Evidence-based or not?
Investigating Swedish fashion brands'
online sustainability communication practices

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ABSTRACT

The idea of sustainable fashion is becoming increasingly popular within the fashion industry, whilst consumers are seeking information online about brands' sustainability values and impact. This has made online sustainability communication a common practice among fashion brands. However, with the rise of sustainability communication, the risk of greenwashing increases. To tackle this issue, a new directive which is set to ban greenwashing was approved by the European Union in early 2024, creating a need to examine current sustainability communication practices of brands within the Union. Therefore, this thesis studies six Swedish fashion brands' online sustainability communication practices by looking at how sustainability is presented via Instagram posts and websites' sustainability-related pages, whilst further investigating how evidence-based these forms of sustainability communication appear to be. In turn this will help understand what brands should take into consideration to avoid greenwashing accusations. The brands included in the study are fast fashion brands Arket and Cos, premium fashion brands Filippa K and Tiger of Sweden, and sustainably-positioned fashion brands Asket and Nudie Jeans.

To answer the research questions, a qualitative thematic analysis has been conducted on 180 sustainability-related Instagram posts, as well as 62 sustainability-related webpages sampled from the six Swedish fashion brands' official Instagram accounts and websites. The analysis resulted in the discovery of the themes "the environmental impact of fashion", "supply chain developments", "sustainability through improved materials", and "towards circular and slower fashion models". These findings show that Swedish fashion brands present sustainability from a wide perspective covering aspects of environmental, social, and economic sustainability by sharing related efforts, whilst also taking an educational approach to encourage mindful consumption habits. Evidence is presented through explanations, definitions, statistics, time-based goals, and actionable plans, whilst third party confirmations provide the strongest proof. Webpages are noted as the more evidence-based channel, whilst Instagram is more surface-level. However, no brand practices perfect evidence-based sustainability communication as various types of sustainability claims that are either vague, lack proof, or clear substance, in addition to misleading visual elements, are identified as tactics to enhance sustainability on a surface-level. Moreover, evidence is occasionally used to highlight certain accomplishments to avoid showing the full picture. To conclude, this study encourages Swedish fashion brands to review current communicational practices, so that sustainability claims are clearly supported by evidence and appear coherent across online communication channels.

KEYWORDS: *sustainable fashion, sustainability communication, greenwashing, Instagram, sustainability webpages*

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1. Introduction

The fashion industry accounts for up to 8% of the world's greenhouse gas emissions, whilst contributing to environmental destruction, and underperforming in textile workers' treatment (UN Environment Programme, 2023, pp. 6-7). The industry is also known to produce more clothes than it sells, further highlighting an unsustainable production model (Tonti, 2024, para. 2). Despite this, the idea of sustainable fashion is a growing trend with many brands turning to green initiatives (Kaner, 2021, p. 211). This has also led some fashion brands to build their whole existence around sustainable values (Sweet & Wennberg, 2021, p. 4).

The turn towards sustainability has made sustainability communication a common marketing tactic (Cronin et al., 2011, p. 159). Simultaneously, consumers are increasingly looking for information about brands' sustainability values and impact via various digital channels (Merriman & Udiavar, 2023, p. 5). Fashion brands have been found to use several communication channels to bring forward their stance on sustainability, with social media identified as the most popular one (Han et al., 2017, pp. 128-137). Notably, Instagram has been found to be the most optimal channel for fashion brands' sustainability communication, since the visual platforms allows presenting products along with brand values, whilst also engaging a community (Kwon & Lee, 2021, p. 710; Zhao et al., 2022, p. 2). Alongside Instagram, company websites are identified to be popular for sustainability communication (Ott et al., 2016, p. 683). The importance of this communication channel is highlighted, as a survey from 2021 found that 42.7% of consumers opt for fashion brands' webpages when assessing sustainability standards, making this the most popular digital source (Albella et al., 2022, figure 4).

The shift towards sustainability has also brought forward the issue of misleading sustainability communication, as an independent report found that 59% of major global fashion brands present deceptive claims, also known as greenwashing (Trunk et al., 2021, p. 9). Greenwashing can be defined as businesses communicating about their sustainability initiatives in an untrue manner (Becker-Olsen & Potucek, 2013, p. 1318). What makes greenwashing problematic is that it may lead to a decline in consumers' interest and trust towards sustainable products (Naderer et al., 2017, pp. 117-118). Greenwashing has also been described as an unethical marketing practice (Baldassare & Campo, 2016, p. 427). Moreover, what sustainable fashion entails has yet to be defined within the industry, inviting further greenwashing behaviour (Sierra, 2023b, paras. 3-9).

One step towards tackling misleading sustainability claims was recently made as a new directive was approved by the European Union (EU) in February 2024, which is set to ban greenwashing and therefore, make it trickier for brands to communicate about sustainability since presented claims need to be supported by evidence (European Council, 2024, paras. 1-2). These upcoming legislative changes create a need to assess if the sustainability communication of fashion brands currently practising within the EU meet the upcoming standards, making the Swedish fashion industry an

interesting case. The country has a very lucrative and versatile fashion industry, which has successfully expanded to international markets (Sweet & Wennberg, 2021, p. 3). Sweden has also set high goals for being a driver of sustainable fashion innovation (Sweet & Wennberg, 2021, pp. 13-14), whilst often being ranked among the world's top sustainable countries (Environmental Performance Index, 2022, table 1). However, despite Sweden's many claims to sustainability, its fashion industry has not been spared from greenwashing accusations. For example, Sweden's biggest fashion export, H&M, has been accused of greenwashing practices multiple times (Adegeest, 2022, para. 1; Sierra, 2023a, para. 1). This points towards a potential paradox in the sustainability communication of Swedish fashion brands.

Against this background, this thesis sets to examine six Swedish fashion brands' online sustainability communication practices over on their sustainability-related webpages and Instagram in the light of how sustainability is presented, and if the communication is based on evidence considering the new greenwashing regulations. The chosen fashion brands cover three segments, ranging from fast fashion brands Arket and Cos, to premium fashion brands Filippa K and Tiger of Sweden, and sustainability-positioned fashion brands Asket and Nudie Jeans. This brand selection is motivated by getting a wider look into the current state of sustainability communication practices within the Swedish fashion industry. Therefore, to investigate the above-mentioned six brands' online sustainability communication, the following two research questions, followed by one sub-question, are addressed in this study:

> *RQ1: How is sustainability presented by Swedish fashion brands via Instagram posts and on their websites' sustainability-related pages?*

> *RQ2: How evidence-based does the online sustainability communication of Swedish fashion brands appear to be?*

> *SQ1: What should Swedish fashion brands consider in their current online sustainability communication practices to avoid potential greenwashing accusations?*

1.1. Research gap

When looking at the existing academic research, sustainability communication and greenwashing have become popular topics to study in relation to the fashion industry. In the Swedish context, H&M is identified as the most studied Swedish fashion brand within this space (Jestratijevic et al., 2020, p. 8; Kaner, 2021, p. 211; Kim & Oh, 2020, p. 6; Mickelsson et al., 2023, p. 261). This creates a need to expand the scope and study a wider set of brands and their sustainability communication. Notably, Brydges et al. (2022, p. 357) recently conducted research on a broader range of Swedish fashion

brands' sustainability communication practices on social media, websites, and in-store from employee perspectives via anonymous interviews. However, the actual online content of multiple Swedish fashion brands' sustainability communication in relation to greenwashing does not appear to have been researched. Moreover, no previous studies were found to have conducted a combined analysis on this topic from content gathered from both Instagram and sustainability-related webpages even beyond the Swedish realm. Therefore, this thesis will contribute with a unique perspective to the above-identified research gap by investigating how a wide range of Swedish fashion brands are currently communicating about sustainability via their Instagram and sustainability-related webpages, whilst helping to identify potential greenwashing traits in the case that evidence is lacking in presented sustainability claims.

1.2. Structure of thesis

In order to answers the proposed research questions this study takes on a qualitative approach, as the online sustainability communication from the chosen six Swedish fashion brands will be analysed through a thematic analysis. Since this research is structured into multiple parts, the following section introduces the different chapters of the thesis. The second chapter covers the theoretical framework which forms a strong academic and theoretical foundation for investigating Swedish fashion brands' sustainability communication practices. In this chapter important key terms are defined and synthesised in relation to previous literature, as this information will be useful for the operationalisation and data analysis parts, as well as to conclude how previous research aligns with the findings brought forward in this specific case. The third chapter provides an overview and explanations of the methodology used. This chapter acknowledges why a qualitative research approach was chosen. Moreover, the method of thematic analysis, the sampling procedure, and the coding process are described. The fourth chapter presents the final results of the conducted thematic analysis. In this chapter, the results are discussed in thematic sections. This is followed by the fifth, and final chapter, in which the conclusions of the study are presented in relation to the research questions, alongside theoretical and practical implications, as well as limitations and suggestions for future research.

2. Theoretical Framework

2.1. Sustainability and sustainable development goals

Because this study's overall focus is sustainability, this term must first be defined. According to Fischer et al. (2023, p. 17), there is no universally established definition for sustainability. However, a common definition is from 1987 when the United Nations (UN) established that sustainability entails not hurting future generations by overconsuming resources to fulfil current needs (UN, n.d., para. 2). Whilst sustainability itself can be seen as something achieved through long-term goals, the journey happens through steps of sustainable development (Jeronen, 2013, p. 2371). The UN's 17 sustainable development goals (SDGs) are one approach for applying sustainable development. These 17 SDGs were introduced by the UN back in 2015 as a way for the global community to come together to tackle a wide range of issues relating to enhancing the well-being of the planet and its people, alongside reaching global economic prosperity by 2030 (UN, 2023, section Introduction, paras. 1-2).

2.1.1. The Triple Bottom Line

When talking about sustainability in relation to business, Elkington's Triple Bottom Line (TBL) is a popular approach for illustrating this relationship as it takes sustainable business practices beyond environmental factors (Elkington, 2006, p. 523). This model looks at businesses' sustainability practices and reporting through a lens of social, environmental, and economic protection (Elkington, 2006, pp. 523-524). These three spheres are also often referred to as people, planet, and profit or the 3Ps (Slaper & Hall, 2011, p. 4; Sitnikov, 2013, p. 2559). To break down the 3Ps further, people refers to businesses' social impact, including, for example, the welfare of workers and affected communities, planet is about what businesses do within their supply chain to have a smaller impact on the environment, and profit relates to how businesses make a positive impact through economic welfare by, for example, providing employment in communities (Sitnikov, 2013, pp. 2559-2560; Slaper & Hall, 2011, pp. 2-3). Profit also relates to maintaining a profitable business whilst steering away from overproduction and overconsumption (Jeronen, 2013, p. 2374). Errichiello and Zschiesche (2022, p. 18) highlight the importance of the 3Ps being balanced and well-integrated in operations for businesses to be able to claim actual sustainability. This balance is illustrated in Figure 1, which shows how true sustainability is only attainable when the 3Ps align (Iyer-Raniga & Ho, 2020, p. 8; Purvis et al., 2019, p. 682). However, previous research has argued that a balanced sustainability scenario is a rare matter among financially driven businesses (Dyllick & Muff, 2016, p. 170). Moreover, the TBL approach to sustainable business is often only applied on a surface-level through reporting (Sridhar, 2011, pp. 63-64). In relation to this, Elkington (2018, para. 8) himself has criticised the TBL model in recent years, arguing that businesses are only using it as a tool for reporting sustainability, whilst not actually finding a way to balance the 3Ps within their practices. However, to create a theoretical approach for business and sustainability, this study will view this concept from the TBL perspective.
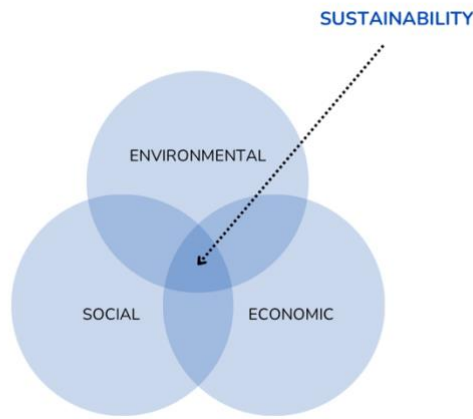
Figure 1: Sustainability through TBL. Adapted from Iyer-Raniga and Ho (2020, p. 8) and Purvis et al. (2019, p. 682).

