McArthur Foundation, 2017; Thomas, 2019). Fast fashion is characterized by the rapidity and volume of its production. It follows a strategy that offers inexpensive and often poor-quality clothes to consumers. The design, manufacturing, and marketing methods used are aimed towards constantly changing trends throughout the year, leading to mass consumption (Barnes & Lea-Greenwood, 2006; McKinsey & Company & Business of Fashion, 2023). It is a very impactful industry regarding human and environmental health. However, fast fashion has become one of the most dominant production models in the fashion industry (Fashion & Index, 2021).

Its environmental and social costs are not to be neglected. The fashion industry practices have led to cases of environmental hazards throughout its entire supply chain, such as land use for chemically intensive crops, discharge of untreated wastewater, and textile waste piling up in landfills (EU Commission, 2022a; Thomas, 2019). Other problems associated with the fashion industry can be raised, such as exploitative corporate practices and shifting of hazardous working conditions overseas which have led to various ethical disasters, such as the collapse of the Rana Plaza building in Bangladesh. It happened exactly a decade ago, in April 2013, and killed 1,132 people (Thomas, 2019). Social and health costs associated with the fashion industry are of considerable importance (Bick et al., 2018). These concerning incidents have increased as the fashion industry has expanded during the past decades, involving more actors, and creating more injustices both for humans and nature. They are injustices in the sense that negative impacts from the fashion industry disproportionately affect communities and countries that are already in a disadvantaged or marginalized position (Bick et al., 2018). This only leads to the creation of more injustices towards specific groups which are more affected. This is for example the case of CO₂ emissions, which lead to Climate Change. We can already observe that Climate Change is affecting mostly lower-income communities (Bick et al., 2018) which increases the injustice between countries in the global North and the global South.

2.3 The sustainability problem: The fashion industry in need of change

Nicholas Stern, in the influential report *The Economics of Climate Change* (2008) has contributed to the global debate on climate policy as the emphasis on the economic impacts of Climate Change has been recognized and proven scientifically. Stern refers to greenhouse gas emissions as the *biggest market failure the world has seen* (Stern, 2008). According to Stern's review, immediate action is needed to reduce greenhouse gas emissions globally.

Other research has targeted the fashion industry and have also drawn the same conclusion regarding the need for changes and regulation of the industry. Initiatives such as the UN

Sustainable Development Goals are not sufficient to create meaningful change (Mizrachi & Tal, 2022). There is a need for more comprehensive and mandatory regulations. Leal Filho et al. (2022) also support the need for greater sustainability actions in the textile sector, from the use of recycled material to consumer education; they discuss the importance of collaboration between different stakeholders such as governments, industry, and consumers. There is a wide consensus that the linear economy that our society is based on is leading in an unsustainable direction. Therefore, a shift towards a circular economy is commonly seen as a solution (Jia et al., 2020).

2.4 The sustainability problem: The EU's answer

2.4.1 The EU Commission

The EU Commission was created in 1967 by merging different preexisting authoritative bodies: The High Authority, the European Economic Community, and the European Atomic Energy Community. The EU Commission is one of the main institutions common to all EU members and aims to defend their common interests (Staab, 2013). Each member state (there are 27 of them) has a representative within the Commission. The EU bureaucracy has sixteen services it focuses on, such as Agriculture and Rural Development, Economic and Financial Affairs, Education and Culture, Environment, Energy and Transport, et cetera.

The EU Commission has a complex structure, but here are the key elements that the readers should keep in mind. The EU Commission, as the executive body of the EU (European Union), plays the role of proposing, implementing, and enforcing legislation as well as setting the budget and holding national authorities accountable for compliance. It is the only EU body with the power to propose and initiate legislation that is common to all member states. The European Commission also holds the responsibility of being representative in international negotiations and nurtures external relations. Finally, the EU Commission has the power of shaping the EU's future through its political strategy (Staab, 2013). Andreas Staab adds that "the organization of the Commission differs from national governments in a number of ways, reflecting the dual nature of the EU as both an intergovernmental union of states and a supranational union of European citizens" (Staab, p.49, 2013).

The legislation implementation procedure requires both the Council and the European Parliament's agreement on the European Commission's proposal. This is often referred to as the *co-decision procedure* or the *ordinary legislative procedure* (European Parliament, 2023). When chosen, the legislative proposal is adopted and turns into an official legislative process. Consequently, the legislation is implemented and the agreement is binding for all EU members that will receive directives and results to be achieved. Laws and tools to reach the goals are often left to the decision of each national government. Most often, a set deadline is communicated until the member states have to achieve the set requirements (EU Parliament, 2023).

2.4.2 Policy implementation and the Environment

Environmental degradation is a topic that has been increasing in national but also international agendas. It is acknowledged that action must be taken not only at national level but jointly, across borders (EU Commission, 2019). Environmental degradation and impacts are worldwide and so should be the action against it (Stern, 2008). Common environmental policy is beneficial for countries coordination, especially in the now globalized world, where economies and populations well-being are interdependent. It is an evidence that institutional action is necessary in order to achieve a proper sustainable development in the near future.

Some actually add a fourth dimension to sustainability: economic, social, environmental and institutional, as a support for the other three dimensions. The institutional setting is necessary for the other three dimensions to be fulfilled and integrated correctly. Institution refers to the formal and informal rules, norms, and conventions that structure social interactions and shape the distribution and use of resources within a given society or organization (Vatn Arild, 2015). In this thesis, I'll use the terms policy, legislation and regulation interchangeably. They have to be understood as a set of goals, specific rules, requirements and practices that guide decision-making according to a written law that has been passed by a legislative body, in this case, the EU Commission. Policy instruments are described as a structural effort by governments to solve a problem by changing actions of the governed (Runhaar et al., 2014). Policy instruments can take different forms, such as soft policies which help steering actors towards a certain behavior by informing or guiding them through educational campaigns or nudges, to hard policies which directs or restricts actors' activities with economic incentives, subsidies or taxes. (Banerjee et al., 2021). Policy-makers can use a set of these different policy instruments to achieve a legislation's goal. This is the case of the EU-SSCT, which as mentioned potentially using educational techniques directed at consumers, fees directed at fashion brands activities as well as subsidies towards recycling facilities.

Initially, the environmental concern wasn't a focus of the EU's agenda, it only developed later on from different initiatives from member states, before it was agreed on a common policy at the EU level in the early nineties. This paradigm shift was driven by the pressure from a few leading countries but also from citizens and NGOs (Staab, 2013). The first Environmental Action Plan was announced in 1973, it focused on adjusting existing legislation for them to be less harmful on the environment. Its evolution then evolved towards a shift for sustainable growth as well as new agendas focusing on waste, energy use and pollution reduction, targeting key sectors such as transport, tourism or agriculture (Staab, 2013). It evolved towards a more extensive inclusion of environmental engagement in the EU's politics. The efforts to protect the environment are currently put into place into two different fields of action: specific policies (for example on waste, climate change, land use) and environmental elements within other sectors/policies (such as agriculture, transport and fisheries). The EU's environmental agenda appears as being very extensive, however, the environmental ambitions have often been lacking behind on the agenda as they are complex and member states are reluctant towards coordinating environmental policies (Staab, 2013). In 2007, the EU agreed on different environmental targets; cutting greenhouse gases by 20% between 1990 and 2020, source 20% of the energy from renewables, ban traditional lightbulbs, get power station to adopt carbon capture technologies, shift the agriculture to bio fuels. As well

as the adoption of the EU ETS cap-and-trade system. However, the EU Commission received various negative feedbacks from member states. For example, some countries feared lacking behind other countries with better economic development and pointed out at the ambitions for being too drastic. A general assessment shows promising results as the environmental performance of some member states has increased. However, a gap between implementation and the theory has been noticed (Staab, 2013). Goals are often too ambitious for EU's ability for change, lack of technologies, lobbying sectors and fear of economic burden may be at fault.

Not only has the EU Commission acted on the European level but also on the international scene. The Kyoto Protocol and Paris Agreement are the biggest international climate policy established recently. International agendas often differ from the European one, which pushes the EU to adjust their policies to the international criteria. As promising as it appeared in the beginning, international policies are complex and very difficult to achieve. The EU seemed to be the only frontrunner disposed to act for the environment (Staab, 2013).

However, further policy changes are needed, as many scientific assessments, such as the IPCC's Sixth Assessment Report, have concluded. The EU Commission has recently announced a variety of legislation to be implemented in the EU, the European Green Deal (EGD), which elaborates a pathway in order to put the European economy on a sustainable path, to solve climate change and promote a green transition through extensive measures and sectors (EU Commission, 2019). The European Green Deal is the most recent and most ambitious European policy implementation. Agriculture, food, cities, forest, biodiversity and circular economy are some examples of concerned sectors. The ambition is big; to become a world leader in terms of sustainability, by doing quick and effective changes to protect the environment while putting economic growth forward (EU Commission, 2019). The EGD is based on latest scientific reports on Climate Change such as the IPCC (Intergovernmental Panel on Climate Change), IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) and the EEA SOER 2019 (The European Environment Agency— state and outlook). The EGD aims to involve every European country and every industry in this effort for a transformative change.

2.5 The EU Strategy for Sustainable and Circular Textiles

The EU Strategy for Sustainable and Circular Textiles is a set of regulations presented by the European Commission in march 2022 in order to create a transition pathway towards a circular and sustainable textile sector in the EU. The EU Strategy aims to reduce the environmental and social impacts from the textile industry operating on the European market. The EU Commission presented a set of specific actions and measures such as the development of eco-designs, standards and certifications as well as promoting sustainable production and consumption practices. The measures are targeting all textiles sold on the European market which means that it also trickles down the supply chain, thus potential global changes can be expected from it. Furthermore, the EU Strategy focuses on all stakeholders; consumers, retailers, suppliers and manufacturer. The Commission promises this Strategy to be a transformative shift for the fashion industry (EU Commission, 2022b). The EU Strategy for Sustainable and Circular Textiles, hereafter referred to as EU-SSCT or EU Strategy, is part of a bigger picture or legislation that are currently being implemented in the

EU: the EU Green Deal, the new Circular Economy Action Plan and the Industrial Strategy. The European Commission back up their Strategy on some scientific data about environmental degradation linked to the textile industry. They share a brief picture of it while mentioning the small percentage of current recycled textile waste, the amount of waste loading up in landfills or incinerated while the total textile consumption keeps increasing.

The European Commission (2022) argues that the textile industry has a high potential of circularity. Textiles in a circular economy would not only be made of more sustainable fibers and dyes, but would become more durable, repairable and recyclable, minimizing waste at the end of their lifetime. The EU strategy targets the whole supply chain by the implementation of eco-designs, strict waste management, transparency, labelling as well as minimizing microplastics. These new business models would allow for more sustainability in the fashion sector while allowing companies to create economic value. The strategy aims to tackle waste by making producers responsible for the waste produced by their own products, thus creating "extended producer responsibility" and increasing circularity of their products through eco-design requirements. The European Commission also requires more transparency in order to detect false claims about sustainability, or greenwashing, in order to provide more trustworthiness for consumers and to enable them to make informed choices. The strategy considers every product placed on the EU market, which means it needs to have a worldwide implementation, as most fashion garments are currently made outside EU, mostly in countries of south-east Asia. The strategy targets not only textile waste and environmental pollution but also social rights. So, this strategy seems promising, for consumers who would benefit from higher quality products, for garments workers, who would see their safety and health improve, as well as for the environment, which would be better protected against pollution and overexploitation of land. In addition to environmental concerns, the EU Commission mentions that textile ought to be respect social rights. Therefore, they came up with a Transition pathway, as a way to plan future actions and establish a clear roadmap to achieve those goals by 2030.

This is the first regulation in this kind targeting directly the fashion sector. The textile and fashion sector had up until now not been strictly regulated about its environmental impact. The EU Commission had already tried pushing the sector towards more sustainable practices but not to this extend, as they now delivered clear objectives and explicit policy action plan(Ohana Public Affairs, 2022).

Here are the mains targets of the EU Strategy for 2030 (EU Commission, 2022b):

1. Mandatory Ecodesign requirements

According to the new regulations, from 2030, all product placed on the European market must be design according to some durability, reusability, reparability and recyclability requirements. In addition, the EU Commission will set some qualification regarding the use of harmful chemicals and carbon footprint of textile products.

2. Ban the destruction of unsold and returned products

In line with transparency regulations, companies will have to disclose the amount of destroyed items from unsold or returned products.

3. Digital Product Passport: transparency requirements

More transparency on companies' activities will be required from 2030. This will take form of a Digital Product Passport. As the name mentions, a digital "passport" will accompany each product and therefore give information for the consumers on the sustainability aspects of the garment as well as recommendations of usage, et cetera. This aims on increasing consumer awareness and facilitate their decision-making process when purchasing textile products. This can be seen as an upgraded label tag that we can currently find on clothes.

4. Ban greenwashing: regulation on green claim

Green claims will be strictly regulated in order to avoid any greenwashing claims. This will be pursued through the elaboration of EU Ecolabels to avoid marketing campaigns using false and misleading labels as marketing tools.

5. Minimize microplastic pollution

One important burden coming from textile is microplastic. The EU Commission underlines the importance to address the problem of microplastic release throughout the whole lifecycle of textiles, this affects companies in regards to the production stage as well as the consumers in regards to the use stage through washing of the garments. Some measures presented by the EU Strategy are the usage of innovative materials, innovative washing machine filters and innovative waste management procedures.

6. Extended Producer Responsibility: eco-modulation of fees, R&Ds, waste

Textile and clothing manufacturers will be held accountable for their products throughout their whole lifecycle. Therefore, the waste from end of consumption will be collected specifically and should be re-introduced within the economy according to a circular model. Eco-modulation of fees provides manufacturers with an incentive to reduce the environmental burden from the industry by creating less waste.

7. Due Diligence: environmental and social fairness

A plan for Corporate Sustainability Due Diligence Directive has been put into place in order to prevent from any social and environmental issue throughout the entire value chain of companies. Alongside transparency, this imposes to companies to have a good knowledge of their suppliers and partners.

8. Put an end to overproduction and overconsumption

The EU Commission wants to address the overconsumption and overproduction patterns our current society is based on. They have introduced it under the slogan #ReFashionNow that

promotes "fast fashion being out of fashion" (EU Commission, 2022b). This goes along with implementing a circularity model for the fashion industry over the linear model linked to fast fashion, where textiles and resources end up as waste, creating large environmental burden.

9. Strict regulations on waste exportation

Waste management has to be improved in order to avoid shipment of textile waste towards countries from the Global South where biggest textile landfills can be found (Ellen McArthur Foundation, 2017; Fashion & Index, 2021). Regulations will prohibit the exportation of textiles to countries without sufficient capacities for waste management.