2.1.2.   Incorporating the SDGs with TBL

According to Singh and Rahman (2021, p. 3), it is beneficial for businesses to link Elkington's 3Ps with UN's 17 SDGs as these are closely intertwined. The researchers developed the so-called TBL-SDGs framework for integrating the two by assigning each goal into the best fitting sphere of TBL depending on the effect they have on social, economic, or environmental issues (Singh & Rahman, 2021, pp. 3-6). For example, SDG13 which is about climate action naturally fits under the sphere related to the environment, whilst SDG8 that looks at decent working conditions and economic growth falls under both the social and economic sphere (Singh & Rahman, 2021, pp. 3-5). Notably, SDG17 is linked to all 3Ps (Singh & Rahman, 2021, pp. 5-6). Figure 2 illustrates in full how the 17 SDGs fall within the framework.

Figure 2: TBL-SDGs framework. Adapted from Singh and Rahman (2021, p. 6).

2.1.3. Drivers for sustainability in business

The push towards incorporating sustainability with business is largely fuelled by consumers becoming attracted to the idea of sustainable consumption (Hammad et al., 2019, p. 538). Moreover, Da Giau et al. (2016, p. 74) explain this by consumers holding businesses accountable for their whole supply chain, as it is not enough that a product is presented as environmentally friendly if the workers are being treated unfairly behind the scenes. Beyond this, Bansal and Roth (2000, p. 724) identified three key drivers for businesses to go green, which are: 1) competitiveness, 2) legitimation, and 3) environmental responsibility. Competitiveness links sustainability to profitability of the business, which in turn motivates businesses to go green to improve their market position (Bansal & Roth, 2000, p. 724). Meanwhile, the driver of legitimation is about businesses following current legislations, whilst environmental responsibility is a genuine drive for going green rooted in the values of the business to do better (Bansal & Roth, 2000, pp. 727-728). Notably, this model falls short in relation to TBL as it only considers the environmental sphere of sustainability. However, it helps understand motivating factors in relation to contexts that steer sustainable business behaviour.

2.2. The fashion industry

Since this thesis is investigating fashion brands' sustainability communication, it is first important to understand how this industry operates, to then be able to position it against the idea of how sustainability is presented by Swedish fashion brands. The fashion industry is part of the textile industry which has a long and complicated supply chain (Niinimäki et al., 2020, p. 190). The supply chain is global and includes multiple steps ranging from farming fibres to producing various textile materials which are used to make the actual garments (Niinimäki et al., 2020, p. 191). This is followed by the distribution and consumption of the garment, and also considers the garment's end-of-life disposal. Niinimäki et al. (2020, pp. 190-191) highlight the fact that each step of the chain has its own impact on the environment because of a variety of reasons such as extensive use of water, chemicals, and energy, manufacturing and shipping emissions, as well as textile waste. Notably, many European fashion brands design their clothes in-house and sell them on the Western market, whilst they often outsource the clothing production to lower-wage countries outside Europe (Blaazer, 2022, section 2, para. 3). This has also been the case within the Swedish fashion industry (Sweet & Wennberg, 2021, p. 16). The outsourcing to lower-wage countries can be related to various problems regarding textile workers' rights ranging from various safety issues, to unfairly long working hours, and not earning a living wage (Sweet & Wennberg, 2021, p. 6).

2.3. Sustainability and fashion

Overall, the fashion industry has been trying to come across as more sustainable in recent times as a response to societal pressure in relation to both environmental and human rights issues (Palm, 2023,

p. 1; Velasco-Molpeceres et al., 2022, p. 1). However, it is debatable whether sustainable fashion is achievable, due to the fashion industry's unsustainable practices within all 3Ps of the TBL model (Bandyopadhyay & Ray, 2020, p. 377; Henninger et al., 2016, p. 411; Niinimäki, 2015, p. 3). Despite this sustainability paradox previous research tries to define what sustainable fashion would entail. Henninger et al. (2016, p. 412) suggest that for fashion to be sustainable it should at least use ethical and sustainable design, follow fair trade and wage practices, meet human rights and working condition standards, avoid harmful substances, and consider environmental issues. However, the definition of what makes fashion sustainable also depends on the viewer, as Henninger et al. (2016, p. 410) found that producers value aspects of local production and sourcing as important components of sustainable fashion, whilst consumers value materials categorised as environmentally friendly. Niinimäki (2015, pp. 4-10) argues that a definition of sustainable fashion should be based on brand values starting with a design that is ethically produced, entailing, for example, animal welfare in relation to materials used or following human rights and fair labour standards. In addition, for fashion to be sustainable the current chemical load in production should be reduced for improved health and safety of both workers and consumers, whilst the focus should also be on more efficient resource use by embracing recycled materials, slower production models, and circularity (Niinimäki, 2015, p. 10).

2.3.1.   Slow fashion

The notion of slowed-down production hints to the idea of slow fashion (Niinimäki, 2015, p. 10). Slow fashion is about slowing down the consumption process, whilst vouching for the longevity of fashion items by producing less to a higher quality (Jung & Jin, 2016, p. 410; Velasco-Molpeceres et al., 2022, p. 1). Therefore, the idea of classic and durable design are often highlighted as slow fashion attributes contributing to a more sustainable take on fashion (Casto & DeLong, 2019, pp. 110-111). This nod towards classic design is also referred to as something timeless, becoming a piece of fashion that does not rely on trends but remains stylish and wearable through various seasons (Casto & DeLong, 2019, p. 111). Daukantienė (2023, p. 999) states that higher quality garments and timeless designs would make fashion more sustainable as it would contribute to reduced fashion waste. To summarise the idea of slow fashion, Jung and Jin (2014, pp. 5-6) describes that it consist of five dimensions: 1) equity through fair trade production practices, 2) authenticity through craftsmanship and traditional production techniques, 3) localism through utilisation of local production and resources, 4) exclusivity through limited production, and 5) functionality through high quality garments that are designed considering aspects of longevity and versatility.

2.3.2.   Circularity

Niinimäki (2015, p. 10) refers to a closed-loop system as the future of fashion, allowing consumers and producers to work together so that no old textiles go to waste but rather get reused.

Hence, circularity is another term that must be discussed when referring to sustainable fashion. The current state of the fashion industry is mostly linear and does not consider the recyclability of clothes (The Sustainable Fashion Forum, 2024, para. 2). For example, within the European market less than 1% of garments are recycled, whilst most end up thrown away in landfills creating textile waste (McKinsey, 2022, para. 2). Therefore, clothing collection and recycling initiatives become important aspects of circular fashion (Daukantienė, 2023, p. 999). Furthermore, Daukantienė, (2023, p. 999) explains that circularity within the fashion industry looks at avoiding textile waste by prolonging the life of clothes through upcycling, reselling, and repairing clothes.

2.3.3. Traceability and transparency

Notions of traceability and transparency are also brought forward as components for reaching a sustainable fashion industry (Garcia-Torres et al., 2022, p. 357; Henninger, 2016, p. 412). Traceability can be defined as having the capability to fully trace a product's background to guarantee its sustainability in relation to areas of the 3Ps (UN Global Compact, 2014, p. 6). Traceability leads to improved transparency as brands can openly share product information to verify sustainability claims to consumers who rely on sustainability records for making informed purchase decisions (UN Global Compact, 2014, p. 20). According to Garcia-Torres et al. (2022, p. 360), traceability and transparency are needed for a more sustainable fashion supply chain, as these components reinforce each other which helps generate better outcomes for sustainability-related practices.

2.3.4. Third party certifications

According to Velasco-Molpeceres et al. (2022, p. 15), third party certifications are the only way to prove sustainability of fashion. These kinds of third party certifications are something brands can apply for themselves, and if granted, they help inform consumers about a specific product's sustainability aspects such as a garment being made with environmentally friendly materials or that the working conditions during the production process have been fair (Koszewska, 2011, pp. 21-22; Oelze, et al., 2020, p. 14). Koszewska (2011, pp. 22-23) calls such product certifications ecological and social labels. In addition to product-specific certifications, various third party organisations offer partnerships for fashion brands as a way to support change on an organisational level rather than only certifying certain aspects of fashion-related products (Koszewska, 2011 p. 24).

2.3.5. Textile & Fashion 2030

In the move towards a more sustainable fashion industry, independent parties have come forward with various initiatives. In the Swedish context, Textile and Fashion 2030 is identified as an important initiative as it is a sustainable fashion program created by the Swedish government in collaboration with University of Borås (Textile & Fashion 2030, n.d., para. 4). The program recommends Swedish

fashion brands to implement the following seven SDGs for a more sustainable industry by 2030: 1) clean water and sanitation (SDG6), 2) decent work and economic growth (SDG8), 3) industry, innovation and infrastructure (SDG9), 4) responsible consumption and production (SDG12), 5) climate action (SDG13), 6) life on land (SDG15), and 7) partnerships for the goals (SDG17) (Textile & Fashion 2030, 2019, p. 5). It should be noted that in relation to this study these seven SDGs form a benchmark standard for identifying sustainable fashion practices among Swedish fashion brands.

SDG6 relates to fashion brands having a water management strategy within their supply chain to reduce water-intensive production and the use of harmful chemicals (Textile & Fashion, 2030, pp. 10-12). Furthermore, it entails that brands educate consumers about how their fashion habits may release chemicals and microplastics into waterways, whilst encouraging them to wash garments less often to save water. SDG8 is about brands adopting new technologies and innovations to guarantee future profitability, developing and implementing circularity, ensuring no modern slavery or forced labour taking place, and guaranteeing that fair working conditions are met (Textile & Fashion 2030, 2019, pp. 13-15). SDG9 relates to brands investing in and supporting research, innovation, and education related to sustainable development within the fashion industry (Textile & Fashion 2030, 2019, pp. 16-19). SDG12 is about brands encouraging sustainable consumption by taking on an educator's role in society (Textile & Fashion 2030, 2019, pp. 19-23). Moreover, it entails developing better products by, for example, considering how materials affect longevity and circularity, ensuring that suppliers handle chemicals and waste correctly, and minimising production emissions. SDG13 concerns how brands through a climate strategy set tangible time-based goals within their production to combat climate change (Textile & Fashion 2030, 2019, pp. 23-25). SDG15 deals with brands assuring that their materials originate from sustainable forestry or organic and regenerative farming, whilst restoring possible harm relating to their production practices (Textile & Fashion 2030, 2019, pp. 26-27). SDG17 is about brands participating in collaborative initiatives to implement sustainable technologies, whilst also openly exchanging knowledge within their supply chain (Textile & Fashion 2030, 2019, pp. 27-29). It also relates to partnerships with businesses, various organisations, or public bodies to facilitate sustainable development within the industry.

2.4. Sustainability communication

Sustainability communication becomes another important concept to define and discuss since this study investigates how Swedish fashion brands communicate about sustainability. According to Brydges et al. (2022, p. 359), sustainability communication is about businesses informing the public about their offerings in relation to the 3Ps of sustainability. Sustainability communication is increasingly used by businesses as a marketing strategy to come across as greener and push environmentally friendly products (Chen et al., 2020, p. 194; Cronin et al., 2011, p. 159; Nemes et al., 2022, p. 1). Relating to this, Thomas (2018, pp. 1532-1533) argues for a more wholesome

sustainability marketing approach that highlights the whole background process related to a product, and not only parts of it, such as specific environmentally friendly aspects. The researcher gives the example of what on the surface looks like a pair of branded jeans is in reality built on a whole chain of environmental, economic, and social implications, which as a whole should be clearly communicated to the consumer (Thomas, 2018, p. 1532).

2.4.1. Three forms of sustainability marketing

Kemper and Ballantine (2019, pp. 284-289) have identified three forms of sustainability marketing: 1) auxiliary sustainability marketing (ASM), 2) reformative sustainability marketing (RSM), and 3) transformative sustainability marketing (TSM). ASM is a competitively focused marketing approach entailing that businesses communicate about the 3Ps in relation to their products through, for example, ecological labels to come across as more sustainable to increase both brand reputation and loyalty (Kemper & Ballantine, 2019, pp. 285-287). Meanwhile, RSM goes beyond ASM as businesses practicing this marketing tactic highlight unsustainable characteristics of current consumerism, whilst they inform consumers about sustainable consumption options by nodding towards an overall sustainable lifestyle, rather than just marketing sustainable products (Kemper & Ballantine, 2019, p. 287). TSM is the most radical marketing approach as businesses practicing this are after real societal change towards a more sustainable reality (Kemper & Ballantine, 2019, p. 289).

2.4.2. Sustainability communication in the fashion context

In the following part, sustainability communication is reviewed in relation to the fashion industry via previous research on fashion brands' sustainability communication via Instagram and sustainability-related webpages, as this study focuses on online sustainability communication performed via these channels. Starting with Instagram, Zhao et al. (2022, pp. 11-12) noticed differences among fashion brands' communicative approaches, as some focused on communicating about eco-friendly materials and slow fashion, whilst others utilised nature-imagery to inform about efforts made to battle fashion-related environmental issues. Similarly, when comparing two sustainably-positioned brands' sustainability communication on Instagram, Milanesi et al. (2022, p. 10) found that one brand showed nature-related images, whilst the other opted for fashion-related images. However, one similarity identified was that the manufacturing process was never portrayed on Instagram by either of the studied brands (Milanesi et al., 2022, p. 11). Another study that investigated differences between Instagram responsibility messaging of fast fashion brands and luxury-positioned fashion brands, noted that fast fashion brands mostly focused on communicating about ethical business practices, such as opting for vegan leather or organic cotton, whilst luxury fashion brands opted to communicate about environmental sustainability issues through educational posts as well as social philanthropy initiatives (Kwon & Lee, 2021, pp. 710-711). Overall, it was found that when fashion

brands shared about environmental causes on Instagram the platform's visual aspects were clearly more utilised in comparison to social causes by, for example, highlighting nature elements (Kwon & Lee, 2021, p. 711).

Moving to sustainability-related webpages, these have been found to be utilised by fashion brands to give a comprehensive overview of the company's sustainability values (Han et al., 2017, p. 142). On a similar note, SanMiguel et al. (2021, p. 18) stated that the website format is ideal for educating consumers about sustainable fashion and influencing them towards more responsible consumption choices. However, Da Giau et al. (2016, p. 84) who studied Italian fashion brands' web-based communication, concluded that there was a trend to mainly communicate about environmental sustainability via websites, whilst the social side of sustainability was often forgotten about.

In the Swedish context, Brydges et al. (2022, p. 365) found that how Swedish fashion brands chose to communicate about and define sustainability was not consistent as it depended on the communication channel. When using social media to communicate about sustainability Instagram was the most popular platform (Brydges et al., 2022, p. 364). However, the brands' sustainability webpages were used to help portray transparency and to provide the most information about brands' sustainability practices, as brands found this particular online communication channel to be a safe space to share more in-depth information (Brydges et al., 2022, p. 366).

2.5. Greenwashing

When discussing sustainability communication greenwashing must also be assessed, as sustainability communication can be used as a ploy for brands to come across as sustainable without putting in the necessary work (Nemes et al., 2022, p. 1). For instance, Baldassarre and Campo (2016, p. 423) describe greenwashing as communication efforts by businesses that are trying to enhance their image by only highlighting positives whilst not disclosing negative matters. The notion of "green" in greenwashing often signals the idea of businesses falsely communicating about their environmental sustainability practices (Nemes et al., 2022, p. 1). However, to further match the sustainable business setting described in this thesis, Seele and Gatti (2017, p. 240) argue for incorporating the full TBL definition of sustainability when researching greenwashing.

2.5.1. The EU directive

When it comes to preventing greenwashing, the goal of the EU's new greenwashing directive is to provide consumers with sustainability information that is clear, relevant, and reliable (European Parliament, 2024, p. 4). Besides preventing brands from using misleading environmental claims, the EU wants the directive to also stop false claims related to social sustainability issues including working conditions, fair wages, human rights, inclusivity, diversity, and animal welfare, in addition to product circularity aspects relating to durability, repairability, and recyclability (European Parliament,

2024, p. 6). What the directive defines as greenwashing is a wide range of misleading information such as: 1) providing environmental claims related to carbon neutrality without relating them to tangible targets or verifying them via a third party, 2) claiming to be "climate neutral" or "carbon positive" by only offsetting emissions, 3) using non-credible sustainability labels that are not based on a verified certification program, and 4) presenting generic environmental claims such as "eco-friendly", "climate friendly", or "biodegradable", in addition to social terms such as "conscious" or "responsible" in an unclear and unconfirmable manner (European Parliament, 2024, pp. 7-14).

2.5.2. Greenwashing within the fashion industry

When it comes to greenwashing practices within the fashion industry, Adamkiewicz et al. (2022, p. 2) states that the pressure to quickly move towards a more sustainable industry has led to shortcuts through greenwashing practices. This entails that fashion brands state that they are sustainable whilst only implementing a small fragment of sustainability in their business to make consumption seem guilt-free, by, for example, coming out with sustainably depicted clothing lines among non-sustainable (Adamkiewicz et al., 2022, p. 2-3). Another example is inviting consumers to bring back old clothes in return for discount vouchers, a contradicting circularity effort that is inviting to further consumption of new clothes (Adamkiewicz et al., 2022, p. 3; Trunk et al., 2023, p. 5). Other identified greenwashing tactics used by fashion brands are, for example, noted to be offering donations as a part of the sale, renaming Black Friday to Green Friday, using images related to nature or social impact, and idealising working conditions by stating "made with love", among other false claims such as "green" or "fair" (Sailer et al., 2022, pp. 8-18). Similar claims have also been noted by other researchers, as Thomas (2008, p. 528) found fashion brands to commonly use words such as "natural" or "eco" which hint at environmental sustainability. These words easily lead to greenwashing since there is no clear standard for how these words can be utilised (Thomas, 2008, p. 528). On the same note, Yan et al. (2012, pp. 151-152) found that fashion brands tend to incorporate vague sustainability terms such as "eco", "green", "natural", "organic", or "sustainable" in their marketing. Moreover, an independent report on greenwashing in the fashion industry found that brands often use vague terms such as "preferred", "sustainably sourced", or "sustainably made" to describe sustainable qualities of materials they opt for (Trunk et al., 2021, p. 8). However, the report concluded that these claims become misleading when used without a clear definition.

2.5.3. Integrated Framework of Greenwashing

Nemes et al. (2022, p. 7) developed the Integrated Framework of Greenwashing to help identify misleading sustainability communication by summarising 13 types of greenwashing claims from the aspects of impact, alignment, and communication. Impact covers five types of greenwashing claims which are selective disclosure, empty or irrelevant claims, and claims that are clearly a lie or lack

credibility (Nemes et al., 2022, Supplementary Table S1). Furthermore, alignment covers four types of greenwashing claims which are related to how well claims made by brands reflect the actual brand, their use of suspicious certifications, as well as claims of environmentally friendliness when a brand is using political power or endorsement in an opposite direction, whilst communication covers another four types of greenwashing claims which are use of misleading symbols, in addition to claims that do not hold any proof, are vague, or contain information that is hard to grasp (Nemes et al., 2022, Supplementary Table S1).

This study focuses on five out of the 13 claims: 1) selective disclosure, which entails that sustainability claims only focus on a small set of sustainability-related attributes to divert attention from the big picture, 2) empty claims, which is when a brand presents sustainability claims as a way to boast its sustainability achievement whilst not being able to fulfil the presented claims, 3) no proof, which means that sustainability claims are presented without verifiable proof, 4) vagueness, which are sustainability claims that are easily misinterpreted as they are not presented clearly enough, and 5) misleading symbols, which entails that visual elements are utilised to create an enhanced and non-accurate sense of sustainability around a brand (Nemes et al., 2022, Supplementary Table S1). The reason this thesis only focuses on these five claim types is motivated by them having traits that are identifiable in the format of the online sustainability channels that this study focuses on. Moreover, features of these five types of claims can be integrated with the EU's greenwashing directive and the greenwashing communication tactics brought forward by previous research presented in the theoretical framework.

3. Methodology

3.1. Research design

This study takes on a qualitative research approach, as it helps bring forward discoveries relating to how different meanings are socially constructed in their natural setting (Flick, 2018, p. 5). By specifically conducting a qualitatively angled analysis on textual and visual content from Swedish fashion brand's online communication channels this approach will allow to bring forward both manifest and latent meanings in the data which in turn reflect a current social reality (Zhang & Wildemuth, 2017, p. 318). Therefore, the qualitative approach is identified to be most useful for gaining better understanding around how Swedish fashion brands are presenting sustainability in their current online communication setting. Furthermore, since this thesis investigates a niche case, the qualitative perspective becomes ideal as it is useful for studying specific cases rather than broader trend patterns, allowing to understand the Swedish context in-depth (Zhang & Wildemuth, 2017, p. 319).