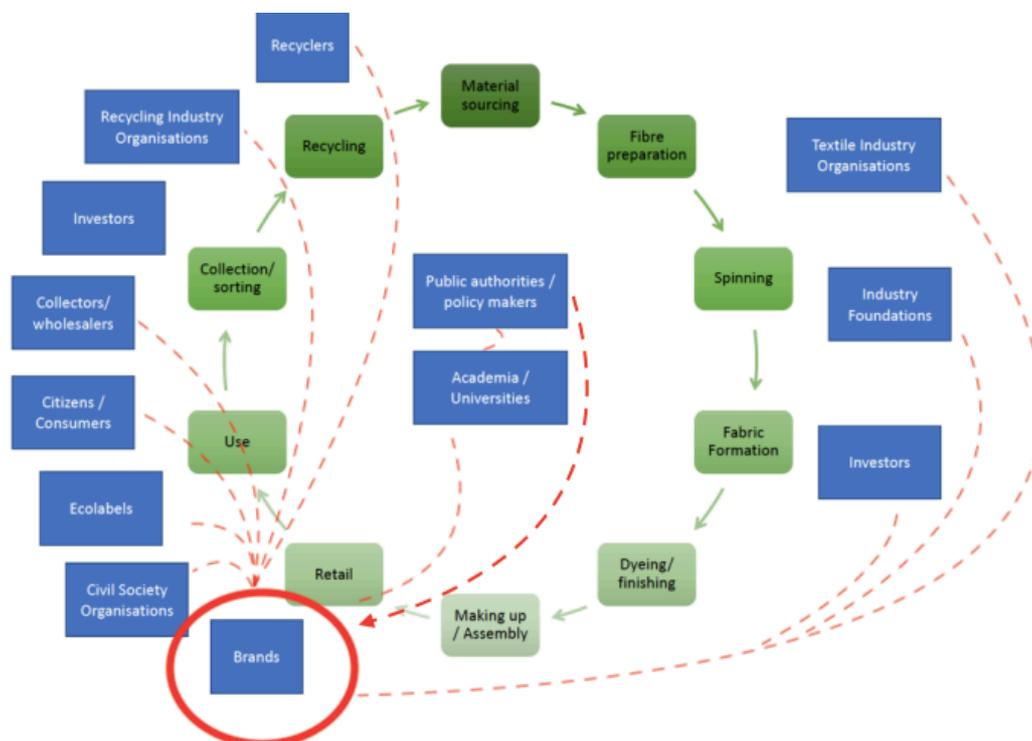
10. Skill development, research and investments

The EU Commission is highlighting the importance on supporting research, innovation and investments for a green transition as well as the development of highly-skilled workers. Therefore, the EU Commission invites stakeholder such as companies and Member States to support the objectives of the EU-SSCT.

Non-compliance to these regulations can lead to lack of competitiveness on the market as well as possible fees, loss of license to operate, et cetera (Ohana Public Affairs, 2022).

Here is an overview of each stakeholders involved in the EU Strategy. Dynamics between companies, hereunder referred as brands (the subjects under analysis in this research) and other stakeholders has been highlighted in red.

Figure 1: EU-SSCT Stakeholders



Source: Adapted from: (EU Commission, 2022a)

2.6 The problems of the EU's answer

The EU Strategy for Sustainable and Circular Textiles is a fairly new policy process and is currently in the making. It is a very extensive policy with great ambitions for Europe to be the first market offering only sustainable, circular and fair textiles and clothing. The goals are set for 2030, which allows a period of time of 7 years for the industry to make a change. However, as of the 24th of March 2023, hence one year after the EU-SSCT announcement, the *Transition Pathway for the Textiles Ecosystem Paper* has not been published. It had been announced the survey would be published by end of 2022, this paper would have been a precious element in this research as well as for policy makers and textiles companies affected by the regulations. However, it seems like the EU Strategy still need to be accepted by the EU Parliament. Some criticisms have arisen shortly after the strategy's announcement, mainly from researchers and organizations, stating the flaws of the EU regulations. Various organizations, including Fashion Revolution, the largest fashion activism movement worldwide (Fashion Revolution, n.d.) have written a joint letter to the European Commission about the urgency of making the EU Strategy more impactful. For example, they recommend to set clear material and consumption reduction goals, putting extended bans on all goods destruction, and requiring eco-designs that not only take recyclability into concern but also build for a longer lifespan of clothing (Fashion Revolution, 2022). Researchers from the group CHANGE in Oslo Metropolitan University have expressed the lack of attention to local and traditional production of textiles and small-scale businesses, as well as lack of a concrete plan of the EU Strategy (CHANGE Clothing research, 2022). Halt of overproduction and the perpetual use of synthetic fiber (Consumption Research Norway (SIFO), 2022) as well as the lack of strict regulations targeting CO₂ emission reduction and economic incentives, R&D financing, incentives for recycling, second-hand and repair services should also be addressed further (Ohana Public Affairs, 2022). Those critics seem to be founded on stricter definitions of circularity and sustainability than the one guiding the EU regulations construction, leading to different outcomes to how the regulations should take place to achieve a truly circular and sustainable industry. This leads to one question; is the pathway offered by the EU Strategy sufficient and realistic?

Chapter 3 Theoretical frameworks

3.1 Introduction

The complex and multi-faceted nature of this research makes an interdisciplinary approach highly relevant. This interdisciplinarity is reflected through the choice of multiple frameworks, applied and linked together in order to support a coherent analysis of the current state of the study. The following sections provide information on the analytical approach which I use to analyze the data presented in the thesis. The selection of theories and concepts has been done according to their appropriateness to the research question, their ease of application in the given context and their explanatory potential.

An analytical perspective is drawn from the three distinct frameworks in order to analyze different characteristics of the situation studied. The frameworks and concepts aim to connect the study to existing knowledge while giving a basis for the structure of the research, the choice of methods as well as the analysis of the data. As the name suggests, a framework helps "framing" the research and provides limits and structure to the initial assumptions one can have about a topic of study as well as limiting the scope to the relevant data only.

I have selected three approaches according to the research question and sub-questions. The theoretical frameworks focus on the three thematics of 1) green policy implementation, 2) companies' adaptation to sustainability and 3) sustainable businesses in practice. The choice of the three theories reflects the evolutive characteristic of policy implementation; its conception, its future implementation and its potential impacts. The three thematic are directly related to the three sub-questions that are guiding the research. The approach is on having a broader view on each facet of the topic rather than a more detailed but narrower focus that would omit some important reflections on the topic and context of the research. This choice is justified by the fact that the EU-SSCT is very recent and still in the developing process, which means that it is necessary to allow a margin of interpretation of both the policy implementation side and the company's implementation strategy. Since there is also a low amount of actual data to be analyzed at the moment, the focus is more on interpreting the available information while putting it in relation to the existing knowledge in order to create a well-grounded interpretation of the actual context and the way it may evolve in the future. Combining different theories and frameworks promotes independent theorizing in order to analyze the complexity of a topic. Furthermore, given the recent nature of the EU-SSCT, well-fitting and already existing frameworks are not to be found in the literature. By combining 1) a framework focusing on green policy implementation and 2) a framework on companies' adaptation to sustainability as well as 3) a framework on sustainable businesses allows the elaboration of a better fitting framework for this particular study. Furthermore, those different theoretical frameworks cover an important part of the background for the research and provide an overview of the state of research and the history of green policy implementation and sustainable business models within the fashion industry.

The theoretical frameworks have been selected through a process of examination of the thesis topic and research question, the key variable related to them, followed by a review of the existing literature and selection of relevant studies. I do not give a comprehensive account of each theoretical frameworks, but select aspects that support the topic under investigation.

In the following section, the selected theoretical frameworks will be introduced, explaining why they fit this research and how they will be used as well as what theoretical discussion and generalization they allow.

3.2 Environmental Policy Integration

This section introduces the analytical approach I have chosen in order to answer the first sub-research question: What are the enabling factors and barriers regarding the upcoming implementation of the EU-SSCT? This sub-research question will be answered with the help of existing literature and theories on Environmental Policy Integration.

As previously mentioned, at the time of this research, the EU-SSCT is still being discussed and in the waiting for the EU parliament approval of its application. Thus, concrete impacts from the policy cannot be analyzed. Therefore, I chose to analyze the potential barriers to its future implementation using the Environmental Policy Integration framework.

The textile sector being a major contributor to environmental degradation, it needs to be regulated by institutions in order to reduce its negative impact. Regulating such sectors might lead to conflicts between environmental objectives and the sector's own objectives, such as economic profit (Runhaar et al., 2014). However, it is argued that sectoral policies are promising with regard to tackling the roots of environmental damages, and therefore represent a more efficient policy strategy than pure environmental policies.

The works of Runhaar et al. 2014, *Towards a Systematic Framework for the Analysis of Environmental Policy Integration* and Biesbroek et al., 2013 *On the nature of barriers to climate change adaptation*, are relevant for this thesis. They introduce the theoretical framework of EPI while putting emphasis on the empirical implementation's part of policies, which will be used in order to analyze companies' views on the potential implementation scenarios of the EU-SSCT. When looking at a nascent policy, two of its dimensions can be analyzed, the policy strategy in itself and its empirical implementation. To improve EPI strategies, it is stated that more research has to be done in order to know better where, what, how and why EPI works.

It is then clear that this research provides empirical information on a particular environmental policy in a specific context. EPI strategies have been promoted by the EU Commission within various policy sectors for some years (Runhaar et al., 2014). Therefore, one more argument for using it is that it shows sector-wide agreements between companies and governments, and that similar studies have already been done within the EPI sector. EPI is a policy, a set of measures, however, it can also be used as a framework for analysis, which is the case in this study.

EPI is broadly described by Runhaar et al., 2014 (p. 9) as "the incorporation of environmental concerns in policy sectors by public and private actors involved [companies, non-governmental organizations (NGOs) and governmental actors]" while specifying that it "underlines the integration of environmental and climate concerns at sector rather than at individual organization level and the importance of actors other than government."

EPI provides a structured framework for evaluating the effectiveness of policy interventions in achieving sustainability goals. Using this framework provides a standardized approach to green policy implementation at an international level. Additionally, it can help in identifying areas for improvement and potential barriers to progress, thereby guiding policy and decision-making processes. Using such a framework as a first step in the research, allows a more comprehensive understanding of the EU-SSCT.

EPI, applied as a policy measure, aims to minimize conflict between varied policy objectives while incorporating environmental concerns in non-environmental policy sectors (Runhaar et al., 2014). It allows, for example, to increase climate adaptation in sectors such as agriculture, transport or urban planning, which could then also be the case for the textile and fashion sector. EPI has as its goals to stimulate actors towards increasing their motivation for sustainability and environmental protection while doing it voluntarily and autonomously by changing their own agendas. This results in shifting the focus from the environmental problems to the driving forces of Climate Change.

EPI allows policy makers to achieve greater environmental objectives by steering a large number of actors (Runhaar et al., 2014), such as fashion companies. Moreover, EPI addresses an institutional void problem and tries to solve it by sharing responsibility for environmental protection with actors that are usually not allocated such responsibilities because they are outside the traditional environmental-focused domains. Sometimes this can lead to resistance due to lack of legitimacy and due to competition with the actors' own objectives.

In their article *On the nature of barriers to climate change adaptation*, Biesbroek et al. (2013) present Climate Policy Integration (CPI) as an element of EPI focusing on mitigation and adaptation of climate concern within all policy fields, thus leading to climate concern becoming more and more mainstream. But the nature of the strategies can be varied, and their heterogeneity makes it more difficult to have a clear overview of EPI. CPI helps identify barriers – such as financial, knowledge, informational, cognitive, socio-cultural or institutional – to integration of CPI. In addition, EPI and CPI take into consideration the different geographical scales and heterogeneity between the diverse sectors they are being applied to. They can be part of international agreements or applied at the national level. In this research, I am not making any distinction between CPI and EPI and will refer to it as EPI.

It is important to underline the difficulty of evaluating EPI through measured impacts such as on CO₂ emissions or climate risks. Moreover, quantifiable impacts from the EU-SSCT have not occurred yet. However, more research has to be done on the implementation stage, as EPI might have great ambitions that are not always reflected in their implementation stage (Runhaar et al., 2014) and thus show a particular weakness of EPI. EPI research will help in establishing what strategies perform best in what situations.

According to (Runhaar et al., 2014) and (Biesbroek et al., 2013), here are the five main categories of barriers to EPI:

3.2.1 Financial barriers

Those are the financial resources limitations for firms to implement Climate Policy Integration in their activities. EPI can require more administrative work, investment in new technologies

and research et cetera. Those represent a cost for companies which may reflect a limitation for some.

3.2.2 Knowledge/informational barriers

It refers to differences in actors' knowledge on the policy in itself or on sustainability in general. Some actors may get easier and better access to information through partnerships and active participation in sustainable forums and arenas.

3.2.3 Cognitive barriers

Cognitive barriers are actors' perception of risks and adaptive capacity. Some companies might express more or less unwillingness or poor skills in seeking, cooperating and acting upon the sustainable policy implementation. It can limit or benefit a company's activity.

3.2.4 Socio-cultural barriers

It has to be understood as actors' perception of climate change. They are looking more into company's specific values and beliefs linked to their identity or their socio-cultural surroundings. They can vary from one company to the other, or from a geographical region to the other. This means it could have some divergences in companies' view on climate change as well as within a company's value chain.

3.2.5 Institutional barriers

Institutional barriers refer to the obstacles or constraints that prevent individuals or organizations from adopting new behaviors or practices. Institutional barriers are also context-specific, as some policies, procedures or situations that can differ from a region to the other. Those divergences might disadvantage certain companies or actors.

The authors argue that these barriers are interconnected and can reinforce each other, which may hinder efforts to adapt to climate change. They also suggest that overcoming these barriers requires a comprehensive approach that addresses the social, economic, and political dimensions of adaptation. Those various characteristics of EPI will be analyzed through the analysis of company discourses on the EU-SSCT.

Policy Appraisal refers to the process of evaluating and assessing the effectiveness, efficiency, and appropriateness of a policy that has not necessarily been implemented yet (Dye, 2013). An analysis of the EU-SSCT in itself will also be done to the extent possible given what is currently known about it. There are two dimensions of governance strategies that I will look at: the mode of governance and the way to steer actors. The mode of governance can be the regular top-down approach, this is the main approach of the EU Commission. However other approaches include interactive, bottom-up and even self-governance. Here we also want to look at the extent to which there might be an interactive dynamic within the EU Commission's predominantly top-down approach. This will be done by looking at who are the subjects of the strategy, who is steering it, in what direction and by what means. The second dimension looks at the means of policy or policy instruments. Those can be legal and regulatory instruments that restrict or allow certain behavioral options, economic instruments such as changing the cost-to-benefit ratios of some behaviors, communicative instruments providing information, as well as organizational instruments that affect structures and procedures.

The EPI framework assesses the performance of both the decision-making stage and the implementation stage, and therefore contributes to the development of a robust framework for exploring and appraising the effectiveness of environmental strategies.

3.3 Corporate Dynamic Capabilities and Climate Adaptation

The second analytical approach has been selected in order to help answer the following sub-research question: To what extent are companies changing and adapting with regards to the EU-SSCT? This sub-research question will be answered with the theoretical frameworks focusing on business organization towards Dynamic Capabilities (DC) and Climate Adaptation (CA) by looking at what changes are fashion companies making to integrate the EU-SSCT goals within their strategies and how they are making them as well as the tools and dynamic involved in this process.

Another important consideration when talking about policy effectiveness, is looking at the particular sector the strategies are being applied to. As mentioned by Runhaar et al. (2014), each strategy is sector specific and should be studied accordingly. In this section, I will look at fashion companies' tools and abilities to change and adapt towards sustainability and link it to sustainability policy implementation and organizational system change.

Organizational Design (OD) refers to the arrangement of actors, resources, technologies and activities within a firm, or more broadly, their strategic management. A good organizational design will depend on its fit with the context and this will impact the capacities to sense and seize market opportunities. During policy implementation, companies have to change their organizational design in the most efficient way in order to achieve sustainable goals while staying competitive.

Dynamic capabilities refer to the ability of an organization to adapt to changes in its environment. Therefore, the link is made with the previously-presented framework on CPI and EPI that can be seen as the initiator of these changes.

Moreover, CPI and EPI framework focuses primarily on regulatory and policy changes, and may not capture all relevant environmental risks, opportunities, environmental performance. Therefore, it is useful to complement the first framework by looking at how organizations use tools and approaches in order to fully develop their activities to face environmental change.