Thematic analysis has been chosen as the qualitative method of analysis for answering the research questions. This method allows for identifying reoccurring patterns, referred to as themes, within a specific data set (Braun & Clarke, 2006, p. 79). These so-called themes are built upon smaller codes that are identified in the analysed data (Byrne, 2022, p. 1399). Therefore, this method will be helpful for analysing Swedish fashion brands' online sustainability communication to identify overarching themes related to how six Swedish fashion brands are presenting sustainability, and how evidence-based their sustainability communication is. Furthermore, this study combines a deductive and inductive approach in the thematic analysis. The deductive approach is based on theory, meaning that previous literature is used as a base for initial concepts that guide the coding process of the analysis (Berg, 2001, as cited in Zhang & Wildemuth, 2017, p. 319). These are presented in the operationalisation part of this chapter (3.3). Meanwhile, the inductive approach allows the researcher to expand beyond the theory by potentially identifying additional codes in the data during the analysis (Zhang & Wildemuth, 2017, p. 319).

3.2. Sampling and data collection

The sample used in this study consist of six Swedish fashion brands' Instagram posts and sustainability-related webpages, listed in Table 1. Content collected from these two online communication channels create an interesting pool of data to analyse in order to gain insights on Swedish fashion brands' sustainability communication practices. This brand selection is motivated by all brands having sustainability-related pages on their website. Each brand also has more than 100k followers on Instagram signalling wide reach. Additionally, the brands fall under three different segments making the sample, and potential sustainability communication approaches, broader. Notably, the following definitions of the three included brand segments were utilised when selecting

the six Swedish fashion brands included in this study. Firstly, fast fashion brands were identified as brands that follow a fast turnover of on-trend clothes sold at a more affordable price (Velasco-Molpeceres et al., 2022, p. 1; Bandyopadhyay & Ray, 2020, p. 377). Secondly, premium fashion brands were identified to fall more towards the luxury spectrum as their selection of clothes fit under a higher price point (Cullumbine, 2023, para. 2). Lastly, sustainably-positioned fashion brands were in this study seen as brands that have built their business foundation around sustainability-related values (Niinimäki, 2015, p. 3).

Table 1

Sample description

Brand name	Brand segment	Instagram (followers)	Website
Arket	Fast fashion brand	@arketofficial (1.3M)	arket.com
Asket	Sustainably-positioned brand	@asket (153k)	asket.com
Cos	Fast fashion brand	@cosstores (3.3M)	cos.com
Filippa K	Premium fashion brand	@filippa_k (275k)	filippa-k.com
Nudie Jeans	Sustainably-positioned brand	@nudiejeans (284k)	nudiejeans.com
Tiger of Sweden	Premium fashion brand	@tigerofsweden (107k)	tigerofsweden.com

3.2.1. Instagram posts

The sample of Instagram posts was collected through purposive sampling from the six brands' official Instagram accounts listed in Table 1. This means that the researcher sampled data identified as most ideal for this specific research case (Robinson, 2014, p. 5244). Several sampling criteria were adopted, and these are clearly disclosed to ensure the transparency of the research (Robinson, 2014, p. 5244). To begin, the Instagram post had to reference sustainability in a way that was easily identifiable by reading the post's caption or via clearly identifiable textual elements or symbols in the image alongside the caption. During the sampling, the idea of sustainability was constantly linked back to the theoretical framework. To give an example, this means that references to sustainability in the form of versatile wear or timeless design were included, as were mentions of ecological or social labels. However, if the connection to sustainability was deemed too vague or unclear the post was excluded. For example, if the post's image included nature elements but had no further mention of sustainability in the caption the relation to sustainability was deemed too weak. In the case of a carousel post that included multiple images, only the very first image of that post was included. This was motivated by keeping the sample size manageable and balanced across all brands, whilst it was also deemed that the first image in a carousel post captured the message that the post conveyed along with its caption. Similarly, in the case of a video post, only the first frame was included as a still image. Therefore, if the sustainability message was not clear enough in the first frame of the video and the post caption did

not contain a clear sustainability reference the video post was excluded from the sample since the full content of a video will not be considered when conducting the analysis.

The sampling procedure also followed a few set exclusion criteria. Firstly, sustainability posts that did not have a clear relation to fashion were excluded. For example, in the case of @arketofficial no posts mentioning Arket café or homeware products were included as these were not seen to have a clear reference to sustainable fashion. Secondly, any reposted or collaborative posts that had a connection to private users were excluded. However, reposted images or collaborative posts from public companies were allowed. Thirdly, if the post mentioned sustainability but featured children in the image, it was excluded due to ethical considerations relating to the protection of minors. Fourthly, since it became clear that brands sometimes post about a specific topic many times in a row in an almost identical way, it was decided that a broader range of sustainability-related posts could be collected by leaving a time span of five days between similar posts. This specific time span was chosen as it was deemed that brands would have had time to post about a wider range of topics over the span of five days. However, in the case that the messaging was clearly different between such posts, if they, for instance, covered various different topics about the same collection, they could be included without the five day time span.

In order to collect the most recent posts from each brand the posts were collected from the newest post starting from the 28th of March 2024 continuing backwards in a chronological order. The sampling was finished for each brand when 30 posts were collected. No specific time limit on how far back the posts could go was deemed necessary as the oldest post included in the sample was posted within the last two years. Following the above criteria, the final sample came to consist of 30 Instagram images per brand, along with their full captions, resulting in a total of 180 Instagram posts. This final amount was deemed broad enough for gaining an understanding around the chosen six brands' sustainability communication practices on Instagram. The sampled posts were saved as screenshots from Instagram's website, rather than the mobile app, in order to fit both the image and caption in one screenshot. These screenshots were then organised into their own maps per brand, to then be stored on an external hard drive and on the researcher's personal computer. See Appendix A for an overview of the full Instagram post sample.

3.2.2. Sustainability-related webpages

The sampling procedure for the sustainability-related webpages was also purposive. The webpages were collected from the official brand websites listed in Table 1. The website data was collected between the 27th of February and the 16thth of April 2024. Several sampling criteria were adopted. In order to define what a sustainability-related webpage entails it was concluded that it was most often found under a link named "Sustainability" as a part of a brand's homepage's header or footer links. However, occasionally the sustainability information was identified under a differently

named link or links on the homepage, which was the case for Arket and Asket. In these cases, these identified sustainability-related webpages were sampled.

The identified sustainability-related webpages also consisted of sub-pages that occasionally linked to additional related sub-pages. Sub-pages were included in the sample if they were used to inform further about a brand's sustainability practices. Since brands were identified to use multiple sub-pages for their sustainability communication, no more than 15 pages per brand were included in the sample. This amount was deemed to give a comprehensive overview of each brands' web-based sustainability communication. To clearly restrict the sample size any sub-page that was deemed not to provide deep enough information about the brand's own sustainability practices or did not show a clear enough connection to sustainable fashion practices was excluded from the sample. In addition, higher rank sub-pages were favoured over lower rank sub-pages in the sampling as these were deemed to provide the most important information. Moreover, any downloadable materials that the webpages linked to were excluded. This was motivated by the fact that this study looks at how fashion brands communicate about sustainability on their websites rather than via downloadable materials such as sustainability reports. It should also be noted that not all brands provided downloadable materials on their sustainability-related webpages, which would have made the sample inconsistent if these were only included for some.

The final sample came to consist of 62 sustainability-related webpages, and these were divided between the six brands the following way: Arket 12 pages, Asket 12 pages, Cos 15 pages, Filippa K 3 pages, Nudie Jeans 10 pages, and Tiger of Sweden 10 pages. The sampled webpages were saved as PDFs, which were then organised into branded maps. These maps were then stored on the researcher's personal computer. However, a copy of the sample was also placed onto an external hard drive. It is important to note that in the case that a webpage included fold-out sections that could not be captured in the initial PDF file, these were separately captured as screenshots and placed into a new PDF file. This was done for Cos and Filippa K. In addition, when it came to Asket and Arket, material information from various sub-pages was collected as additional screenshots. This is because the two brands' website structures provided separate sub-pages for their material-related information, whilst other brands provide this information via one page. Leaving this information out for Asket and Arket would have made the sample unbalanced in relation to the content from sustainability-related webpages that had been collected from the other brands. Therefore, the material-related texts were collected as screenshots and gathered into separate PDFs to work as a supplement for both brands' pages referring to materials. These four additional PDF files are not included towards the final webpage sample count but work as supplemental material in the data analysis. See Appendix B for a full overview of the sampled webpages.

3.2.3. Ethical considerations

Ethics have been considered during the sampling procedure, as well as during the processing of the data. First and foremost, the protection of minors has been acknowledged. This is because some Instagram posts related to sustainability were noted to feature children and these were left out from the sample as it was deemed unethical to include them. In two instances, the sustainability-related webpages also contained images of children, and these have been hidden by the researcher when processing the data before analysis. The privacy of private individuals has also been considered. Since brands occasionally share private users' images along with usernames on Instagram the sampling criteria of not including any reposted images from such user accounts was deemed necessary to avoid potential privacy issues. Privacy issues were further tackled during the processing of the data by covering any visible usernames that were shown in the likes or comments in the Instagram screenshots. If private usernames were included in a brand's Instagram post caption, such as accounts of models, photographers, or makeup artists, these were also hidden, to avoid potential identification of individuals that would challenge their right to privacy. Similarly, names of employees and designers were covered if they were mentioned in any of the sampled material, including webpages. However, names of CEOs, company founders, or celebrities have been left in the data since these are considered public figures. Since the sample consists of data shared by public brands and is freely accessible online, no further ethical considerations in relation to the brands themselves were deemed necessary. However, all six brands and the collected data related to them have been assessed in a respectful manner throughout this thesis.

3.3. Operationalisation

To create a clear foundation for the data analysis, important concepts from the theoretical framework are operationalised in this section. To begin, it should be established that this study approaches sustainability from the TBL perspective (Elkinton, 2006, pp. 523-524; Slaper & Hall, 2011, p. 4; Sitnikov, 2013, p. 2559). Building on this, the concept of sustainable fashion in relation to Swedish fashion brands' sustainability communication has been operationalised by using Textile & Fashion 2030's (2019, pp. 10-29) seven chosen SDGs. To clearly structure these seven SDGs, Singh and Rahman's (2021, p. 6) categorisation of SDGs in relation to TBL has been utilised, placing SDG6 under people and planet, SDG8 and SDG12 under people and profit, SDG9 under profit, and SDG13 and SDG15 under planet, whilst SDG17 covers all 3Ps. Textile & Fashion 2030's approach to sustainable fashion in relation to the TBL model has been expanded with the help of concepts introduced in the theoretical framework in relation to sustainable fashion. These have been intertwined within the seven chosen SDGs to broaden the analysis in relation to Swedish fashion brands' sustainability communication. This modified framework for operationalising sustainable fashion created a structural base for identifying how the six brands present sustainability via their online sustainability communication, and if some aspects are missing in relation to the 3Ps. Appendix C

includes the full operationalisation framework used for identifying sustainable fashion indicators in Swedish fashion brands' online sustainability communication.

Greenwashing is another important concept that has been operationalised to help understand if Swedish fashion brands' sustainability communication is evidence-based or has traits of potential greenwashing. Following Seele and Gatti (2017, p. 240), greenwashing has been viewed in relation to the full TBL, not just the traditional idea of "green" that relates to the environmental aspect of sustainability (Nemes et al., 2022, p. 1). Five earlier introduced greenwashing themes from Nemes et al.'s (2022, Supplementary Table S1) greenwashing framework have been used for assessing if greenwashing traits are present in the brands' online sustainability communication, and they are the following: 1) selective disclosure, 2) empty claims, 3) no proof, 4) vagueness, and 5) misleading symbols. These five greenwashing themes have been integrated with greenwashing claims brought forward in the EU directive (European Parliament, 2024, pp. 6-14). In addition, greenwashing behaviour identified by previous research and independent rapports presented in the theoretical framework have been used to complement the greenwashing framework. The full operationalisation framework for identifying greenwashing is presented in Appendix D.

3.4. Data analysis

The collected data has been analysed in-depth following Braun and Clarke's (2006) six phases of thematic analysis to help find potential overlapping themes within the Swedish fashion brands' Instagram posts and sustainability-related webpages. Braun and Clarke (2006, p. 86) note that data analysis is not a linear process, which has allowed movement back and forth between the steps of thematic analysis whenever deemed necessary.

The first phase in the chosen approach to thematic analysis is about data familiarisation and initial note-taking (Braun & Clarke, 2006, p. 87). Therefore, some time was dedicated to going through the full data set and noting down initial discoveries and ideas. Followed by this, the second phase is about coding the data systematically to identify important smaller segments that in a later stage of the analysis become the foundation of broader themes (Braun & Clarke, 2006, p. 88). At this point, all the gathered data was analysed thoroughly to allow the discovery of various codes and assessing if and how these could be applied across the full data set. The coding was performed with the help of the coding software MAXQDA (v2024, Verbi Software GmbH). Alongside this, a Word-document was created as a codebook to create an easy overview of the project. For the Instagram posts included in the data set both the image and caption were assessed for potential codes, whereas in the case of webpages all elements of the page were considered. The coding was initially structured after categories of people, planet, and profit, in addition greenwashing traits were placed under their own category. This coding approach followed the operationalisation framework (3.3). However, some flexibility was allowed as codes that did not perfectly fit into these set categories or did not match set

criteria were also identified. Moreover, some codes were identified to be overlapping and cover various SDGs. The coding was done in multiple rounds so that it would be as comprehensive and detailed as possible. For example, in the case that a code was identified at a later stage, it would also be compared against the already previously coded material.

The third phase of thematic analysis is about examining the initial list of generated codes further to see if they can be grouped into sub-themes or larger main themes (Braun & Clarke, 2006, p. 89). At this point, repetitions formed a good baseline for identifying themes, whilst also helping identify whether any clear contrasts or similarities had emerged (Ryan & Bernard, 2003, pp. 100-102). During this stage of the data analysis, all identified codes were closely examined. The codes that were identified to relate to each other were grouped under broader sub-themes, which then in turn were grouped under broader main themes. This was followed by the fourth phase of thematic analysis. At this point themes that have been created during the third phase are reviewed further and needed changes and clarifications can be made resulting in a thematic map (Braun & Clarke, 2006, pp. 91-92). Therefore, the list of main themes and sub-themes that had been generated were reviewed and reworked in order to confirm that the identified themes made sense and resulted in a cohesive whole. These were then placed into a table to generate a complete overview resulting in a thematic map consisting of 97 individual codes which were categorised under 12 sub-themes, and four broader main themes. After this, the fifth phase of thematic analysis allows the researcher to keep refining and defining the themes in order to make final improvements and giving the themes their final descriptive names (Braun & Clarke, 2006, pp. 92-93). This phase resulted in the final version of the thematic map found in Appendix E. The final, and sixth phase, of thematic analysis summarises the process and produces a clear analytical report (Braun & Clarke, 2006, p. 93). This report is presented in Chapter 4.

3.5. Validity and reliability

The validity and reliability of this thesis are acknowledged, as these relate to the trustworthiness, accuracy, and quality of the conducted research (Golafshani, 2003, p. 604). It should be made clear that in qualitative research the results are based on the researcher's interpretation. Therefore, the reliability of this study has been improved by ensuring transparency of the research by describing the research process openly ranging from the theoretical background to method and data analysis (Silverman, 2011, p. 361). When it comes to validity, Johnson (1997, p. 282) acknowledges that this is often risked in qualitative research by researcher bias due to its explorative nature and lack of structure. Therefore, it is important to practice reflexivity because how the researcher of this study views the reality may differ from someone else due to, for example, the personal background of the researcher. By practising reflexivity, a more critical and non-biased approach to the data analysis and interpretation of findings has been possible (Johnson, 1997, p. 284).

4. Results

The thematic analysis performed on 180 Instagram posts and 62 sustainability-related webpages from six Swedish fashion brands resulted in the discovery of four main themes: 1) the environmental impact of fashion, 2) supply chain developments, 3) sustainability through improved materials, and 4) towards slower and circular fashion models. These themes are discussed more in-depth in the sections below through related sub-themes.

4.1. The environmental impact of fashion

The first theme captures that Swedish fashion brands are including an environmental focus when presenting sustainability. This theme is divided into three sub-themes: 1) towards reduced environmental impact, 2) educating consumers about environmental impact, and 3) enhancing environmentally friendliness. Because this theme captures the environmental side of sustainability it is strongly connected to the environmental sphere of TBL and the related codes are mostly placed under planet aspects of SDG6, SDG13, SDG15, and SDG17. However, some codes in relation to the sub-theme "towards reduced environmental impact" touches on SDG12 (profit), whilst "educating consumers about environmental impact" also brings in aspects of SDG6 (people) and SDG12 (people).

4.1.1. Towards reduced environmental impact

Swedish fashion brands present environmental sustainability through notions of being aware of their environmental impact. This sub-theme is identified to be mostly covered via the brands' webpages, where their environmental impact is most frequently highlighted through emissions. Most brands share that the majority of their emissions are released during the production phase. For example, Cos (2024f) states: "We know that the biggest impact takes place in relation to raw materials and production" (para. 4). However, only Filippa K and Nudie Jeans provide current emissions numbers, showcasing that these brands are currently measuring and tracking their full supply chain emissions (Textile & Fashion 2030, 2019, pp. 24-25). For example, Filippa K (2024b, section 4.2, para. 2) shares emission numbers from 2022, alongside percentages of where in the supply chain these emissions originated from (Figure 3). Emissions are further acknowledged by brands through time-based reduction goals, alongside actionable reduction strategies (Textile & Fashion, 2030, 2019, pp. 22-25). For example, Filippa K (2024b, section 4.1, para. 1) presents time-based emission goals for 2030 based on EU directives. Meanwhile, Nudie Jeans (2024b, section How We've Calculated our Emissions, paras. 10-13) and Tiger of Sweden (2024f, section Our Commitments, para. 1) are set to follow a 1.5-degree pathway. The two brands have also entered a third party partnership with Swedish Textile Initiative to help them meet this standard, providing more trusted support to their claims (Koszewska, 2011, pp. 24). Cos (2024f, para. 3) brings forward the highest emission goal with a

reduction of 56% by 2030. However, the brand stays humble in its ambition and has identified the biggest source of its emissions showing clear strategical focus:

> We know this will not happen overnight for a company of our size, but we are committed to achieving this goal . . . . We know that the biggest impact takes place in relation to raw materials and production, which is why we work closely with our suppliers to identify better solutions in the manufacturing process. (Cos, 2024f, paras. 3-4)

Beyond emissions, environmental impact is further acknowledged through water intensive production and identified solutions (Textile & Fashion 2030, 2019, pp. 10-12). Nudie Jeans is the only one sharing current water usage numbers (Figure 4). The brand also informs about water reduction strategies by, for example, stating: "We see a rapid development of water-saving methods and technologies at our suppliers. The use of laser technology to create a washed look is a very effective substitute for hand-scraping and classical water washes." (Nudie Jeans, 2024a, section Water, para. 4). However, fast fashion brands also mention working with producers who have invested in water-saving technologies which, for example, Cos (2024c) in one instance presents as such: "Its most celebrated innovation to date is growing cotton in climate-controlled greenhouse environments, which uses up to 80% less water" (section Materra, para. 1). In relation to water use, chemical's impact on the environment is also noted by Nudie Jeans (2024a, paras. 1-4) who has a sub-page dedicated to the topic where the brand shares information about introducing proper chemical handling procedures and wastewater systems in its production chain as solutions to reduce chemical pollution (Textile & Fashion 2030, 2019, pp. 10-21). Filippa K (2024b, section 4.3, Chemicals fold-out) also acknowledges chemicals, noting that the brand complies with international chemical laws and certification standards, signalling clear proof for these claims (Koszewska, 2011, pp. 22-23; Velasco-Morpetz, 2022, p. 15). Beyond this, brands tackle chemical reduction through a material focus, which is covered in theme 4.3.
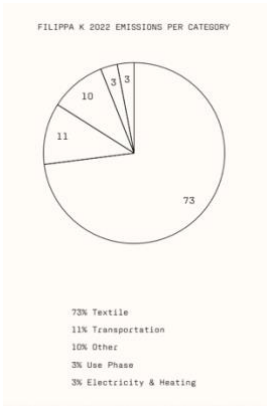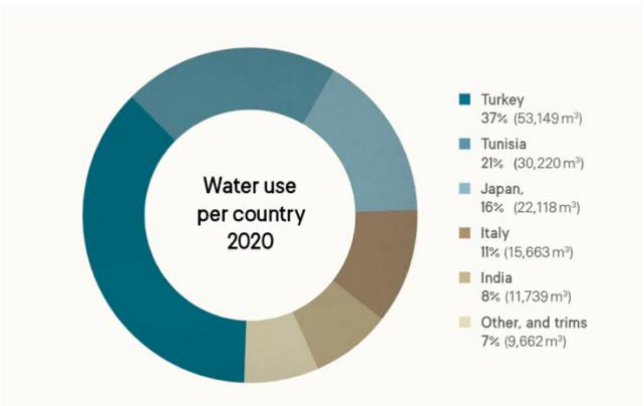

Figure 3: Filippa K (2024)   Figure 4: Nudie Jeans (2024a)

Lastly, efforts to improv soil health and increasing biodiversity by opting for organic and regenerative farming are brought forward in relation to reducing environmental impact (Textile & Fashion 2030, 2019, pp. 26-27). However, there are no clear indicators of at what stage this work is at, as these aspects are mentioned mostly in relation to materials such as cotton, see theme 4.3. Nevertheless, for example, Filippa K (2024b, section 2.5, Certification fold-outs) presents third party ecological labels as a solution to guarantee that appropriate farming methods have been used. Similarly, Nudie Jeans (2024d, para. 2) confirms organic farming through certifications that relate to both soil health and biodiversity. These third party labels signal more certainty around made improvements (Koszewska, 2011, pp. 22-24; Velasco-Molpeceres, 2022, p. 15).