Studies such as *Sustainable development and dynamic capabilities in the fashion industry: A multi-case study* by Da Giau et al. (2020) have demonstrated that Dynamic Capabilities can be applied as an analytical approach to study sustainability in the fashion industry. Some researchers claim that adopting a DC perspective is particularly suitable when looking at sustainability, as it leads to a detailed analysis of the processes and strategies developed by each firm (Da Giau et al., 2020). This analytical approach assists me in the analysis of the EU-SSCT's future implementation within fashion companies. It is based on the hypothesis that most firms need to re-arrange their processes and activities in order to reach sustainability goals. Most fashion brands are based on a linear, finance-oriented model of production, and achieving sustainability goals requires change. Moreover, it has been shown that adopting an

effective Dynamic Capability approach positively impacts companies in their journey towards sustainability (Da Giau et al., 2020). Building a sustainable business model out of a regular (often referred to as linear) business model requires some reconfiguration, improvement, extension and integration of various capabilities, assets and resources aligned to the company's new goals (Da Giau et al., 2020). Research on Organizational Design has created great contribution, as it shows the link with successful green business model and the importance of innovation, adaptation and opportunity realization. On the other hand, lack of experience with those concepts can be a barrier for companies to implement green strategies.

Teece et al. (1997) describe the concept of Dynamic Capabilities as:

"[a] firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. Dynamic capabilities thus reflect an organization's ability to achieve new and innovative forms of competitive advantage given path dependencies and market positions."

(Teece et al., 1997, p. 516)

The DC approach is part of the broader scope of research of Resource-Based View (RBV) approach, which focuses on existing resources and capabilities for firms to exploit for competitive advantage and business success. This framework helps understand how companies grow and diversify (Teece et al., 1997). However, Dynamic Capabilities emphasize the dynamic characteristics resulting from system change towards sustainability. This particular stand point is needed in this research to identify whether companies face a reconfiguration of their resources, capabilities and goals while integrating new sustainability objectives. This specific research has to take into consideration the particularities of the fashion industry, which is complex, competitive as well as challenging as it is largely globalized and faces great pressure for its environmental impacts. Sustainability is also characterized by its complexity and ambiguity.

Teece et al. (1997) examine DC by investigating three categories: sensing, seizing and transforming. Sensing refers to the step that scans the market in order to seek and examine the emerging opportunities and to gather knowledge. Seizing focuses on assimilating and integrating the knowledge. Finally, transforming refers to the creation of new routines by re-arranging resources and operations. There are different types of DC, they can be the firm's absorptive capacity, communicative skills, their capabilities for sustainable supplier development as well as their proactive attitude towards environmental adaptability or their implication with environmental research (Da Giau et al., 2020).

Below is listed the most relevant types of information I am seeking to analyze in relation to the Dynamic Capability approach:

3.3.1 Sensing environmental opportunities

Sensing opportunities are analyzed by looking at who is responsible of this particular task within the firm. It is relevant to see if there is a particular team or person dedicated to sensing sustainable opportunities and gather knowledge about it. Furthermore, I will look at how this is achieved. This could be through cooperation with different stakeholders (NGOs, consulting companies et cetera) and involvement/proactivity of each firm towards knowledge gathering as well as reacting to consumer concerns and looking at merging trends and potential market

issues. Market sensing can be achieved through analysis of press coverage, competitors' evaluation and benchmarking, research, advices seeking, as well as attempting conferences and meetings (Da Giau et al., 2020).

3.3.2 Seizing environmental opportunities

This step looks at which opportunities firms decide to prioritize and according to which arguments. The choice of prioritizing an opportunity over another can be related to ease of implementation, need for new technologies, external pressure, as well as the feasibility of the objective. When looking at seizing opportunities, it is also important to look at who is doing it. As opportunities can be related to specific departments within a company, a greater level of communication between teams may be needed between the ones sensing the opportunity and the ones seizing it. For example, decisions about green products may not be made by the same person making decisions related to green facilities or green governance. The seizing steps can be made in a top-down approach in which the sustainability department choose what strategies to prioritize, then given to project teams, or according to a bottom-up approach with green deputies identifying green initiatives in each department (Da Giau et al., 2020).

3.3.3 Transforming environmental opportunities

When opportunities are sensed and seized, the finale step is about making transformation in order to achieve the new objectives (Da Giau et al., 2020). In this regard, I will look at who is making the decision about the approval of the execution and implementation of the opportunity.

Transforming refers to the creation of new routines by re-arranging resources and operations. There are different types of DC. They may be the firm's absorptive capacity, communicative skills, their capabilities for sustainable supplier development, as well as their proactive attitude towards environmental adaptability or their implication with environmental research. Absorptive capacity refers to a firm's ability to recognize, integrate and commercialize external knowledge value (Cohen, W. & Levinthal, D., 1990). This can also be made either from a top-down perspective or a bottom-up perspective. The former has shown to be more impactful in practice than the latter (Da Giau et al., 2020).

This research will similarly examine how Organizational Design and Dynamic Capabilities are structured to achieve sustainable goals and compare the patterns of our four interviews to the literature.

3.4 Corporate Social Responsibility and Sustainable Business Models

The final analytical approach has been selected in order to help answer the following sub-research question: To what extend is the EU Strategy for Sustainable and Circular Textiles likely to change the fashion industry towards sustainable and circular business models? This sub-research question will be answered with the theoretical frameworks focusing on Corporate Social Responsibility (CSR) and Sustainable Business Models (SBM).

The concept of Sustainable Business Model being closely related to Corporate Social Responsibility, CSR has been chosen as the main focus analysis in order look at the bigger picture while assuming that CSR, applied to an extended level, leads to a business model that is actually sustainable.

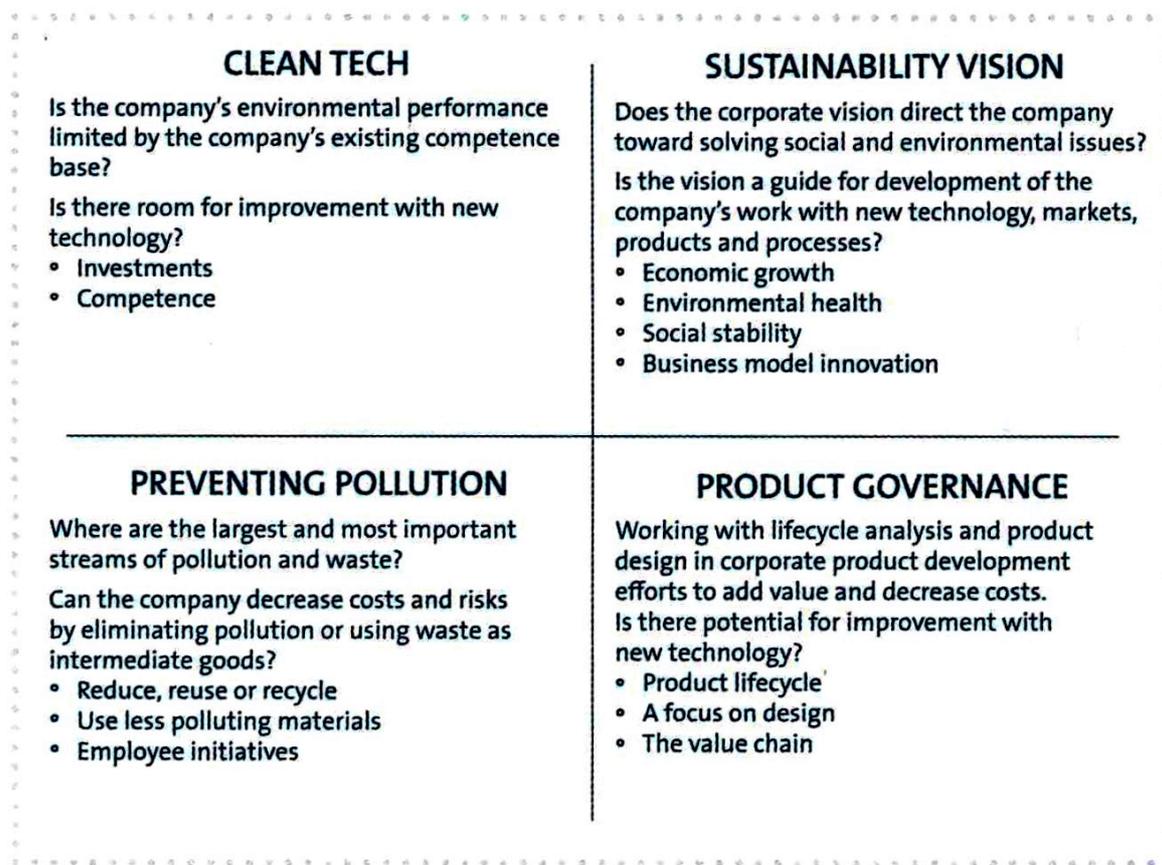
In line with the Brundtland report's description of sustainable development, companies of all sectors have start aligning their business practices to various sustainable practices. In their book *CSR and sustainable business*, Borglund et al. (2021) trace the emergence, history and hopes of sustainability within the corporate's world. There is nowadays an increasing interest from various stakeholders, such as consumers, investors, employees, organizations, politicians, in CSR pushing companies to act upon their environmental impact. Integrated environmental responsibility of corporations has been argued in academic research since 1970. However, its only twenty years later that the importance of companies in the sustainable arena was discussed at a UN conference. Since, companies are seen as central players taking part of the solution, and vice-versa, companies are said to benefit from taking sustainable actions.

Corporate Social Responsibility is a vast field, and the academic literature is extensive and sometimes diverging on the topic. Responsibility can be seen differently according to its context, as it is determined by the society's understanding of it, depending on the geographical and time context (Borglund et al., 2021, p. 64). This means that businesses' social responsibility can have different forms, from one context to the other as well from one business to the other. It is also assumed that the degree to which a company is responsible matches its sphere of activity. A global company must have deeper commitment towards global society than a local company, which may have a limited commitment to the society they are related to.

Financially, companies can benefit from taking certain environmental actions as they may decrease their costs (better resource management) and increase their revenue (better image towards the consumer). In addition, there are many arguments that decreasing environmental impact can create value for shareholders; that differentiated environmental products may allow higher prices; that front runner position favors a company's products as compared to competitors; that resource and energy efficiency leads to costs saving; that better risk management increases the company's protection against from boycotts or lawsuits; and may lead to better adaptation to changing markets (Borglund et al., 2021, p. 107).

To use this approach, I'll be looking at current and envisioned plans for the fashion industry sustainable performance according to the concept of CSR and Sustainable Business Models. Those two concepts represent the pathway that industries may take according the EU-SSCT.

Figure 2: Four aspects of corporate sustainability



Source: Figure 3.3 Sustainability portfolio covering the levels of sustainability efforts within a company: from internal preventive work to global sustainable vision (Borglund et al., 2021, p. 106)

Primarily, clean technologies refer to company's full capacity of innovation on green technologies and competences such as recycling facilities, investing in research and development (R&Ds). In a second place, preventing pollution has to be tackled by sustainable companies in order to reduce their impact to a maximum, this can be done by reusing some of their resources, recycling them and reducing their overall waste in order to pollute less, using green energy and cleaner materials. In addition, the corporates views and plans for the future should be aligned with sustainability. A company's vision should prioritize innovation, social stability, environmental safeguard as well as economic growth. Finally, Borglund et al. (2021), suggest that the company should have a clear overview of their product's impact on the environment. This can be done through life cycle assessment, design innovation and transparency within the value chain.

Other aspects of CSR have to be considered by businesses when working towards sustainability. One important aspect alongside environmental sustainability, is ethical sustainability. It is a core concept of CSR. Ethical sustainability refers to the integration of ethical principles and values into the corporates' practices. It involves considering the social impacts of business decisions in order to achieve better equity, justice, and responsibility in business operations (Borglund et al., 2021). Increased awareness for environmental and

ethical sustainability within firms is done through education. There is now an existing market for it, consultancy agencies, organizations and medias.

Another core aspect and now popular pathway of sustainable business model, is circularity. This is mentioned in the EU-SSCT. Circularity refers to an improved management and conservation of resources as those ones are limited. The circularity concept is opposed to the linear approach, where garments (in the case of the fashion industry), are created and end up to waste. A circular approach takes into consideration the end-of-life of a garments in order to re-create value from it, either by reusing, recycling or repairing it. This way, a resource stream is created forming a closed loop for resource use.

Another aspect mentioned by Borglund et al. (2021) is nudging efforts from companies and other stakeholders to influence and steer consumers behaviors in an environmental path. This is a commonly used intervention used by politicians and governments to get a desired behavior by facilitating some part of the process. One example for the fashion industry could be to facilitate consumers' access to information about sustainability performance in order to justify higher prices.

Transparent value chain is another core goal for a sustainable management of fashion businesses. Our globalized world has made it harder and harder for firm to deal with diverging regulation across the globe, sometime benefitting from the situation. A company should have a clear view of all their operation in order to aim for a better responsibility for their people and the environment.

CSR is a very broad topic and cannot be conceptualized in a few distinct steps. However, each point presented so far will be discussed and put into relation with the data gathered through interviews with fashion companies. CSR and Sustainable Business Models are not a perfect solution, as there are still many challenges to face. But companies' role in achieving better environmental and social sustainability is undoubtable. There is not one strategy for companies to be sustainable. It is a path that is specific to each company and that will keep evolving with time.

Each framework has been chosen as they represent a different stage of the EU-SSCT implementation. EPI helps the understanding of building green strategies. DC offers a view on how businesses can change and respond to green strategies. SBM and CSR allow a critical analysis of whether the EU-SSCT puts fashion companies in line with sustainability once implemented.

Chapter 4 Methodology

4.1 Research objectives

The purpose of this study is to provide updated knowledge about the upcoming implementation of the EU Strategy for Circular and Sustainable Textiles within the fashion sector and to gain a better understanding of stakeholder motivations, practices and changes regarding the strategy. By investigating the experiences and views of fashion companies on the future implementation of the EU-SSCT, and analyzing the results through the lenses of Environmental Policy Integration, Dynamic Capabilities, and Corporate Social Responsibility and Sustainable Business Models, I will provide insights into the effectiveness of the strategy and potential areas for improvement.

The research objectives are:

1. To understand firms' awareness, experiences, practices and views regarding sustainability in general and the EU-SSCT specifically.
2. To identify barriers and concerns that may affect the implementation of the EU-SSCT within fashion companies.
3. To use the findings from the firms to evaluate the potentials and limitations of the EU Strategy in its implementation as well as assessing its potential to lead towards a circular and sustainable textile and fashion industry.

These objectives are limited to companies' stated experiences and views, as the physical impacts of the EU-SSCT cannot yet be assessed. The improved knowledge and understanding concerning the EU Strategy's attempt to put the textile industry on a more environmental path may help policy makers and fashion companies in getting a better understanding of the EU strategy and some potential barriers to its implementation.

4.2 Research questions

To pursue the objectives, I will ask the following main research question: **What lessons do the experiences, knowledge and views of fashion companies hold for assessing the potential and shortcomings of the EU Strategy for Sustainable and Circular Textiles?**

To answer the main research question, three sub-research questions will guide the research:

Sub-RQ1: What are the potential enabling factors and barriers regarding the upcoming implementation of the EU-SSCT?

Sub-RQ2: To what extent are companies likely to change and adapt to the EU-SSCT?

Sub-RQ3: To what extent is the EU-SSCT likely to change the fashion industry towards Sustainable and Circular Business Models by 2030?

These questions highlight three stages of the EU Strategy: the policy elaboration, the policy implementation and the policy results. These three stages are linked to the three theoretical frameworks presented in Chapter Three.

4.3 Research design

This research is qualitative and supports the interpretivist nature of my thesis. Interpretivism is based on the belief that each subject observes and understands reality according to their own experience, knowledge, subjectivity and social constructs. As a researcher, I have remained mindful of the ideals of objectivity, transparency and trustworthiness. However, the research is also affected by my personal interests, knowledge and resources. In this research, each company's view has to be valorized and it is assumed to be particular to their own experience, context and perspective. A qualitative approach emphasizes the focus on investigating meanings and interpretations in order to discover more about a specific context. The following sections explain the approach and methods I have used to conduct my study.

The research is based on a qualitative research design, as quantitative data is not available due to the recent character of the topic. Quantitative data could for example constitute quantifiable impacts such as CO₂ emission levels, the amount of waste produced et cetera. This kind of study should be done a few years from now, when companies have started implementing the EU-SSCT. However, qualitative data encapsulates ideas, opinions and thoughts of individuals on a topic and are said to benefit studies that focus on understanding processes (Granot et al., 2012). Qualitative research is often about words and their emphasis and meaning rather than quantitative analysis of data. I will build on the theory presented in Chapter Three when interpreting the collected data.

The research has been conducted according to a case study approach. A case study is an in-depth study of one person or group. Its aim is to get learn as much as possible about the situation in order to be generalizable to a larger population (Bryman, 2016). Each interviewee is considered as the representatives of their company, which are the case study under analysis. However, due to constraints of time and resources, an in-depth case study of each company has not been possible as it would have required multiple interviews with staff of each company. Nonetheless, I have proceeded with one-to-one interviews with one leader representing each case, targeting in-depth questions in order to cover as much of the topic in a single interview with each participant. Prior to each interview, I have informed myself about each company through annual reports, website consultation and various articles to get a better knowledge basis before interviewing them.

The objective of case studies is not always to generalize the insights from it to a population (Bryman, 2016), but may be to uncover trends, motivations thoughts and opinion. Case studies can rarely be generalized as they are specific to one individual, group or institution, and therefore may not demonstrate general causal relations. As the phenomena studied are actually happening while the research is done, it is not something that can be replicated nor generalized but can be used to understand more about this type of situation.

A case study approach fits this research, as it allows an in-depth examination of the topic, focusing and collaborating directly with a limited amount of companies' representatives that

can bring a view on their experience with the EU Strategy. The main challenge of this research is to learn as much as possible from one organization regarding their experience, views and action resulting from the establishment of the new EU Strategy in order to establish results that are relevant for other businesses which are seeking to reduce their negative environmental impact. However, the case study approach allows me to collect a sufficient amount of information on recent companies' experiences and views that contribute to the understanding of the EU-SSCT.

It is interesting to look at not only one but several different companies in order to compare them as well as identifying patterns, differences and similarities. The number of interviewees does not answer the generalizability problem but enables me to compare different experiences and responses to the EU Strategy. The assumption is made that there is a possibility of having a different experience of the EU-SSCT based on the company's profile, size and resources (Fu Jia et al., 2020). The companies' profiles and sizes will be discussed in more detail under section 4.4.1.

The data gathering is done at one point in time, which refers to a cross-sectional approach. It is opposite to a longitudinal approach, which gathers information at different point in time. The latter would benefit the research as it allows the analysis of the changes and development in time; however, limitations of time did not allow it.

4.4 Research methods

4.4.1 Selection of cases: Sampling

The population is: every fashion company that sells on the EU market, and is therefore affected by the EU-SSCT. Therefore, not only EU brands have been contacted but also non-EU brands selling on the EU market. There are many categories of fashion brands, none of which has been excluded from the sampling criteria. Some of the major fashion categories are; fast fashion, luxury and sportswear. They offer different types of products, with different price ranges, and target different consumers. It is interesting to examine different brand profiles in order to analyze and interpret potential similarities and divergences between each profile. Respondents, response rate, generalizability. The population and sample of this research are dictated by the nature of the research question. This can be referred as a purposive sampling.

The sampling method is based on a non-probable and non-randomize selection of participants. A non-probability sample is a selection of units of a population that has not been selected randomly/ by chance. It implies that some units were more likely to be selected, this is mainly explained by availability and the resources I had on hand to contact potential participants. Convenience sampling is a form of non-probability/non-randomized sampling approach. I was already in contact with Company A through previous exchanges regarding potential internship at their company. Company B and Company D are the only companies contacted without any prior contact. Finally, Company C was approached through the intermediary of a contact that has previously been working with Company C. This approach is referred as convenience sampling, described as "one that is simply available to the researcher by virtue of its accessibility" (Bryman, 2016, p. 187). Other companies have been selected according to the availability of direct contact tools. As big fashion brands rarely divulge email

addresses, they are not easily reachable. Therefore, email contact has been prioritized when available, LinkedIn message has been used when no email address was found. I have not opted for other contact methods such as calling, as phone numbers were not easily available and companies are located all around the world, which would have generated high costs.

A sample, in academic research, refers to the selection of participants for the study (Bryman, 2016). Different methods of selection suit different types of research. In this research, a non-probable sampling method has been chosen: purposive sampling. In other terms, the researcher is not seeking participants on a random basis but according to their relevance to the research question (Bryman, 2016).

Non-randomized sampling, and moreover convenience sampling, involves question of generalizability and bias. Personal connection with some units of the population has undoubtedly helped me getting their involvement in this research. This leads to problems of generalizability and representativeness of the sample to the population. However, it is not sufficient reason to not perform convenience sampling, as it represented a good opportunity to gather data of quality on the topic of EU-SSCT and respondents have shown great interest in the topic and willingness to share knowledge.

This method has been chosen for strategic reasons, as selected participants show relevance for the research. The sample of participants has been selected according to the following criteria: selected participants are working or are affiliated to a fashion or textile company which will be impacted by the EU-SSCT, is part of a research project or has accomplished studies related to the topic of fashion, textile and sustainability. The participants selected for interviews are working in a department related to CSR or Sustainability. All participants interviewed were Heads of Sustainability, Sustainability Director or CSR Manager of their company. They have been selected as they are the ones with possibly the most knowledge on the EU-SSCT within their company.

The choice of sampling method is justified by the fact that other type of sampling method might be time consuming and lead to unnecessary results. As reaching to a company whose targeted market is located outside of Europe, might not be concerned by the EU Strategy.

But the sampling also made sure to have a variety in some other aspects such as the size of the company, as it is assumed that different size company can have different experiences and views. As well as the location of the company: one company from Switzerland and one from Norway have also been selected, even though those countries are not part of the EU, it is assumed that their experience and views is still relevant, as their market might be within EU and due to the proximity with other EU countries.

Once the sampling method had been chosen, emails and LinkedIn messages were sent to 21 companies, explaining the research and asking for their participation. After a time of one to two weeks, a follow-up email was sent to any contactee that had not responded. Out of 21 companies, 9 companies answered. Those 9 companies have a similarity in their profiles: they are all related to sports, sustainability or outdoor. Out of the 9 companies, Nike's Head of Sustainability rejected the participation, as stating that the company receives a high number of such requests and does not have the time and capacity to accept them. Company J also

rejected the participation, mentioning their premature involvement in the topic of sustainability. Company Q rejected the participation due to overload of work and incapacity to make time for an interview. Companies D, E and F initially agreed to taking part in the research, but later failed to give news, even after follow-up emails.

One important point to address, is the company's profile. A variety of fashion brands have been contacted. Fashion is varied in terms of what different brand can offer. In order to be the most representative, different profiles have been selected; sport brands, outdoor brands, fast fashion brands, slow fashion brands as well as high fashion brands. The companies who agreed on participating to the research have one point in common; they are all sport and outdoor companies. This will be further addressed in the Chapter Five.

Table 1: List of contacted companies, profiles, contact method and responses

	Headquarters	Profile	Market size	Contact	Answer	Participation
Company A	Europe	Sports	Worldwide	Email		
Company B	Scandinavia	Outdoor	Worldwide	Email		
Company C	Switzerland	Sports and outdoor	Worldwide	Email		
Company D	France	Winter sports and lifestyle	Europe/ North America	Email		
Company E	Norway	High fashion	Europe	Email		
Company F	Switzerland	Lifestyle	Switzerland/EU	Email		
Company G	Germany	Accessories	Worldwide	LinkedIn		
Company H	Sweden	Fast Fashion	Worldwide	Email		
Company I	USA	Sports and outdoor	Worldwide	LinkedIn		
Company J	Norway	Outdoor	Worldwide	Email		
Company K	Spain	Fast Fashion	Worldwide	LinkedIn		
Company L	USA	Sport	Worldwide	LinkedIn		
Company M	Spain	Fast Fashion	Worldwide	Email		
Company N	USA	Sport	Worldwide	LinkedIn		
Company O	Germany	Sport	Worldwide	LinkedIn		
Company P	Netherlands	Fast Fashion	Worldwide	LinkedIn		
Company Q	Sweden	Outdoor	Worldwide	Email		
Company R	Norway	Outdoor	Worldwide	Email		
Company S	USA	Sport	Worldwide	LinkedIn		
Company T	USA	Fast Fashion	Worldwide	Email		
Company U	Norway	High and Slow fashion	Norway	LinkedIn		

Source: Companies' Annual Reports, Websites and Interviews

Table 1 provides an overview of the companies that were contacted to be part of this research study. Their headquarters location, profile, market size, and the researcher's mean of contact are listed. The green boxes represent the positive responses, the red boxes represent the negative and non-responses. The hatched-green areas are companies who initially agreed to take part in the research and later did not respond to communication anymore.

Table 2 provides an overview of the companies whose sustainability leaders were interviewed as part of this study. Note that, in accordance with their request for anonymity, Company B's exact headquarters location and company size are not disclosed. More details on the companies can be found in Appendix 3.

Table 2: Company profiles

	Headquarters	Description	Market size	Company size	Sustainability Team Size	Interviewee's position
Company A	Europe	Sportswear	Worldwide	20'000 employees	25 people	Head of Sustainability
Company B	Scandinavia	Outdoor	Worldwide	1'001-5'000 employees	5 people	Sustainability Director
Company C	Switzerland	Sportswear and outdoor	Worldwide	1'100 employees	2 people	CSR Manager
Company D	France	Winter sports and lifestyle	Europe / North America	100 employees	2 people	Sustainability Manager

Source: Companies' Annual Reports, Websites and Interviews

4.4.2 Data collection

Data collection in case studies can take different forms, such as questionnaires, interviews, observations et cetera. This study is primarily based on semi-structured interviews with key stakeholders.

The interview guide (Appendix 1) is constructed according to *A structural guide to in-depth interviewing in business and industrial marketing research* (Granot et al., 2012). Their model suggests to build an interview guide according to three stages that enables the analysis of experiences in their context. The three questions guiding the interview are; 1) "how did you get there?", which refers to past experiences; 2) "what is it like being you?", which refers to their personal experiences; and 3) "what does it mean to you?", which refers to their beliefs and point of view regarding their experience.

A series of questions linked to the three stages as well as to the upcoming implementation of the EU-SSCT was developed. Other general information about the company have been added for contextualization. The interview guide aimed to have a larger number of questions for participants to be able to pick some that they felt better able to answer and potentially leave some out, which they could or would not answer. The suggested interviewing time was 45 minutes. The interview length has been between thirty minutes and one hour, depending on participants' availability. The shorter interview (30 minutes) did not allow as much detail as the others.

The interviews were conducted following research values such as listening actively to the participants, letting the interview flow guide the discussion and not sticking strictly to the interview guide, asking for clarifications when needed and allowing participants time to reflect on the questions.

According to (Granot et al., 2012, p. 3), in-depth interviews advantages are:

Phenomenological ethnographic interviewing enables an understanding of participants' thought processes, values, aspirations, and professional and life stories in context. In-depth interviewing leads to a more conscious awareness of the power of the social and organizational context of people's experience. Interviewing provides a deeper understanding of the issues, structures, processes, and policies that permeate participants' stories. It gives a fuller appreciation of the complexities and difficulties of change.

The insights on companies experiences with the EU Strategy have been gathered through interviews and analyzed under the lenses of various theoretical frameworks.

4.4.3 Triangulation and saturation

Four interviews can be considered as an insufficient amount to reach full saturation. Saturation refers to the point in research when no new or relevant data is emerging from the research interviews (Bryman, 2016, p. 412). However, due to limit of time and resources, it is still relevant to make some observations and reflections in order to draw some cautious conclusions from the data gathered.

Triangulation refers to the use of a second research strategy (in this case, different than interviews), to support findings of the first research strategy. This can be referred as cross-checking of information (Bryman, 2016, p. 386). Triangulation can benefit the research by increasing the confidence in findings from the interviews. However, as mentioned not many triangulation means were available to me as, due to the recentness of the EU-SSCT, data availability is rather low.

Data backing up interviews has been gathered from companies' annual reports, newspaper articles on EU-SSCT and scientific articles on policy implementation in different contexts. Those documents are not part of the analysis in itself but will be included in the background and discussion.

4.4.4 Data analysis

The analysis of the data was performed by doing a content analysis of texts, in this case, the transcripts from the interviews. Transcription of the interviews allow a greater and more structured analysis of their content. The treatment of the data aims to shed light on particular statements from interviewees helping answering the different sub-research questions particular to the context of the EU-SSCT implementation.

The analysis was done in three steps: 1) sampling, or choosing the text elements; 2) coding, a systematic and detailed sorting of the text according to concepts derived from the sub-research questions; and 3) interpretation, identifying themes, patterns and meanings. Each code was assigned a color, and the text was then colored according to each code. I have chosen to perform this task manually, on paper rather than with a software on computer, because this allows deeper consideration and proximity with the text and the topic. Codes

are the foundation of themes, those are patterns within data set, topics or concepts that appear repeatedly. The thematic analysis was reflexive, which means that codes were not made according to the notebook but in a more flexible way. Codes can be changed, added or removed along the work. Codes were not only created before but also during the stage of analysis. Grouping the codes allowed to summarize data in a way to answer research questions and achieve research aim and objectives. The coded data was then analyzed and discussed through the frameworks presented in the Chapter Three.

In a second reading, potential patterns were studied, to see if there were any recurring themes and consistencies or some variations in ideas arising from the interviews to draw some interpretation and conclusions from.

A qualitative analysis of the data was performed by organizing, interpreting and assessing the information in order to find patterns and trends to answer the research question. This step was an exploratory process and allowed examining subjective experiences of the participants. Findings will be discussed in the next chapter.

4.5 Limitations

While the small number of interviews limits the generalizability of the results, the research provides some new insights into the implementation of the EU Strategy in the textile industry. I am satisfied with the number of interviews I have managed to conduct. As a small number allowed me to get stronger and tighter involvement from the interviewees, which would probably not have happened with a large number of interviews. An important consideration is that the companies that agreed on participating in the interview are probably the ones with a greater interest in sustainability, which leads to some bias in my findings. Hearing from less sustainability-oriented companies would have been beneficial in understanding their views on the EU-SSCT, and would probably allow better recommendation to help them navigate a changing world they will eventually have to face. Finally, the interviews will have a degree of bias, as the interviewees are representatives of their company, which will affect their interests and statements.