4.1.2. Educating consumers about environmental impact

The above sub-theme is closely intertwined with Swedish fashion brands taking an educational approach when communicating about environmental impact, signalling communication tactics that push for change (Kemper & Ballatine, 2019, p. 287). This sub-theme is also most present in the web-based communication where all brands raise consumers' awareness towards more sustainable fashion habits by informing them about the fashion industry's heavy toll on the environment (Textile & Fashion 2030, 2019, p. 20). For example, Asket (2024i) shares the following statistics: "The fashion industry produces over 100 billion garments, per year. Depleting irrevocable natural resources. Discharging pollution into our air, land and waters. It's accountable for 10% of global greenhouse gases. By 2030, it's projected to grow another 50%." (para. 1). Sustainably-positioned fashion brands also bring this educational approach of the industry's environmental impact to their Instagram. Nudie Jeans shares about the issue of textile waste, as a total of seven post relating to the matter are identified in which the brand informs about the issue through short but captivating punchlines (Figure 5). Asket also informs about this issue by sharing relevant statistics (Figure 6).
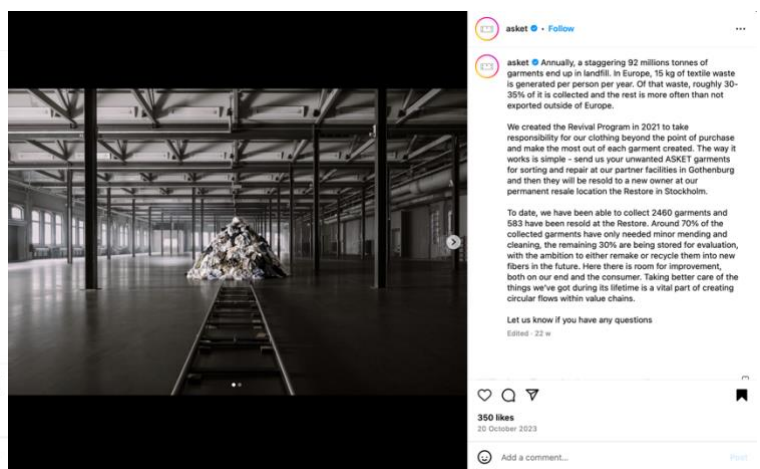

Figure 5: Nudie Jeans (2023e)

Figure 6: Asket (2023a)

Besides educating about the industry's impact, consumers' own impact is also highlighted by giving information about changes that can be made to everyday behaviour. Most brands provide consumers with washing guidelines recommending washing clothes less often and using colder water for a reduced environmental toll as a way to improve consumer's washing-related habits (Textile & Fashion, 2030, pp. 11-12). For instance, Tiger of Sweden (2024c, section Our Partners, para. 4) utilises third party guidelines by Clevercare to inform about better washing practices, whilst Asket provides a detailed chart that shows impact numbers based on specific washing scenarios (Figure 7). Brands from all three segments are also noted to provide consumers with information regarding microplastics shredding from synthetic garments and how consumers can minimise the release of these during washing, showcasing that brands want to help consumers tackle water pollution-related issues (Textile & Fashion 2030, 2019, p. 9).

Figure 7: Asket (2024c)

Beyond this, Asket (2024i, para. 2) has created the educational concept of "impact receipt" which lists emissions, water, and energy used in relation to the garments purchased from the brand as a way to raise consumers' awareness around the true impact of the clothes that they buy. On Instagram, six posts are also identified to cover the topic in an educational manner through impact numbers comparable to real-life scenarios (Figures 8-9). These impact-related numbers are calculated together with a third party partner, signalling reliability. Moreover, this concept showcases that Asket wants to help consumers make better informed choices when buying new clothes (Textile & Fashion 2030, 2019, p. 22). Whilst not as extensive, Cos and Nudie Jeans have also introduced similar educational approaches. For instance, Nudie Jeans (2024b, section How We've Calculated Emissions, paras. 1-2) currently shares emission and water use data related to the production for each of their garments.
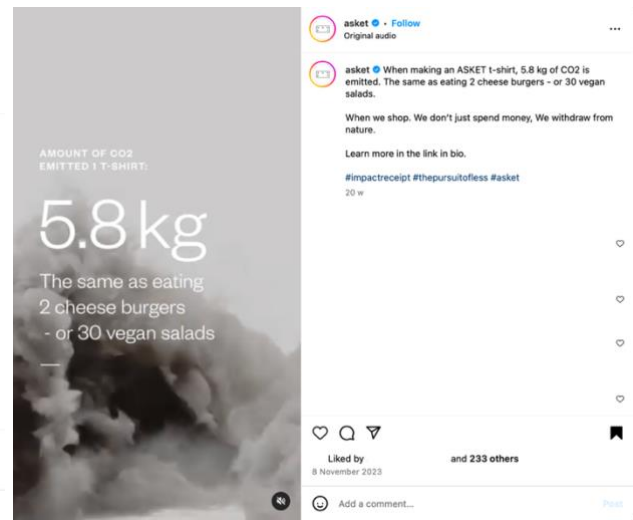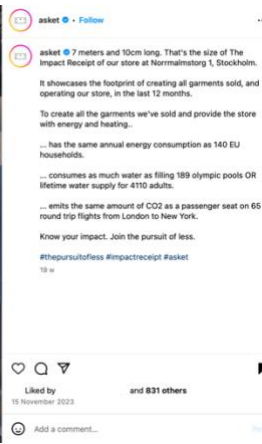
Figure 8: Asket (2023e)

Figure 9: Asket (2023c)

4.1.3. Enhancing environmentally friendliness

Whilst all Swedish fashion brands acknowledge that the fashion industry is problematic due to its environmental impact, some communicational tactics are noted to enhance brands' environmentally friendly image without substantial evidence. Firstly, communication surrounding carbon offsetting must be touched upon as both Nudie Jeans and Tiger of Sweden mention it in relation to their emission reduction strategies. Impressively, neither claim "carbon neutrality", which would be linked to greenwashing efforts within the new EU directive (European Parliament, 2024, p. 14). Nudie Jeans (2024b) even backs up its stance by stating: "We do not believe nice words will do the trick for the climate; we believe in working toward change. Therefore, we do not talk about being climate neutral or climate positive through carbon offsetting." (section Climate Neutral or Climate Positive, para. 1). However, the problem arises with Tiger of Sweden (2024b) showcasing carbon offsetting as its main strategy for emission reduction through the statement: "Today we use carbon offsetting to be able to cover for emissions which we cannot fully eliminate. Tomorrow, we need to focus fully on not releasing emissions in the first place." (para. 3). Whilst the brand does have a time-based goal for emission reduction, this statement comes across as an empty environmental claim as it seems that emission-free production is not a current worry of the brand and that work towards it can be pushed to a later moment (Nemes, et al., 2022, Supplementary Table S1).

Secondly, brands make general environmental claims in their web-based communication, despite having room to go more in-depth via this channel as the two sub-themes above show. For example, Cos (2024c) states that a supplier's manufacturing methods are "more planet-friendly" (section Manteco, para. 1). Meanwhile, for instance, Tiger of Sweden (2024c) claims that minimising transport is "good both for the planet and the garment" (para. 3). These examples are not consistent with other environmental claims which are presented by brands in a more evidence-based manner. Hence, these come across as attempts to create an idealised image around brands' environmental impact and

advancements through vague statements that also lack proof (European Parliament, 2024, p. 11; Nemes, et al., 2022, Supplementary Table S1).

An additional example relating to vague environmental claims is found on Cos' Instagram (Figures 10-11). The brand shares about regenerative farming practices where "animals, plants and people can work together to thrive" (Cos, 2024e, para. 2). The brand also states that following these practices allow for "working with nature, not against it" (Cos, 2024l, para. 1). Notably, these two claims are supported by proof under the third party partnership with NATIVA™ (Koszewska, 2011, pp. 24). However, they signal communicational tactics that create an idealised environmental image through vague terms when compared to how the brand informs about the same topic on its webpage in a more evidence-based manner:

> The NATIVA™ Regenerative Agriculture program supports local communities and is designed to improve soil matter and microbiology. Focusing on the key areas of regenerative agriculture, NATIVA™ equips farmers with training and resources . . . including enhanced vegetation, not using chemical fertilisers, reducing tillage and integrating natural fertilizers such as animal manure. (Cos, 2024j, section Regenerative or Organic, NATIVA™ Regenerative Wool fold-out)
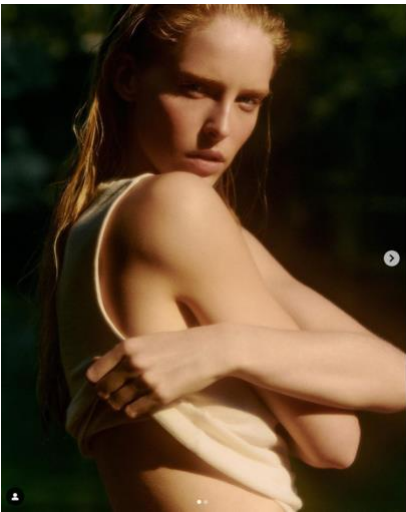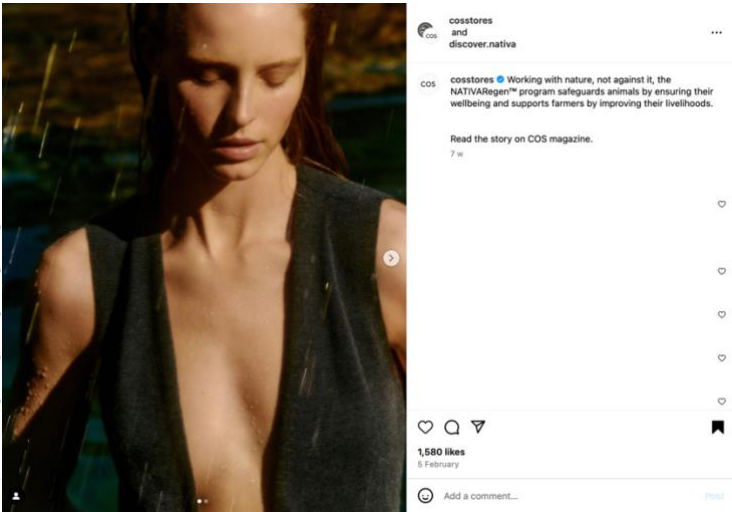

Figure 10: Cos (2024e)

Figure 11: Cos (2024l)

Finally, misleading symbols in the form of beautiful nature-related imagery are also present when brands communicate about their environmental impact (Nemes, et al., 2022, Supplementary Table S1; Sailer et al., 2022, p. 11). Cos, Filippa K, and Tiger of Sweden are identified to use beautiful nature images in both their web-based and Instagram communication (Figures 12-18). These nature images can be seen as a way to provide false evidence that paint a more environmentally friendly image, which is not based on reality, potentially creating a risk for greenwashing (Nemes et al., 2022, Supplementary Table S1). To provide a comparison, Nudie Jeans uses an image of nature which

signals climate urgency, providing a more realistic tactic as it does not enhance the environmentally friendly image in an unrealistic manner (Figure 19).
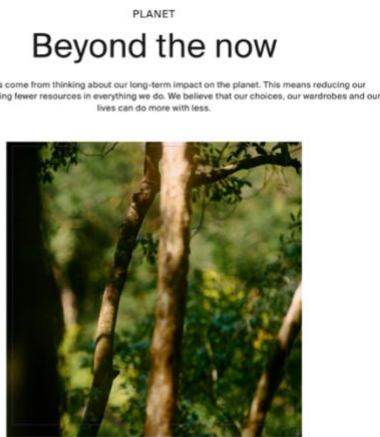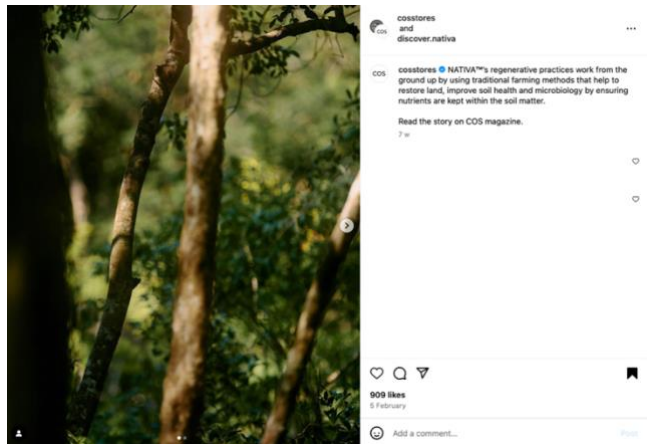