4.6 Ethical considerations

Regarding the interviews' data, when handling research data with personal information about corporate's companies such as the one interviewed, it is necessary to be precautionary in order not to harm their image. I have followed NMBU's guidelines for Handling Research Data and have notified NSD (Norwegian Centre for Research Data) about my research. A consent letter (Appendix 2) based on NSD's recommendations has been sent to each participant prior the interview. All companies have agreed to the interview being audio-recorded. The recordings were only used for transcription and analysis of the participants answer. Recording of interviews allows better concentration and involvement as an interviewer, as well as a better detailed analysis of the data. Recording can however cause the respondents to distort their answers (Bryman, 2016). Most companies have requested looking at the interview guide before the interview, this request has been accepted. Prior overview on the interview guide helps participants to reflect on their answers for them to be more detailed, it can however

distort them (Bryman, 2016). Company B has asked to stay anonymous. Companies A, C and D have asked for verification before agreeing on their name being shared in the thesis.

Ethical considerations have to be applied on a larger spectrum when researching on the topic of fashion and textiles. As a researcher, I should consider the potential impact of this research on the industry and the companies most importantly in order not to harm their image. In addition, it is important to consider the power dynamics present in the fashion industry. As a researcher and as a reader, it has to be kept in mind that the fashion industry is largely reliant on the exploitation of workers and the planet. The companies interviewed are not exempt from such statement. But this research is made with the hope that policies such as the EU-SSCT will actually, and finally, put an end to exploitative practices. Moreover, many companies rely on greenwashing as a marketing tool to embellish their brand reputation, not only through false advertisement, but this could be done through more subtle ways. For example, through rhetorical discourses from their representatives such as my interviewees. In addition, companies are taking actions aligned with what is expected from them in order to be more sustainable to reinforce their image. CSR, according to (Parguel et al., 2011) is also a mean to achieve greater commercial success for companies.

Chapter 5 Findings and discussion

Corporate perspectives on the EU-Strategy

5.1 Introduction

This chapter presents and discusses my findings on the upcoming implementation of the EU Strategy for Sustainable and Circular Textiles within European fashion companies. The chapter is divided into three sections, each focusing on a specific analytical framework: Environmental Policy Integration, Corporate Dynamic Capabilities and Climate Adaptation as well as Corporate Social Responsibility and Sustainable Business. Each framework is addressed through each sub-research question. The sections are sub-divided according to the different companies' comments, and a final comparison of the four companies concludes each section. The data was gathered through interviews with the Heads of Sustainability, CSR Manager and Sustainability Director of four outdoor and sportswear fashion companies. The analysis provides insights into the leaders' experiences and views on the upcoming implementation of the EU-SSCT, and assesses the extent to which the EU Strategy could become successful in promoting sustainable business model innovation in the textile sector. The chapter discusses the key findings within each analytical framework and draws on the literature to provide a critical analysis of the upcoming implementation of the EU Strategy. The chapter concludes with recommendations for policymakers and stakeholders to improve the effectiveness of the EU Strategy and to promote the transition towards a more sustainable and circular textile industry.

5.2 Environmental Policy Integration

The EPI framework is used in order to answer the sub-question 1 (or 2): *What are the enabling factors and barriers regarding the implementation of the EU Strategy for Sustainable and Circular Textiles?*

This is how I will proceed to analyze interview data under the EPI lens:

- Analyze the interviewees' views on the EU Strategy in terms of its implementation.
- Examine the barriers or challenges perceived by the interviewees in implementing the EU Strategy and how they relate to EPI dimensions.
- Compare and contrast the thoughts of the business leaders on their approach to sustainability and circularity.

5.2.1 Financial barriers

Financial barriers are the economic resource limitations firms experience or foresee regarding the future implementation of the EU Strategy in their activities. EPI will require more administrative work, investment in new technologies and research et cetera (Biesbroek et al., 2013) and will represent a cost for companies.

Companies A (Sportswear company), B (Nordic company) and C (Scott) mentioned the increased amount of work that such regulations could imply. But the amount of work and its cost rely mainly on the extent to which the EU Strategy will be implemented and the character

of the legislation that will follow. Company A and Company B explained concrete examples of what they referred to as the costliest case scenario. The requirements concerning microplastics and Digital Product Passports could for example force the companies to perform many tests and Life Cycle Assessments (LCAs) of their products. Such tasks would require a larger and better skilled workforce and this would increase costs for the companies. Company B stated about microplastic standards: *“Everything on this will be extremely expensive ... if you should test everything of material. So, I hope they take that into consideration as well.”* – Company B

Company A had a similar comment regarding the possible necessity of doing LCAs for each product, stating that *“There might be some complication ... this will create quite a lot of work and also quite a lot of costs”* Company A had a similar view over the potential investments regarding recycling facilities, seeing it as a "cost game", where incentives will be required to create an innovative and sustainable business model. Similarly, company C mentioned that increased costs for companies could be problematic as they could impact consumers financially:

What I've noticed, at least when I do look at all the reports that come out on consumer surveys, sustainability is always very important [...]. They [the consumers] think sustainability is great. However, when it comes to purchasing sustainable [...], price will always be the most important. So sometimes it doesn't matter if you create the most sustainable product: if it is too expensive, people don't care, which is a bit of a pity. – Company C

What is seen as a cost for companies could also impact the consumers, as the products they are buying might increase in price. And as the CSR Manager from Company C mentioned, the financial cost of a product is of high importance for most consumers. However, an increase in product prices would reflect the environmental and social costs of clothing and could push consumers to reflect on their purchases and change their behavior. Moreover, Company D's representative also mentioned how the current system, where raw material is cheaper than recycled material, leads to problematic practices and unreasonably low clothing prices.

Financial barriers may probably arise from different regulations under the EU Strategy implementation. They can affect various stakeholders such as fashion companies and consumers, however, they seem to reflect a fairer system where environmental and social costs are embedded in financial costs.

5.2.2 Cognitive and informational barriers

Cognitive barriers are actors' perceptions of risks and of their own capacity to adapt, as well as their level of knowledge, information or awareness (Biesbroek et al., 2013) about climate change and the EU-SSCT and its potential impacts. Actors show different degrees of knowledge and understanding, which might benefit or hinder their journey towards implementing measures and developing a new organization to comply with the requirements in the EU-SSCT. Some companies demonstrated involvement in how to get easier and better access to information through partnerships and active participation in sustainable forums and arenas. In addition, companies shared insights into their level of willingness to seek, cooperate and act upon the implementation of the EU-SSCT.

All four company representatives showed a rather high level of understanding and enthusiasm regarding the topic of sustainability. Moreover, they all seem to support the implementation of the EU-SSCT, as they recognize the need for such regulations. However, this statement has to be nuanced, as all four interviewees were selected on the criteria of working in the department of their company that deals with sustainability. The four respondents have similar backgrounds, as they have a professional and/or academic background in relation to sustainability and have also shown personal interest in that topic. However, the fact that all the companies have a department working directly on the topic of sustainability represents a certain level of investment by the companies, as other companies might not have such a department. One Head of Sustainability expressed their view on taking measures for sustainability at the European level: *"I will not make a call [as to] whether it's too slow or too fast. I think it's necessary."* – Company A

The first interview question regarding the EU-SSCT was, "How familiar are you with the EU Strategy for Circular and Sustainable Textiles?" The answers ranged from "Haven't heard about it", "have briefly heard", "Have regular updates on it", "directly involved with the EU Commission". Companies A, B and C showed medium to high level of familiarity with the EU Strategy. All of them have been reading through the document announcing the regulations at least a couple of times or have had updates on it through various channels, such as partnerships with organizations that are helping the fashion industry navigate new regulations. Companies A, B and C were well aware of what had been published so far and had a clear expectation about what was still to be shared by the EU Commission. The Head of Sustainability from company A explained:

I'm aware of this strategy. We work with several sustainability organizations and also sort of industry associations such as the FESI [Federation of the European Sporting Goods Industry] and the Sustainable Apparel Coalition. They work on your policy and others. We are looking at the content of this strategy and at the potential regulation that is coming, such as the EU taxonomy or the consumer claims legislation and other legislation. We are observing the development of these policies and legislation and see how we can best prepare the company for those pieces. – Company A

Unlike the three other companies, Company D (based in France) had almost no knowledge about the EU-SSCT, mentioning *"having looked at it from afar"*. However, this can be explained by the fact that such legislation might not impact them as much as other companies, as they may not have to do many changes regarding their practices, since they claim to already comply with most of the upcoming regulations. One example is the Extended Producer Responsibility regulation, which is already in place at the national level in France under a regulation with the same name (Responsabilité Élargie Producteurs – REP). Therefore, the implementation of the Extended Producer Responsibility regulation at a European level might not change much for the French brand.

Furthermore, each actor has referred to the vagueness of the current information on the EU Strategy, which affects their current knowledge about it:

They've given a pretty good overview about what they would like to achieve, but from a company perspective, what's still missing a lot, I think, and it's no fault of the EU Strategy, it's more, kind of the processes and roadmaps that we will have to follow as a company to comply with the different regulations. But it's no fault of the Strategy ... they're writing it, they're developing it as we speak. They're kind of figuring it out.

–Company C

However, Company B highlights that often such policies do not appear suddenly but are developed over a period of time and therefore they should be expected and companies can prepare themselves beforehand. This is even more so due to the increasing awareness of Climate Change and the increasing number of regulations in different sectors. A lack of awareness might be resulting from poor search skills or lack of resources. A company that does not have a team working on the topic of sustainability, may see its level of knowledge affected by it. Company A stated about small companies and how they might be affected from having less resources: *“Many small companies have maybe one person or two persons who are doing everything and there's lots of regulations. [...] for them it will be maybe more difficult to follow the big ones.”* – Company A

To build on that, Company C's statement shows that for companies, periods of uncertainty may come and go, the process is not linear and some phases can be overwhelming. Therefore, it is important for companies to take it into account in their strategies. Those "gaps", according to them, should be seen as part of the process and will be answered with time, as expressed by Company C:

In the next two to three years, there's going to be tons of new regulations and legislations which will impact us. It may feel overwhelming at the time. But then, once those regulations start being kind of sent, enacted, developed, [we] will have a much better understanding of what is required of us as a company: What we will have to achieve, where are our gaps from an internal process. So, at the moment, when you look at it, there's tons of gaps, because unfortunately not tons of things have been written, but as more and more of these kinds of directives and regulations appear and that they get enacted and the Member States say, “this is how it's enacted here, this is the procedure for you to comply [with]”. Then we'll be much better in terms of understanding where our personal gaps are. – Company C

However, despite listing such challenges and having raised some skepticism, companies were mainly positive about the outcome they expected the EU Strategy to lead to:

I think that this new legislation will make it. It will be tough for companies to transform and to make sure that you are compliant. And until now there is still a lot of question marks. But I think in the end that this is something that I'm really looking forward to, to being able to implement better strategy in the companies. – Company B

I have underlined that it is not unexpected to see a good level of knowledge regarding sustainability and the EU Strategy within Sustainability/CSR teams. However, this knowledge might not be generalizable to other departments in fashion companies. Company B and C both highlighted this problem and the necessity of broadening the knowledge to every department of the company. This would enable each department to navigate more

autonomously within their own field in a more sustainable way. But so far, the manager in Company B saw this as “a quite big gap”:

The problem is that within the companies, in regards to sustainability, their expectation of the sustainability team is that they should be knowledgeable about so many things. [...] The sustainability team usually has, like the label that we should be the one that you come to for all the support in those areas instead of educating [for example] our communication teams [about sustainability]. – Company B

I will return to some of these points in the Dynamic Capabilities Analysis, to see if these challenges can be incorporated in companies' activities and strategies. This section has shown that cognitive and informational barriers may appear in regards to the upcoming implementation of the EU Strategy, however, Companies have expressed different procedures on how to minimize challenges and take proactive measures, an important one seems to be increased partnership and cooperation.

5.2.3 Socio-cultural barriers

Socio-cultural barriers include actors' perception of Climate Change according to their beliefs, values and social norms. They may vary from one company to the other, or from one geographical region to the other, and may be linked to the perception that climate adaptation measures such as the EU-SSCT might interfere with their cultural traditions, social relations or identity as a company (Biesbroek et al., 2013). Socio-cultural barriers refer to company's specific values and beliefs linked to their identity or their socio-cultural surroundings. This means there could be some divergences in the views on climate change within companies as well as among actors within their value chains.

Here I address further the specific profile of interviewed companies. The four companies produce clothing, accessories and equipment that are all related to sports and outdoor activities. This is relevant, as during the interviews, they often distinguished themselves from other companies producing lifestyle clothing. Company B and C (both outdoor companies) have put emphasis on their link to nature and the outdoor, differentiating themselves from other companies they might consider as "more fast fashion" companies. Despite not finding proof in the academic literature that outdoor fashion companies are truly more sustainably-oriented than other fashion companies, some factors support us in thinking so. First of all, their marketing strategy, but in addition their mindset supports such arguments:

We're not looking at the same issues as, for example, a fast fashion company whose consumers are looking at them purely for cheap aesthetics. We're quite fortunate to be able to work in that industry, there's Patagonia, there's North Face. We're very fortunate, because they've been pushing this topic [sustainability] forward quite well. And people consume our products because of the performance they bring because they have a connection with the outdoor. – Company C

The question of whether outdoor companies are actually more concerned with sustainability has been discussed in some scientific articles such as *In Patagonia (Clothing): A complicated greenness* by Hepburn (2013). Here, reflecting on greenwashing is important, although I can only comment briefly on this topic within the scope of this research. While Hepburn does not explicitly mention greenwashing, the article suggests that sustainability efforts in the fashion

industry can be difficult to assess and may not always be as practically effective as they appear. This applies as well in the context of this research: as a researcher and as a reader, it is important to bear in mind that greenwashing can be a subtle and complex phenomenon. Companies' comments let us think that they have incorporated sustainable mindsets to a considerable extent and they also see sustainability as a competitive and financial advantage: *"But on the other hand, we also see it as a chance to capitalize on our work in sustainability that we have been doing for the last 20 years."* – Company A. However, the aim of this research is not to uncover the actual sustainability performance of the companies interviewed.

On the other hand, the interviewees from Company A and B see it as a cooperative opportunity rather than merely a competitive one:

This system is somehow not working. I mean it's working for the European countries, but globally it's not very sustainable. It does not improve or support a circular economy, because it's quite linear. It's a problem that needs to be taken care of and it's also a problem that a single company can hardly solve. – Company A

Company D has put the emphasis on the need for such regulations, as they will push companies that are aware but are not willing to change voluntarily. Moreover, companies that were previously hesitant to change due to concerns about losing market share to competitors may now feel a sense of relief, as the policy applies uniformly to all businesses:

Such transformations will never come from the companies. Which actually have no economic interest in doing so. So, we have to force them to. [...] each individual brand can't do much if they stay on their own. On the other hand, collectively, if you have a large economic structure behind you, and who supports the claims and who says "yes, we are ready to be regulated", if everyone plays by the same rules of the game. [...] Everything is played out at the collective level, and the brands I talk to often say "if I transform myself, just me on my side in a system that doesn't change, my competitors will be very happy to take my market share." On the other hand, if we all agree that the system should change. And for there to be more regulation, "then I agree", because everyone will be playing by the same rules. – Company D

Moreover, as we have mentioned, it is not only a matter of 'one company = one mindset', but it is a cooperative work that has to be done throughout the whole company, as internal socio-cultural differences may hinder adaptation to green policies. This can be seen in the case of suppliers having different mindsets than the companies as well as employees within the company:

A big part of it is internal education, so that's something that takes time and is ongoing. You'll have people who will be very averse to the information and it's normal. They've been doing their job for 25 years, they've never had to worry about this and all of a sudden you're telling them, with five years left of their career, that they have to start worrying about this. They don't have the tools or the interest to worry about this, they're often kind of like: "Oh yeah, that's nice", but if they're not personally interested or invested into it, they won't change much and then it's also kind of getting that mindset change [...] But you've seen that switch of mentality throughout all of your different divisions internally, but also with our partners, our production partners.

There's more and more conscious that's been developed everywhere along the supply chain. – Company C

It is even more so as the fashion industry is a highly globalized industry. Such corporation have to handle cultural and moral differences, as well as institutional complexity that are embedded in their network (Baumann-Pauly et al., 2016). This, once more, is a continuous process towards integrating more awareness within the company's network. Here we have seen that competition as well as cultural and social complexity might hinder a company's willingness to adapt and change to new regulations. All four interviewees expressed a certain distance from this mindset and are focusing more on collective action and looking at the benefits from adaptation to climate change. However, such barriers are important to consider as overcoming them is a process that takes time to incorporate.

5.2.4 Institutional barriers

Institutional barriers refer to the obstacles or constraints that prevent companies from adopting new behaviors or practices. They are context-specific, as policies, procedures or situations may differ from one region to the other. Moreover, they are rooted in structures, processes and norms of the institutions involved. These barriers can be related to the lack of appropriate institutional frameworks, policies, or governance for adaptation. These divergences might disadvantage certain companies or actors. In this section, I aim to discern if any institutional barriers to the implementation of the EU Strategy are experienced or perceived by the companies. Company A's Head of Sustainability said:

With any new regulation, there needs to be a transition period. I hope the EU will also consider this transition period. And I also hope that it will lead to a functioning system [...] We see it with the Taxonomy that sometimes the regulation is well meant, but then there are small details that make it kind of almost ridiculous. So hopefully the regulation on the extended producer responsibility and even others from [the] Taxonomy strategy, they will be a little bit more generous in looking at the big picture and not you know getting lost in small detail. – Company A

This quotation from Company A emphasizes the importance for companies that policy-makers implement regulations that are well-functioning in practice and according to the context. Company A refers to a past experience with the implementation of the EU Taxonomy, which classifies economic activities according to a framework determining their sustainability level, and was introduced in 2020 by the EU Commission (EU Commission, 2020). The company had invested in electric cars based on recommendations in the EU Taxonomy. This investment represented a step towards sustainability, however, it has not been accepted, as the legislation stated that the types of tires of these specific cars were too noisy. However, those tires had to be chosen due to the regional context, as they were winter tires, which is needed in the company's geographical location. A similar company, making the same investment but in a different geographical context that does not require winter tires, would have been advantaged from the investment being accepted under the Taxonomy. This shows a kind of injustice and aberration that companies may face when dealing with the institutional framework. Company C's CSR Manager explained the strengths and weaknesses such regulations can lead to:

Regulations like we see here with [the] EU Strategy, is really bad for many things, but it's also really good for many other things. It's bad because it creates this box under which you have to kind of light yourself and you're all like this. However, what's very good is that it's forcing everybody to work on it versus a few: that they will clean up a lot of this vague, unsure communication – Company C

Company C contrasts the benefits and disadvantages that the EU-SSCT may bring, pointing out that practical barriers to implementing it might arise:

[In a few years] we'll have hundreds of companies asking these verification bodies to verify all our claims that we're currently doing. So that first year, where everybody's going to go to these verification bodies, they'll have paperwork flying out of their windows. They'll not know what to do. I think you'll have [the situation] that [it] will be a bottleneck. So you may have a period in time where there will be no more green claims because they haven't been verified. – Company C

This supposition from Company C might be a possible scenario reflecting both an institutional barrier and lack of resources. However, during the implementation stage various practical challenges may arise that neither companies nor the EU Commission could foresee. This is part of any rule-making process and therefore studies such as EPI are done in order to minimize such risks. However, it is important that the regulation is as relevant as possible for achieving results, as argued by the CSR Manager in Company D: *“But that means that in 2030 it has to be the most relevant thing possible, right away. I don't want us to find ourselves talking about the same things in 2030 [at the European level] that we are talking about now for France.”* – (Company D). A similar thought was expressed by Company B, who mentioned the need of harmonization within EU but also within for example the Nordic countries, since different legislation in different countries could potentially slow the process down. This is also applicable at the international level, as the EU-SSCT's goal is to influence the global dynamic.

One therefore needs to bear in mind that the EU Strategy regulations may clash with other regulations in different part of the globe. Processes may be slow as they involve a multitude of stakeholders with potentially divergent interests and priorities. Diverse regulations may also clash as a result from regulatory complexity.

We have now seen some barriers to the implementation of the EU-SSCT according to four leading companies in the outdoor and sportswear sector. In the next section I will address some hypotheses proposed by Runhaar et al. (2014) about the performance and enabling factors of EPI, which may be confirmed or rejected in the statements by interviewees.

5.2.5 Network configuration

Network configuration refers to the fact that external pressure for change might be coming from each actors' specific network, such as pressure from consumers. The performance of EPI can depend on companies' network configuration, which can act as an external pressure for companies to respond to adaptation. Interviewees have enunciated various relevant actors within their networks who exert some sort of pressure on their actions. These actors are partnership organizations, consumers as well as shareholders. Here is an example from Company C's CSR Manager:

For example, if you have to pay 4% of your turnover [as a tax for non-compliance]. Nobody's ready to give 4% and particularly for companies like them [fast fashion companies] who have to respond to shareholders. Their shareholders will not accept their facility having to pay 4%, because that impacts their dividends and their returned income on their investment. – Company C

This reflects how companies' willingness to adapt to Climate Change might be dictated by external pressure coming from various stakeholders. In the interviews, consumers were the actors who were mentioned most often. Other stakeholders such as partnership organizations and investors were also mentioned as putting pressures on fashion companies. Fashion companies themselves can put pressure on other actors such as suppliers to influence them to take sustainable actions. Therefore, companies' networks can be seen as great potential to create a supportive ecosystem to foster sustainable engagement while providing collaborative support.

5.2.6 Hierarchical importance

According to Runhaar et al. (2014), enabling and hindering factors to EPI can be hierarchically classified according to their perceived degree of importance to companies. This can vary according to various factors such as characteristics of actors (environmental awareness), their resources and capacities (size and financial), some institutional factors (who puts the constraint, what is the nature of the relation with actors, modes of governance such as command and control, taxes, incentives et cetera), as well as their activities (what technologies are available). Among the elements from the EPI framework, the financial and resource-based barriers have appeared more often during the interviews, which supports the hypothesis that companies perceive it as an important factor. In addition, companies with a higher level of environmental awareness may be more motivated to overcome barriers to green policy implementation. Similarly, companies with financial resources and capacities may be advantaged to invest in sustainable technologies. Finally, it appears that institutional factors play a significant role, as the relationship between companies and regulatory bodies can impact the companies' willingness to comply. Runhaar et al. (2014) points out at the difference in the nature of regulations and their varied results. Command and control approaches may be seen as a hindering factor. On the contrary, incentives may be enablers of change as they are more supportive governance mechanisms. The next framework, will analyze further some of these hypothesis as Dynamic Capabilities helps to understand how companies navigate and incorporate such factors in their practices.

5.3 Corporate Dynamic Capabilities and Climate Adaptation

This section addresses the sub-research question, *To what extent are the companies' organizational design likely to change with regards to the EU-SSCT?*, and presents an analysis of the Dynamic Capabilities put in place by companies towards Climate Adaptation. I proceed through the following steps:

- Identify the dynamic capabilities mentioned by the interviewees and categorize them according to the three dimensions of sensing, seizing, and transforming.
- Analyze how the dynamic capabilities might be induced by the upcoming implementation of the EU strategy.

- Compare and contrast the dynamic capabilities of the four companies and how they relate to Climate Adaptation

5.3.1 Sensing

The sensing phase represents the initial steps for a company to identify and assess various opportunities for change. This process is usually done by a team dedicated to this task. Respondents explained the different profiles of each sensing team and its tasks (Table 3).

Table 3: Sensing and company information

Characteristics	Company A	Company B	Company C	Company D
Sustainability team size	25 people	5 people	2 people	2 people
Company size (employees)	20'000	1'000-5'000	1'100	100
Tasks	Sustainability reporting, sustainability strategy development, facilities' sustainability, stakeholders dialogue, sustainability representative	Social, environmental and governance	Consultancy and driving forces on sustainability topics for other divisions	Make sure the company conforms with current major issues, focus on two pillars related to energy transition and sobriety, as well as life repair warranty

Source: Interviews

Table 3 shows how companies organize themselves to achieve sustainability goals. A common point of the four companies is that they all have a department working on sustainability, whereas some other companies might not. The size of the sustainability team, the company size and the team's tasks are considered relevant in the context of Dynamic Capabilities as they influence the development and implementation of sustainability initiatives. Large teams may have a broader and superior expertise level but smaller teams may be more agile but have limited resources and abilities. All companies have similar tasks dedicated to their sustainability team, those are mainly working on sustainability governance and strategy development.

Sensing is a continuous process that companies are doing for different kinds of regulations and opportunities. There are no rules on when one should start the sensing process, but an earliest possible start will usually benefit a company (Da Giau et al., 2020; Teece et al., 1997). Sensing capabilities are crucial in the context of environmental policies as they allow companies to stay informed about novelties regarding standards, emerging regulations as well as market trends and customer preferences. By sensing changes, risks and opportunities, companies can anticipate shifts and challenges in order to align their practices to meet new trends.

Company C' explained their experience with the sensing process for the EU-SSCT:

We've had the EU Strategy, like the EU Taxonomy, on the radar now for at least two years, because it's been known since 2021–2022 that they were saying, this is going to be happening. We're always on the lookout for the proposals when they appear, in order to better prepare ourselves. We're always keeping an eye out on that, so that we understand what some of the things we'll have to work on already now, in order not to find ourselves to be uncompliant for whenever these rules get enacted. – Company C

Companies stay alert for any new incoming information, regulation or opportunity. This is seen as an advantage for them to start working on the new regulation as early as possible, in order to be compliant when the policy is enacted.

We see that Company A, the biggest company, has the biggest sustainability team. This may be due to greater financial capabilities but also bigger pressure from consumers, shareholders et cetera. Respondents were asked if they felt any advantage or disadvantage from their size compared to differently sized companies. The Head of Sustainability of Company A answered:

Absolutely. We have a sustainability team with 25 staff. Many small companies have maybe one person or two persons who are doing everything and it's not only this circularity focused regulation, as I said, you know, it's reporting, it's the Corporate Sustainability Reporting directive, supply chain due diligence with the supply chain due diligence directive. There's lots of regulations. For small companies, it will be maybe more difficult to follow than the big ones. Therefore, we also have the industry federations, so they will also have to play a role to on board in the smaller companies and make sure they're not left behind. – Company A

Here again, Company A underlines the importance of partnerships with organizations, especially for smaller companies. We can also notice the collaborative mindset in the industry, which Company B mentioned as well:

Until now the textile industry has been very collaborative, and has been sharing a lot of information in between brands and we quite early on said that we should not be competitors when we are talking sustainability, we can be competitors on the shop floor, but we are open to share our thoughts and how we might do things. In that perspective, we have many good initiatives both on national but also on a global level. – Company B

5.3.2 Seizing

Seizing represents the stage where sustainability teams decide what should be prioritized and what should not. During this stage, companies need to recognize and capture specific opportunities and requirements from regulations as well as understanding what they imply for the company. This depends on various factors, such as the easiness of implementation, the availability of technologies, the degree of external pressure et cetera (Da Giau et al., 2020). As mentioned by Company A: "*There're all sorts of regulation on the EU level, and then there is also regulation on the national level*". Therefore, knowing which ones should be prioritized is important and having a team dedicated to these tasks can be an advantage:

We're fortunate to have a department which is kind of working on this on a daily basis, on sustainability. But there's many other brands or companies that the person doing

sustainability also does product development on the side, so they can't just focus on sustainability. So I can imagine that for them it has to be horribly overwhelming. If you have to do your normal job and then have the CSR job on the side as well. So we're very fortunate as a company to have had this investment for people to be able to work on it full time. – Company C

Da Giau et al. (2020) hold that the seizing stage can be done by someone different than the sensing stage, this is not something that has arisen from the interviews. Moreover, it seems as if this is an aspect that was not much developed in the interviews. This could be due to a lack of questions about it in the interview guide but also due to this particular stage being less relevant compared to the other ones. Additionally, due to the lack of information about how the legislation will be enforced, it is difficult to know yet what will be prioritized within the EU-SSCT. However, it appears that partnerships may play an important role in the sensing stage. Partnerships can facilitate collaborative action, share of resources and knowledge. Collaboration can bring valuable resources of expertise and knowledge to companies when having to seize opportunities as these tasks can be difficult due to regulations' complexity.

5.3.3 Transforming

In the following section, the transforming processes are analyzed, such as the creation of new routines, new resources, partnerships or operations. As this stage has not currently happened, or is only at its beginning, answers from interviewees are mostly about their opinions rather than facts, decisions and action. It can be their vision on how they may transform their internal processes, systems and practices in order to align with the regulations' requirements. This can involve the adoption of new technologies, new business models, new designs as well as the optimization of resource management et cetera.

Just as for the sensing and seizing stages, new partnerships were often referred to by interviewees when speaking about the transforming stage. Increasing partnerships between brands and with different organizations and initiatives is seen as a potential scenario for Company A:

One of the likely scenarios that this kind of regulation will lead to is that the industry comes together, [that] the major players of the industry come together and create a kind of a recycling conglomerate. We already see this happening in Spain with Inditex and some other Spanish players. So that's what we expect, and then there will be potentially new partnerships. – Company A

Other potential transformation cited by interviewees were about recycling facilities, changes in suppliers, increased communication with suppliers but also with different departments in order to increase the overall company's awareness regarding sustainability topics and regulations. The transforming stage requires companies to overcome different barriers and challenges as well as developing new skills and capabilities to adapt. The transforming stage is an ongoing process as new regulations are always coming up. Therefore, managing successful transformation is crucial for companies to navigate the continuously evolving market. This directly refers to the ability of being dynamic.

Company B commented on the pace of the transformative process, expressing that change could be faster in their opinion, which also reflects their vision and knowledge about the

urgency of acting now in answer to Climate Change. Another comment referred to the "waiting time" regarding the further announcements on the EU-SSCT regulations. Despite the waiting time, the company says to be using it as productively as possible. So, even though no actual change in their activities have been made, they are educating their employees in order for them to be ready for the transformative stage. This was also reflected by the interviewees from Companies A and C.

In regards to Company D, however, it appears that no relevant transformative change is expected as a consequence of the EU-SSCT but that it is rather the continuation and improvement of their already initiated activities. Their existing commitment to sustainability may have already led to practices that are aligned to the upcoming regulations. However, it is important to note that even sustainability-oriented companies such as Company D may still need to undergo transformative processes in order to adapt to the potential changes in dynamics within the European market. The extent, pace and nature of the transformation will vary from one company to the other.

Company D also shared his view on why one might not seek to be the fastest but rather accepting going at a slower pace as it may lead to great outcomes:

You have to accept to go at your own pace. And this pace can be more or less fast. But while being fairly honest to yourself, you can't imagine exploding the counters from one year to the next. Through these steps you will still have a more or less rapid and organic growth and profitability from satisfied customers. Your brand image becomes very strong and you don't need each person to buy 25 t-shirts, you need 20 different people to buy only one. – Company D

As mentioned previously, the transformative stage has not occurred yet, and the analysis is therefore incomplete. However, Dynamic Capabilities provide an insight into the role of organizational design, transformative processes and resources management in effectively adapting to climate change. By looking at sensing, seizing and transforming capabilities, I have demonstrated how companies can navigate regulations such as the EU Strategy.