Figure 12: Cos (2024h)

Figure 13: Cos (2024d)

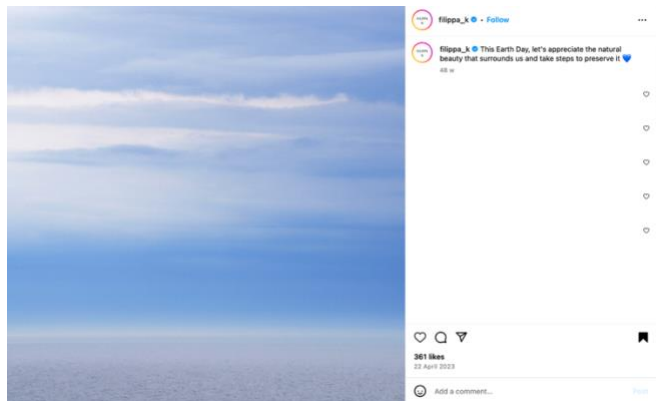Figure 14: Filippa K (2024b)

Figure 15: Filippa K (2023f)

Figure 16: Tiger of Sweden (2024f)
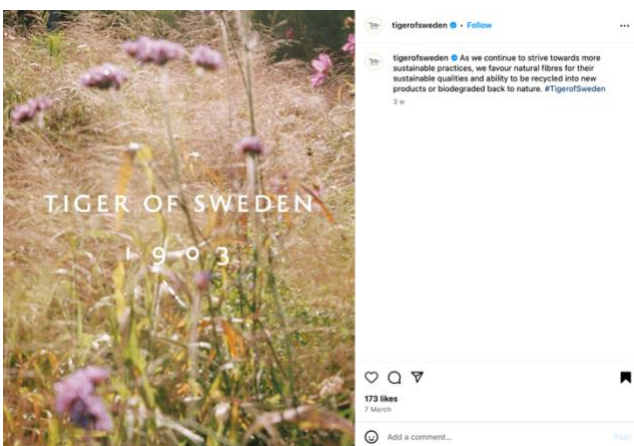

Figure 17: Tiger of Sweden (2024b)

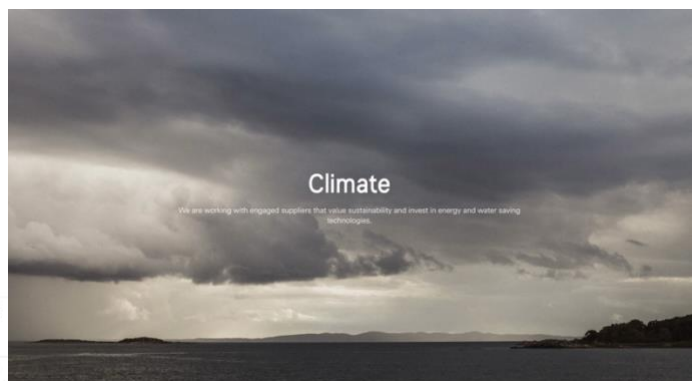Figure 18: Tiger of Sweden (2024a)

Figure 19: Nudie Jeans (2024b)

4.2. Supply chain developments

The second theme finds that notions of improvements relating to people and profit are also important aspects of how Swedish fashion brands present sustainability. This theme is divided into three sub-themes: 1) towards improved supply chain conditions, 2) coming together to create change, and 3) enhancing supply chain image. As noted, this theme covers the social and economic spheres of TBL, as related codes capture elements of SDG8 (people and profit), SDG9 (profit), SDG12 (people and profit), and SDG17 (people and profit).

4.2.1. Towards improved supply chain conditions

The analysis shows that Swedish fashion brands portray sustainability through a social lens by capturing their attempts to improve working conditions within their supply chain. However, this type of sustainability communication is mostly covered on the brands' sustainability-related webpages, indicating that manufacturing processes or social issues are not a popular topic to share about on Instagram. In fact, only 21 posts out of 180 include captions that mention supplier countries or traceability of a material, whilst only one image by Asket shows working facilities (Figure 20).
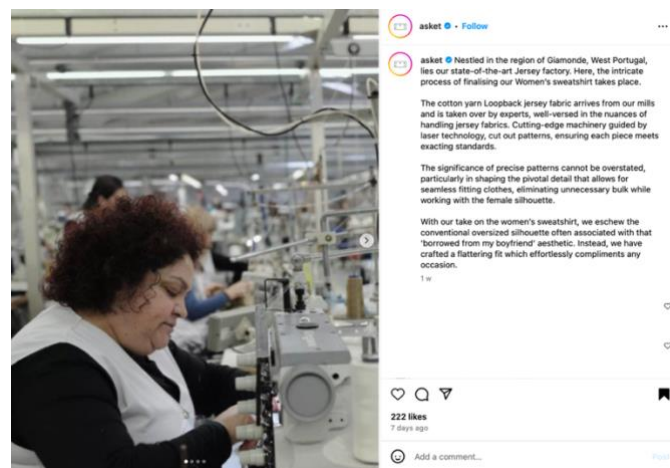

Figure 20: Asket (2024f)

Turning to web-based communication, social sustainability aspects in relation to supply chain improvements are covered more in-depth. All brands promote supply chain transparency, which is noted to be done through listings of supplier names and countries or links to a downloadable supplier list, which in turn vouches for both the traceability of garments and the raw materials used in production (Henninger et al., 2016, p. 412; Gracia-Torres et al., 2022, p. 360; Textile & Fashion 2030, 2019, p. 15). Overall, transparency comes across as an important value and tool for making improvements within the supply chain, which Nudie Jeans (2024h) summarises through the following statement:

We believe transparency in the supply chain is a crucial part of making lasting improvements

. . . . If brands do not know where or how products are made, it will be impossible to make

any improvements to the conditions in the supply chain. (para. 6)

Besides general supplier information fuelled by transparency, brands share various strategies relating to how they ensure that their suppliers uphold responsible working standards. For example, regular supplier audits and visits are a tactic utilised by premium fashion brands and sustainably-positioned fashion brands to check that fair and safe working standards are met. Most brands also require some form of code of conduct to be signed by the suppliers they work with, showcasing a way of setting a standard for working conditions (Niinimäki, 2015, p. 4; Textile & Fashion 2030, 2019, p. 15). Social partnerships are also mentioned as a way to monitor and confirm current working condition standards (Koszewska, 2011, p. 24). For example, Filippa K (2024b, section 5.3) and Nudie Jeans (2024c, section Social Audits & Training, para. 2) share reports from FairWear Foundation's annual audit on their current supply chain standards. Beyond this, Nudie Jeans stands out by showing diligence when it comes to working towards living wages for workers within its supply chain (Henninger et al., 2016, p. 412). The brand provides a transparent overview of how wages are being improved through its Fair Living Wages Program motivated as follows: "We began this initiative in support of the notion that everyone who produces a Nudie Jeans product should have a wage they can live on." (Nudie Jeans, 2024c, para. 3). The brand also shares data of the progress made over the years, whilst being transparent that the brand has still work to do (Figure 21). Meanwhile, Filippa K stands out in its human rights-related work as a solution for improved working standards within its supply chain (Henninger et al., 2016, p. 412; Niinimäki, 2015, p. 4). The brand has set a measurable goal for its human rights-related improvements as it is working towards meeting upcoming EU standards as seen in the following statement:

We're actively reviewing and assessing all of our policies and processes regarding human

rights, preparing for the upcoming European human rights due diligence directive (HRDD).

We've created a risk assessment which includes both countries and factories, where human

rights risks regarding code of labour practices are assessed in all sourcing countries. (Filippa

K, 2024b, section 5.2, para. 2).

Cos and Arket show the most unique approach to social issues, as they mention working towards gender equality among in-house employees and textile workers by, for example, Cos (2024g) stating: "With almost 64% of the workers in the factories in our supply chain being women, we have a responsibility to ensure that they are safe, healthy, and empowered in their everyday workplace." (para 2). In the case of Arket (2024j) the brand mentions that it focuses on placing women in leadership positions: "We have a great responsibility to advance gender equality and actively seek opportunities

to empower women through our business. This applies to both our employees and the 170,000 textile workers employed by our suppliers." (section Transforming Communities, para. 5). Arket also shares current statistics indicating proof that confirms improvements (Figure 22). Cos (2024g) goes more in-depth on its topic-related sub-page sharing vast insights and statistics on improvements under sections with the following headings: "Women are safe", "Women can influence", "Women can advance", and "Women have equal pay".
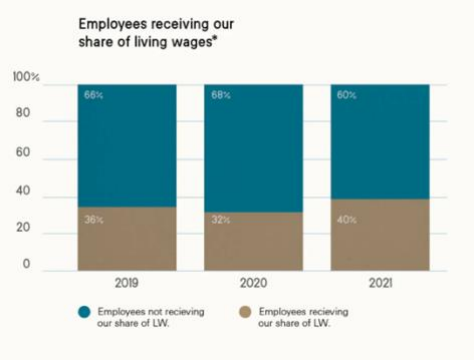

Figure 22: Arket (2024j)

Figure 21: Nudie Jeans (2024c)

4.2.2. Coming together to create change

The economic sphere of sustainability is also present in Swedish fashion brands' sustainability communication as they foster industry-related change within their supply chain through collaborative efforts. This sub-theme is not prominent on Instagram, as it is only recorded in four posts. Instead, its covered in-depth on brands' sustainability-related webpages. Here innovative collaborations, ranging from recycling projects, to reducing textile waste in production, to material improvements are highlighted across all three brand segments as a solution for sustainable fashion (Textile & Fashion 2030, 2019, p. 18). For example, Filippa K (2024b) states: "The fashion landscape is constantly evolving – we strive to partner with innovators in the industry to explore new ways of working that support a circular economy." (section 2, para. 3), whilst, for example, Nudie Jeans (2024g) brings forward a recent innovative collaboration:

> Together with our suppliers in Tunisia and with support from the United Nations Industrial Development Organisation (UNIDO) and research organisation Switchmed, we released our biggest recycling project to date when we in total used 31,000 pieces of second choice garments to make new denim fabric. (section Production Seconds and Leftover Fabrics, para. 1)

Furthermore, brands provide information regarding how they help suppliers transition towards more sustainable practices. Overall, offering supplier education is the most covered field to make such

improvements (Textile & Fashion 2030, 2019, p. 18). Trainings that improve working standards and safety are offered among brands from all three segments. For example, Nudie Jeans (2024a, para. 4) provides its suppliers with chemical safety trainings for improved safety standards. Meanwhile, for example, Cos (2024g) informs about a wide range of equality-related trainings that it is providing, such as improving economic literacy: "We have invested significant funds into our wage management systems to provide the basic tools for all workers to understand wages and payslips, ultimately encouraging financial literacy across the supply chain." (section Women Have Equal Pay, para. 4). Brands providing additional support to their suppliers, alogside co-investments, are also noted (Textile & Fashion 2030, 2019, pp. 17-18). Cos brings forward the most prominent examples, such as helping cotton farmers transition towards organic production by introducing "in-conversion cotton" in its material portfolio (Cos, 2024j, section Regenerative or Organic, In-conversion cotton fold-out). Another example is Cos (2024f, Fuel Alternatives, paras. 1-2) supporting its suppliers move away from fossil-fuel heating systems, which has resulted in their suppliers going completely coal-free.