5.4 Corporate Social Responsibility and Sustainable Business Models

This section focuses on the sub-research question: *To what extent is the EU Strategy for Sustainable and Circular Textiles likely to change the fashion industry towards sustainable and circular business models?* This framework has been chosen with the intention to give an overview on how and if the EU-SSCT will lead to Sustainable Business Models (SBM) according to the framework of Corporate Social Responsibility (CSR). However, this section is also based on thoughts and ideas rather than decisions and actions. Therefore, this section only aims to give an overview of potential scenarios that will have to be further studied in the future.

The section is structured as follows:

- Identify the CSR practices mentioned by the interviewees and categorize them according to the dimensions from the framework.
- Examine the challenges and opportunities faced by the interviewees in implementing CSR practices in line with the EU-SSCT and to what extent they relate to SBM dimensions.

- Compare and contrast the perspectives of the four companies and how they relate to their approach to sustainability and circularity.

5.4.1 Clean technology

According to the CSR framework, the use of clean technologies represents a company's full capacity of innovation on green technologies and competences such as recycling facilities and investing in Research and Development (R&D). This is already something that is becoming more common amongst fashion companies, and it is expected to become more important after the implementation of the EU-SSCT regulations. All four companies have started including a certain percentage of recycled fibers in their clothing, and underlined the importance of an increased use of recycled fibers in the interviews. However, they also discussed the main barriers to recycling. The first one being the price of recycling technologies, which hinders their large-scale implementation. Second, they referred to the difficulties of designing garments that are easily recyclable, as discussed in the section 5.2. Interviewees also indicated that companies need to work with external stakeholders, such as technology providers, waste management companies and policymakers, in order to promote sustainable practices and build a circular economy. Regarding clean technologies, the EU-SSCT seems to be helping in the right direction, but the progress will probably depend on the level of incentives to support it.

The French winter sport brand (Company D) shows a substantial integration of clean technology by having incorporated green energies in their operation by sharing costs with other companies: *We are part of a group with other several brands that have decided to share factories, in Taiwan. And these companies co-finance energy audits and improvements actions, to embark each factory on its energy transition.* – Company D. This shared responsibility has allowed them to overcome financial barriers to clean technology investments.

Clean technologies encompass a wide range of solutions upon which companies can act according to their abilities. This requires companies to assess their current practices and identify the areas for improvement and the necessary investments. Adopting clean technologies does not only allow companies to improve their management efficiency but also to save costs and improve their reputation (Borglund et al., 2021).

5.4.2 Pollution prevention

Preventing pollution has to be addressed by companies in order to reduce their harmful impact. This can be done by reusing some of their resources, recycling them and reducing their overall waste, using green energy and cleaner materials. the company, D, the French winter sports brand, explained:

The problem of energy transition is that [of the] supply chain: spinning, weaving, knitting, dyeing, assembly. It's a succession of machines that needs to be powered by electricity. And if it's from coal or gas, it's a bit of a problem. So that's why we talk about energy transition, because having low-carbon sources for electricity is really important. – Company D

Company B underlined that the problem of (microplastic) pollution is not only a problem caused by synthetic fibers, as often believed, but that all textiles shed a certain amount of plastic as well as chemicals, which end up in waterways and oceans. Solutions of this type of pollution come in the form of standards for minimum shredding, which are part of the EU-SSCT. However, as stated by Company B, only targeting the microplastic pollution with the use of standards might not be sufficient to solve the problem of pollution.

Companies A, B and C have not addressed the question of the green energy transition. This correlates with some of the criticisms raised about the EU Strategy on the lack of discourse for strong measures on CO₂ reduction within the EU-SSCT but also in the vision of most companies. However, measures to reduce CO₂ emissions are necessary and urgent according to the last IPCC report, which states that in order to keep within the limit of 1.5°C the emission level of 2019 will have to be reduced by at least 43% by 2030. IPCC experts present a narrow window of opportunity that we have to act within, in order to avoid the worst repercussions of Climate Change (IPCC, 2023). Pollution from the fashion industry is particularly important and most of the garment production stages involve pollution of some sorts: CO₂ emissions, chemical releases, textile waste, et cetera. The implementation of sustainable practices such as eco-friendly and non-toxic materials, cleaner production techniques and more efficient resource management addresses the issue to some extent. However, the fact of producing clothing is problematic in itself and can only be solved meaningfully by reducing the volume of production.

5.4.3 Visions for corporate sustainability

Corporate views and plans for the future should be aligned with sustainability. A company's vision should prioritize innovation, social stability, environmental safeguard as well as economic growth (Borglund et al., 2021). All interviewees have expressed enthusiasm about the vision for the future of their company. It takes many forms, from a wish for a harmonized industry globally, innovative solutions for the future, innovative mindsets both from companies and consumers as well as staying consistent with their current values.

Company C, which has the particularity of producing not only garments but also other goods such as skis and bikes, sees an importance in the role they will be playing in the future, not only regarding their clothing manufacture but as a bike producer, since cycling is a more and more widespread sustainable form of transportation: *“We are very fortunate to produce bicycles, because for a lot of things we're seen as a sustainable solution for the future, like people always see bicycles as a good thing. It's much better selling bicycles than diesel cars right now.”* – Company C

Company D, which stands out from the other companies, as they have built their business communication on values of sustainability, shares its confidence concerning the future of their company's development: *“All the markets tell us that there is still plenty to do. It's going to follow its course smoothly. There is still potential. There's no point in going too fast either. It just has to be done in a smart way.”* – Company D

Since its creation, Company D has communicated values that appear more in line with the definition of sustainability, emphasizing a lifestyle based on sobriety:

A political definition of sobriety is a synonym of degrowth. This means reducing the production and consumption volumes to reduce the ecological footprint. But also, the reduction of inequalities and the increase of well-being. Sobriety is a reduction of the energy need which facilitates the energy transition. If you need less energy to repair a textile, it's sobriety and it will facilitate the exit of fossil energies in the supply chains to switch to renewable energies. [...] This commitment has been since the creation of the brand. – Company D

However, the four companies' business models seem to be based on economic growth, which, according to CSR dimensions, is still considered within practices for sustainable businesses. Sustainable Business Models does not exclude economic growth as long as it is achieved in a way that is environmentally and socially responsible. However, the degrowth paradigm (which Company D advocates for) would see the current model based on economic growth, driven by consumerism and resource exploitation as unsustainable both environmentally and socially.

5.4.4 Product governance

The company should have a clear overview of their product's impact on the environment. This can be done through Life Cycle Assessment, design innovation and transparency within the value chain (Borglund et al., 2021). All four companies expressed the importance of knowing their partners, having people checking their factories as well as testing their products for quality and impact. This suggests a high awareness and level of product governance. Company A and C note that companies that do not have a good overview of production will be disadvantaged when having to comply with the EU-SSCT, as they lack overview and control over their value chain:

As a big company, we have people on the ground. We have staff members in China and Vietnam and Bangladesh, where the factories are. But for a small company, they don't even see their factories now. They work with some agencies. The agencies place the orders to the factories. I think, for them it will be much more challenging. - Company A

The knowledge on market dynamics is also important, in order not to create overproduction: *“Overproduction comes from the fact that you are relying on forecasts, [...] you don't work with absolute data. You really have to try and find ways to be as lean as possible, so that your stock value is never overly burdensome.” - Company C*

However, the upcoming implementation of the EU-SSCT, and an increased obligation of transparency, may lead to communication problems between companies and their suppliers, as explained by Company B:

We know pretty much all of our Tier 2 suppliers. But for them it might be a business advantage if they are working with certain mills. For instance, they don't want to disclose this for us, because then they are thinking that we can go directly to the mill and buy from them instead of buying from the Tier 2 supplier. It would probably take a long time, and you have one barrier, the communication with the suppliers and how you work with them. Then it could be difficult for you to do tracing, for instance. – Company B

This point reflects on how the implementation of a regulation, aiming in improving one area, can affect negatively another area. This example shows that an increase in product

governance may impact negatively the communication between companies and their supplier. Harming such relationship could disrupt good partnerships and trust along the supply chain.

5.4.5 Circularity

Circularity refers to an improved management and conservation of limited resources (Borglund et al., 2021). Circularity is a main focus of the EU-SSCT. We have already addressed some critics that have been raised on the challenges that comes with creating a fully circular economy of the textile industry, which will require a lot of effort, time and funding. All four companies demonstrated a certain level of interest in circularity and recognized its importance. Some of the companies are running pilot tests to become more circular. One problem regarding circularity is the type of products that are manufactured. As all companies interviewed are outdoor and sportswear brands, their products often contain more chemicals such as water repellent products or glues to make the product more durable. Company B mentioned the lack of consideration in this regard by the EU-SSCT when addressing circularity, which could disadvantage their manufacturing process and therefore impact on the quality of their products:

It's a huge difference if you are a fashion brand making shirts, T-shirts and pants or if you are actually an outdoor company making products for people in dangerous situations [...] As an outdoor brand, if you have high quality standards, it's not possible to buy all type of recycled materials. [...] And there is also an obstacle for us as an industry because today, if we look into our most advanced products, that is laminated and they are taped and contain several layers of material. That is something that we probably don't want into textile-to-textile recycling, because it contains glue and other types of chemicals. Because the output of textile-to-textile recycling has to be as pure as possible, and so we don't want to mix in that type of material. – Company B

Getting to a fully circular fashion industry by 2030 may not be possible and seemed like a challenge according to the companies' representatives. This was also a warning in the various criticism of the EU-SSCT that I have discussed. Company C's CSR Manager mentioned about achieving full circularity in the industry: *“These regulations help push towards that. But I think to achieve the goals of 2030 is difficult. I hope for it, but I'll be very amazed.”* – Company C. Company B shared the same viewpoint.

Company D comments shows that achieving circularity shouldn't be the only focus and is only relevant if other actions towards sustainability are taken:

It is necessary to engage in circularity, we are not working only with recycled polyester from plastic bottles, but also from used clothes. So, it's a good example of circularity. But it doesn't say much about your capacity and production volumes and what you do with these products at the end of their life. So, the products of tomorrow will be circular, yes. But they will have to have a low carbon supply chain [...]. And we'll make less of them. That's the three main pillars: circularity, lower production, and use of low-carbon electricity. Circularity cannot compensate for the other two pillars. – Company D

5.4.6 Nudging consumers

Nudging consumers towards buying more environmentally-friendly products is of considerable importance for companies who want to integrate greater CSR within their business model (Borglund et al., 2021). Working towards a sustainable fashion industry cannot be done without consumers' awareness and support. However, company respondents underlined a gap between consumer awareness on sustainability and their consumption actions, which are often unsustainable:

I think the younger generation is a generation that is very much more in tune and aware of the impact on the Earth and the impact their habits have. However, when you look at it, some of the biggest growing companies are companies that push out to them cheap, poorly made products like Shein. So, they [the younger generation] are informed, they are aware. But they still want to consume and be part of it, so this is the hard thing.

– Company C

Therefore, efforts to educate consumers and change their consumption patterns are essential. Company D mentioned the important role of companies marketing, values and services to help directing consumers towards more sustainable choices:

Everyone is connected. The practices of a company influence the consumption choices of its customers. So you can't tell customers to consume less if, on the other hand, prices are always so low, if you always have so many marketing advertisement to consume and if you always have so many discounts to consume. So sobriety is possible on the customers' side, if everything is done on the companies' side to make it desirable and possible. [...] We have to talk about consuming less. But this must be made possible by an offer and practices from the companies. You cannot tell consumers to repair their clothes if there is no service for that. [...] We have to talk about these subjects to the final consumers, not just talk about materials and packaging because everyone knows how to do that. So we have to talk about the real issues that bother people. – Company D

5.4.7 Transparency

Creating more transparent value chains is another core goal for the sustainability management of fashion businesses, and is part of the EU Strategy regulations. Our globalized world has made it harder and harder for firms to deal with diverging regulations across the globe, sometimes benefitting from the situation. Companies interviewed expressed a commitment to being transparent, which is also reflected in several annual reports. They expressed support for transparency and the proposal to introduce a Digital Passport, arguing that they see it as beneficial for both their company and for consumers. Low degree of transparency from a company could hide dubious social and environmental practices. Transparency also empowers consumer on making well-informed decisions on the products they may purchase. This allow them to take decision in accordance with their values and preferences and invest in companies that reflect them. Increased transparency allows companies to be held accountable for their actions and align to consumers' demand for change. All four company representatives seemed to align with these statements.

5.5 Discussion

Overall, the interviews covered most of the elements introduced from the three theoretical frameworks. However, findings rely heavily on company representatives' subjective perspective, and should therefore be interpreted with caution. Although companies have shown interest in the EU-SSCT, and are rather confident in their abilities to be compliant to it, they also mention the considerable challenges that might hinder the transition. The three frameworks have highlighted some points of the EU Strategy that deserve more attention and should be revised in order to have the intended impact.

Company D has for example expressed its solution concerning how to work beyond the EU Strategy requirements by minimizing environmental impacts through life long repair warranty and rental services. Company D are currently pushing their efforts further, as they have mentioned increasing their use of recycled clothing waste instead of recycled PET bottles, which is the most common recycled material used in the fashion industry. Despite being commonly referred to as environmentally friendly, recycled polyester from PET bottles may be misleading. The use of recycled PET bottles takes bottles out of a closed loop system, as they could perfectly well be recycled into PET bottles again (Kimberley van der Wal, 2020). However, taken into the garment system, they will not be recyclable anymore. Therefore, regulations such as standards for a minimum of recycled fibers might lead to more use of PET recycled material from bottles without reducing the impact on the environment. Company D goes further in its commitment by using low-impact dyeing techniques. Additionally, the company supports extensive environmental initiatives and aims to raise awareness about environmental issues through their marketing. Company D's commitment has been recognized as they have been certified as a B Corporation, which is globally regarded as the highest third-party certification for corporate social and environmental performance (B Lab Global, n.d.).

An important missing element from the analysis is ethical sustainability. Ethics are a core concept of CSR. Ethical philosophy is at the basis of a better and more sustainable way for corporates to operate. Increased awareness of environmental and ethical sustainability within firms may be achieved through education (Borglund et al., 2021). Only one question from the interview guide referred to ethics, however, due to the semi-structured nature of the interview, the question was not addressed. This can also be explained by the lack of importance that is given to the topic in the EU-SSCT, as discussed by some criticism of the EU Strategy. However, ethical sustainability appears to be on the agenda of fashion companies, as ethical concerns is a focus of the Annual Reports and websites of all four companies.

This chapter presented the companies' experiences and thoughts regarding the upcoming implementation of the EU-SSCT. The four companies have presented similarities as well as divergences of experiences and thoughts related to their values and profiles. It is particularly interesting to contrast findings regarding a company with a more classic business model, such as Company A, with a company with a more innovative business model such as Company D. Although common ground between the companies has been found, it appears that all the four companies distinguish themselves from a different group of businesses, which are less related to sports and outdoor activities and more focused on lifestyle and aesthetic.

Chapter 6 Conclusion

6.1 Main conclusions

This research has investigated companies' views associated with the future implementation of the EU Strategy for Sustainable and Circular Textiles. Primarily, this has shown some of the potential barriers and enablers for policy implementation that companies see as the most relevant to consider in the case of the EU-SSCT. In addition, it has given examples of how companies organize to adapt to climate change and the EU Strategy. Finally, it has addressed the question of whether such actions are likely to lead towards greater sustainability and circularity in fashion business models by 2030.

Whether the EU-SSCT represents a decisive step towards a sustainable and circular redesign of the fashion and textile industry cannot be answered by a clear 'yes' or 'no'. The EU-SSCT will push the textile and fashion industry on a path to greater sustainability, but only to a certain extent. There are many barriers hindering its implementation, since companies' profiles, journeys and values are varied. Additionally, a harmonized situation will require a lot of time, resources, motivation and cooperation from every stakeholder. Theoretical approaches to sustainable business exist, however, a view of the transition towards a sustainable fashion industry is still lacking.

The first research objective aimed on examining firms' awareness, experiences, practices and views regarding sustainability and the EU-SSCT. Through the analysis of firms' perspectives, it has been demonstrated that there is a variety of experiences, practices and views regarding sustainability and the EU-SSCT. In regards to firms' practices, I have shown that fashion companies which have incorporated sustainability values to a greater extent, feel more confident in regards to complying with the EU-SSCT regulations. Therefore, minimum changes in their practices are planned.

The second research objective, identifying barriers and concerns that affect their implementation of the EU-SSCT has been addressed. Results concluded that financial barriers were the biggest concerns raised by the interviewees when reflecting on the upcoming implementation of the EU-SSCT. These concerns are also supported in the criticism that various researchers and organizations make of the EU-SSCT.

The third research objective aimed on using the finding to evaluate the potential and limitations of the EU Strategy in contributing to reducing the harmful environmental impact of the fashion and textile industry. I applied the concepts of Corporate Social Responsibility and Sustainable Business Models in order to observe any elements that would enlighten us on whether the fashion industry is on the path towards sustainability and circularity. It is difficult to make a claim as to what a sustainable model is or should be, nor on what is the most environmentally friendly way for a business to operate. However, findings show that action is being taken by different stakeholders to work towards a more sustainable and circular future for the fashion industry. However, even though the EU-SSCT has great ambitions, its actual implementation may fail to lead to meaningful changes, stricter measures are needed and an if greater incentives have to be created in order to reduce

harmful environmental impact of the fashion and textile industry in accordance with the EU-SSCT goals.

6.2 Implications

The research has shown how fashion companies are affected by a policy such as the EU Strategy for Sustainable and Circular Textiles and has therefore contributed in opening a field of research on the EU Strategy. It joins various critics such as CHANGE Clothing research, Ohana Public Affairs and Fashion Revolution, who have commented on the weaknesses of the EU-SSCT in the hope of encouraging further studies to understand and improve the EU-SSCT and to raise awareness and sound a call for action by variety of stakeholders.

The findings from this research are relevant for various stakeholders. First, policy makers could learn from this research about the importance of developing solutions to the various barriers to policy implementation. In the context of the EU-SSCT, responding to company concerns about financial barriers may be achieved by ensuring dedicated funding for R&D initiatives. Additionally, this would need to involve the creation of economic incentives that encourage the use of recycled materials and the availability of repair and second-hand services.

The findings imply that fashion and textiles companies are expected to be constantly compliant with the different regulations. However, to make significant impact, the companies are required to act beyond what the EU-SSCT is demanding, for example to cut their CO₂ emissions by decreasing their production levels. Therefore, it is highly important to get to a profitable and widespread system for rental, repair and second-hand services.

Even though the EU-SSCT is mainly targeted towards companies, consumers should be more involved in the journey towards a sustainable and circular fashion industry. Consumers are decisive leverage actors and as the findings have revealed, there should be a greater awareness and educational program targeted towards consumers. According to the saying 'You vote with your wallet', consumers have the opportunity to vote every day through their purchases and their lifestyle choices. Thus, empowering and politicizing the population on the top of fashion and sustainability could have significant impact.

Finally, findings have shown how reliant companies are on various organizations and initiatives helping them in the journey towards sustainability, and this implies that those organizations will have great responsibilities in leading the way and helping the companies, especially the ones that are failing to keep up the pace.

6.3 Recommendations

To address the gaps that are identified in this research, future studies should follow up on the upcoming implementation of the EU-SSCT. Research on the direct impacts are relevant to guide and improve future policies in the fashion industry sector. For the time being, looking deeper into studies on sustainability awareness and involvement of sporting goods brands versus everyday life and aesthetic brands would allow better understanding of the

motivations and capabilities for change among companies, in order to develop clear recommendations for everyday life and aesthetic fashion brands that seem to be lacking behind.

Recommendations for policy-makers and the EU Commission focuses on maximizing their support towards all stakeholders. Allocating resources towards Research and Development and providing incentives for sustainable practices are crucial at an early stage of the EU-SSCT implementation. It is also recommendable to set ambitious targets with strict enforcement, such as limits on CO₂ emissions, taxes on waste as well as established third-party labels and standards.

Business leaders in the fashion industry should comply with the EU-SSCT regulations, however, going beyond minimum requirements is optimal to achieve truly circular and sustainable results. A proactive approach demonstrates genuine commitment to environmental and social awareness and may leverage collaborative partnerships with various stakeholders in order to overcome barriers and challenges. Additionally, some of the Eu Strategy goals that are set for 2030 can only be achieved collectively, such as circularity in the fashion industry.

As consumer, considering the necessity of each purchase and prioritize quality, durability and reparability and seeking brands that show greater environmental and societal awareness over cheap prices and quantity is important. Adopting more environmentally friendly practices in all domains of life can contribute to the reduction of environmental degradation globally. It is also important to proactively educate ourselves and widening our scope of knowledge, for example, by looking at more radical theories on the topic of degrowth business models. A degrowth perspective is valuable as it answers certain gaps that are not tackled fully by the EU-SSCT, such as the actual emission reduction at all stages of a produce life-cycle, reparability and durability, corporates commitment to social and environmental justice et cetera (Khmara & Kronenberg, 2018).

Fortunately, we are now seeing more actors looking for solutions and progressing in the right direction. This study has taken a closer look at some of the fashion companies who have been taking action and are showing support for the implementation of new policies such as the EU-SSCT.

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APPENDICES

APPENDIX 1

INTERVIEW GUIDE
<p>NB: not all questions need to be answered, this is semi-structured interview approach that gives the opportunity to explore and discuss particular themes relevant both for the interviewee and the interviewer.</p>
<p>1. GENERAL INFORMATIONS</p> <ul style="list-style-type: none"> Name, Company, Size of the company, market and products
<p>2. KNOWLEDGE AND THOUGHTS ON EU STRATEGY</p> <ul style="list-style-type: none"> How familiar are you with the EU Strategy for Circular and Sustainable Textiles? (Haven't heard about it, have briefly heard, directly involved with the EU Commission, etc) Are you actively involved in the implementation of the EU Strategy? Why and how? Do you feel like the goals are clear? reachable? What is your opinion on the EU Strategy in terms of sustainable shift? Do you think it does represent a great shift towards a sustainable fashion industry? To which extend do you feel like this is going to make a change? Do you think the shift and transition is adequate, to fast, or too slow? Do you see the EU Strategy as a constraint or as an opportunity? Do you think sustainability and financial performance can go hand in hand? What do you think about the EU Strategy implementation? Do you feel like there are proper accompanying measures in place or does it only set goals?
<p>3. EU STRATEGY IMPLEMENTATION</p> <ul style="list-style-type: none"> Did you try to anticipate the regulations? Do you see early actions as a competitive advantage? How do you envision reaching the EU Strategy goals? Can you describe what has been done so far as part of the Eu goals and what remains to be done, describe your current plans for the implementation of the EU Strategy. Is your organization on track to transition successfully towards a more sustainable business model? Have you set specific targets and milestones? Based on your data, how far are you from achieving your goals? What are the challenges you foresee? How/to which extend do you think the EU Strategy is going to impact/is impacting your company's activities? According to the size of your company, would you say the implementation of such initiative is rather easy, similar or more difficult than other size company? What are some barriers to some of the implementation characteristics of the EU strategy? (financial, informational, cognitive, socio-cultural, institutional) Do you think your partnerships will change, have you looked for new ones, what are the difficulties during this process? how do you dictate your new partnerships? Is it easier to change partnerships or change the agreements within current partnerships? Why? Have you created new partnerships in the last years influenced by the sustainable shift? Do you see them as valuable and profitable? How do you see the respective roles of the EU Commission, Member States, industry, social partners and other stakeholders in this journey?
<p>4. EU STRATEGY GOALS</p> <ul style="list-style-type: none"> <u>Design requirements</u>: Are there any issues/barriers to this point? What has been done so far and remains to be done about this goal? <u>Digital Product Passport</u>: Are there any issues/barriers to this point? What has been done so far and remains to be done about this goal?

- Tackle Greenwashing: Are there any issues/barriers to this point? What has been done so far and remains to be done about this goal?
- Reverse overproduction/consumption: Are there any issues/barriers to this point? What has been done so far and remains to be done about this goal?
- Extended Producer Responsibility: Are there any issues/barriers to this point? What has been done so far and remains to be done about this goal?
- Tackle microplastics: Are there any issues/barriers to this point? What has been done so far and remains to be done about this goal?
- Restrict textile waste exportation: Are there any issues/barriers to this point? What has been done so far and remains to be done about this goal?
- Circular business models: Are there any issues/barriers to this point? What has been done so far and remains to be done about this goal?
- Do you feel like there are gaps, missing points in the Eu Strategy? Which ones?
- Do you think that some goals require more time, funding and/or coordination?

5. PAST SUSTAINABLE ACTIONS

- What have been the biggest achievements for the last years regarding sustainable practices?
- Do you have a green transition plan? what is your transition plan?
- Have you already reached some of the EU Strategy goals so far?
- Are there some sustainable actions that the company took that are not mentioned by the Eu Strategy?

APPENDIX 2

This form is based on a template from the Norwegian Agency for Shared Services in Education and Research (NSD). It intends to inform participants about the project they potentially want to take part in.

Are you interested in taking part in the research project?

“The EU Strategy for Sustainable and Circular Textiles: A decisive approach towards a sustainable and circular redesign of the fashion and textile industry?”

This is an inquiry about participation in a research project where the main purpose is to get a better understanding of firm's motivations, actions and limitations regarding the implementation of the EU Strategy for Sustainable and Circular Textiles. In this letter we will give you information about the purpose of the project and what your participation will involve.

Purpose of the project

This interview is part of a Master thesis carried out in the last year of the Program in International Environmental Studies at the Norwegian University of Life Sciences (NMBU).

The study is to providing updated knowledge about the establishment of the EU Strategy for Circular and Sustainable Textiles within the fashion sector and provides a basis for a better understanding of stakeholder's motivations, actions and challenges regarding the implementation of the EU strategy.

The urgency of developing a new textile industry design has been addressed in the academic world in order to answer the climate crisis we are currently facing. The EU Commission has taken an initiative that could have a global impact in the world of garment production. However, as the exact regulations are still being discussed, it is interesting highlight garment producers' views regarding the announcement of the EU Strategy.

Questions about the EU Strategy includes showing how well it is established, what challenges firms are facing when following the new rules. It will compare the different elements of the strategy with strategies or action already established in some firms. The study will evaluate the potential and limitations of the EU strategy in its application, for example, if businesses are taking different actions than anticipated by the EU Commission or if some regulations are limiting the innovation capacity of the industry. The improved knowledge and understanding concerning the EU Strategy's attempt to put the textile industry on a more environmental path.

Why are you being asked to participate?

The sample of participants has been selected according to the following criteria: selected participants are working or are affiliated to a fashion or textile company which might be impacted by the EU strategy on Sustainable and Circular Textiles, is part of research project or has accomplished studies related to the topic of fashion, textile and sustainability. Each

participant has been reached out personally by email or phone in order to be informed about this project.

What does participation involve for you?

The data collection method is the following: interview. Which consists in a virtual or physical meeting between the interviewee (participant) and interviewer (student in charge of the project), of approximately an hour, or according to the participant's request. Questions about personal data (name, age, company) do not have to be answered if the participant does not wish so. The information sought is related to: sustainable achievements and sustainable goals regarding the production of garments, thoughts, excitement and/or concerns about the EU Strategy implementation, organizational design of the company to pursue green objectives. The interview will be recorded on a sound track and will later be transcript as a word document, with agreement of the participant. The data collected will be used only for the sake of this research project and may be transcribed.

Any other type of documentation relevant for my research that can be shared by the participant will be useful, such as articles, company's annual report, etc.

Participation is voluntary

Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you nor the company you represent if you chose not to participate or later decide to withdraw.

Your personal privacy – how we will store and use your personal data

We will only use your personal data for the purpose(s) specified in this information letter. We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

- The personal data will only be accessible to the student in charge of the project and its supervisor
- Any name and contact details will be anonymised during the writing of the thesis if requested. Those details will be stored in a personal computer from the student in charge of the project and will they will be deleted after a short time.
- Participants can choose whether or not to be recognizable (and their company) in the publication of the project.

What will happen to your personal data at the end of the research project?

The project is scheduled to end on May 15th 2023. Your personal data will then be deleted from the student's personal computer and only the information from the published project will be accessible to the public on Brage (nmbu.brage.unit.no), NMBU's open research archive.

On request, the final paper will be directly sent to the participant by email.

Your rights

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified

- receive a copy of your personal data (data portability), and
- send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?

We will process your personal data based on your consent.

Based on an agreement with the Norwegian University of Life Sciences (NMBU), Data Protection Services has assessed that the processing of personal data in this project is in accordance with data protection legislation.

Where can I find out more?

If you have questions about the project, or want to exercise your rights, contact:

- Norwegian University of Life Sciences (NMBU) via
Liana Kerll - student in charge of this project (liana.kerll@nmbu.no) and
Poul Wisborg - supervisor of this project (poul.wisborg@nmbu.no)
- Our Data Protection Officer: Hanne Pernille Gulbrandsen
- Data Protection Services, by email: (personverntjenester@sikt.no) or by telephone: +47 53 21 15 00.

Yours sincerely,

Liana Kerll

Project Leader

Liana Kerll, Master Student



Supervisor

Poul Wisborg, Associate Professor

I have received and understood information about the project and have been given the opportunity to ask questions. I give consent:

- to participate in an interview
- for information about me/myself to be published in a way that I can be recognised as my function/title for a firm

I give consent for my personal data to be processed until the end date of the project, approx. 15.05.2023

(Signed by participant, date)

APPENDIX 3

COMPANY A
<p>Anonymous</p> <p>Website: -</p> <p>Headquarters: Europe</p> <p>Market: Worldwide</p> <p>Number of employees: ~ 20'000 employees</p> <p>Products: athletic and casual footwear, apparel and accessories</p> <p>Initiatives they have mentioned/ are part of:</p> <ul style="list-style-type: none">• FESI: https://fesi-sport.org• Sustainable Apparel Coalition: https://apparelcoalition.org/blog/why-we-believe-the-european-commission-should-be-fully-committed-to-the-pef/

COMPANY B
<p>Anonymous</p> <p>Website: -</p> <p>Headquarters: Scandinavia</p> <p>Market: Worldwide</p> <p>Number of employees: 1'000-5'000 (exact number is not disclosed for anonymity purposes)</p> <p>Products: Sports and outdoor apparel and accessories</p> <p>Initiatives they have mentioned/ are part of:</p> <ul style="list-style-type: none">• Ohana Public Affair: https://www.ohanapublicaffairs.eu• SFA Learning & Innovation Network: https://sustainablefashionacademy.org/sfa-learning-innovation-network-2023/

COMPANY C

SCOTT Sports

Website: <https://www.scott-sports.com/global/en/>

Headquarters: Switzerland

Market: Worldwide

Number of employees: ~1'100

Products: Sports and outdoor apparel, gears and accessories

Initiatives they have mentioned/ are part of: -

COMPANY D

PICTURE ORGANIC CLOTHING

Website: <https://www.picture-organic-clothing.com/en>

Headquarters: France

Market: Europe and North America

Number of employees: ~100 employees

Products: Winter sports, lifestyle, watersports

Initiatives they have mentioned/ are part of:

- En Mode Climat: <https://www.enmodeclimat.fr>



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