In addition, third party partnerships that fall under the profit sphere are also highlighted by most brands, coming across as more evidence-based solutions (Koszewska, 2011, pp. 24). For example, Cos (2024a) mentions a partnership to improve its supply chain's circularity efforts: "We also collaborate with the experts at the Ellen MacArthur Foundation, whose work helps to accelerate the transition to a circular economy through precompetitive innovation programmes" (para. 6). Meanwhile, both Nudie Jeans (2024h, section RISE, para. 1) and Tiger of Sweden (2024d, section Our Partners, para. 2) share about Swedish Chemical Group memberships to help manage chemical management and compliance within their supply chain. Another example is Arket (2024k) sharing about a partnership for improving local development and social entrepreneurship:

> Our yak yarns are sourced through our partner Shokay, a social enterprise working directly with a cooperative of herders in the Qinghai province of Northwestern China. Their work in the community helps support local development and encourages social entrepreneurship among young people. (para. 1)

4.2.3. Enhancing supply chain image

All three brand segments are identified to utilise communication tactics that signal efforts to enhance the supply chain image without strong evidence. Firstly, the general social claim "conscious" is noted to be used by two brands, which is listed as potential greenwashing term in the new EU directive (European Parliament, 2024, pp. 11-12). Tiger of Sweden states "conscious choice" in an Instagram post in relation to a material's social conditions (Figure 23). Similar statements can be found on the brand's webpage: "Guided by our core values of responsibility and courage, we invest in conscious practices that make a difference" (Tiger of Sweden, 2024f, para. 3). However, no further

supporting explanation or evidence around what the term conscious entails is provided, creating a greenwashing risk (Nemes, et al., 2022, Supplementary Table S1). In comparison, Nudie Jeans is also identified to use the term. Whilst the term remains vague, Nudie Jeans (2024e) provides further proof regarding what is meant: "Our conscious choice of suppliers is based on long-term relationships and our sourcing policy. Together with our suppliers, we are obliged to provide a safe, fair, and ethical working environment." (para. 3).
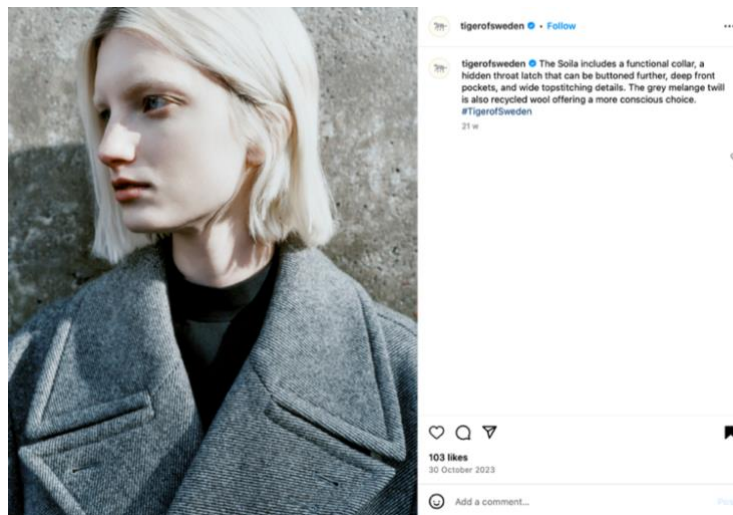

Figure 23: Tiger of Sweden (2023c)

Secondly, a form of selective disclosure is identified (Nemes et al., 2022, Supplementary Table S1). Whilst all brands practice supply chain transparency, further communication tactics are noted to only place selected suppliers in the spotlight through either supplier highlights or country mentions. Over on the web-based communication supplier stories showcase advanced suppliers, with, for example, Arket (2024e) highlighting 11 suppliers under the section heading "The people who make our products", whilst Cos (2024c) shares about six suppliers under the section heading "Meet our suppliers", and Filippa K (2024b) showcases three suppliers under a section on its webpage called "Supplier highlights". Meanwhile, on Instagram brands only mention suppliers from Italy, Portugal, Turkey, or Japan in their post captions (Figures 24-25). However, supplier listings indicate that all brands have a larger number and wider range of suppliers, with, for example, Filippa K listing suppliers from six European countries and three Asian countries (Figures 26-27). Therefore, these more selective supplier highlights come across as a potential effort to only showcase further evidence that bring forward the best practices within the brands' supply chains. Meanwhile, brands may be brushing over potential issues present in the lower-wage countries that are currently included in their supply chains (Niinimäki et al., 2020, p. 190; Sweet & Wennberg, 2021, p. 6).
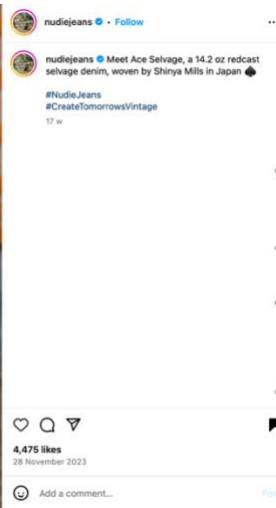
Figure 24: Nudie Jeans (2023c)

Figure 25: Asket (2024e)

Figure 26: Filippa K (2024b)

Figure 27: Filippa K (2024b)

4.3. Sustainability through improved materials

The third theme focuses on material qualities, as the analysis showed that materials are commonly highlighted by Swedish fashion brands to present sustainability via both online communication channels. This main theme is further divided into two sub-themes: 1) focus on materials qualities and 2) enhancing material sustainability. Overall, this theme is noted to capture all 3Ps of TBL to a varying degree, as the related codes cover elements from SDG6 (planet), SDG8 (people), SDG9 (profit), SDG12 (people and profit), SDG13 (planet), and SDG15 (planet).

4.3.1. Focus on material qualities

Swedish fashion brands often focus on material-related qualities when presenting sustainability (Henninger, 2016, p. 410; Textile & Fashion 2030, pp. 19-22). This is a common theme noted to be present on both online communication channels. However, there are some differences. On Instagram material qualities are one of the most commonly highlighted features, through simple captions hinting at a garment's material aspects, and such notions are often paired with fashion-related images (Figures 28-29).
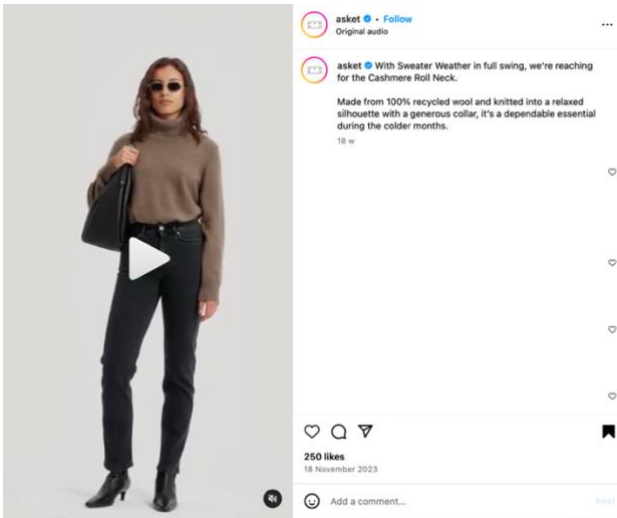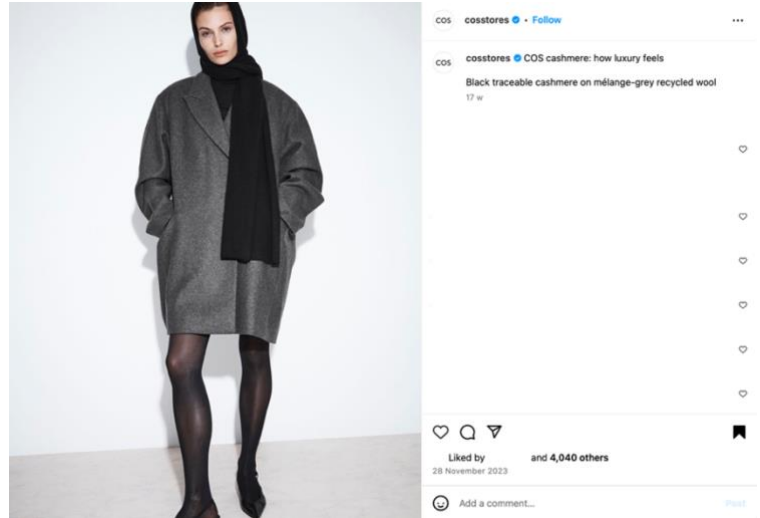
Figure 28: Asket (2023d)

Figure 29: Cos (2023b)

Meanwhile, sustainably-related webpages provide more detailed and educational material content. Brands are noted to share goals for improvements they want to make in relation to materials. For example, Filippa K (2024b) shares its material goal for 2025: "50% of all styles have a material certification: ensuring high welfare and social standards." (section 2.1, para. 1). In addition, Asket (2024h, section Material Classification, para. 2), Cos (2024j, para. 2), and Nudie Jeans (2024d, para. 2) provide statistics in relation to how much of their production currently uses so-called sustainable materials, signalling evidence for current progress. All six brands also have separate sub-pages dedicated to material information where they provide material facts, whilst also noting potential material issues as, for example, seen in how Arket (2024d) informs about polyester:

Recycled polyester is strong, resilient and durable . . . and can be recycled repeatedly. Conventional polyester is man-made from petrochemicals . . . . it requires large amounts of water, chemicals and energy to produce. Recycled polyester takes less energy to make than virgin polyester and helps to divert plastic bottles from ending up in a landfill. (para. 2)

The most commonly mentioned material quality on both online channels is recycled, signalling work towards more efficient resource use through material choices (Niinimäki, 2015, p. 10). On the brands' sustainability-related webpages a wider range of recycled materials are presented compared to Instagram, alongside other material qualities such as materials utilising fewer chemicals, less water, or overall having a lower environmental impact (Textile & Fashion, 2030, pp. 21-26). This is, for example, clear in how Filippa K (2024a) motivates its use of recycled cotton: "Because the recycled cotton is not dyed, the amount of energy, water, and dye used in the production is typically reduced compared to regular cotton." (section Cotton, para. 4). Notably, when it comes to using less chemicals, this is a feature strongly present on Arket's Instagram, as the brand highlights chrome-free leather in

17 out of 30 post captions (Figure 30). Additionally, brands portray sustainable materials through the lens of innovation (Textile & Fashion 2030, 2019, p. 18). For example, Arket (2024b, section Rise Algae Foam, para. 1) and Cos (2024j, section Recycled & Repurposed, Bloom® Algae fold-out) highlight a material made from algae, whilst Filippa K (2024b, section 2.6, Re:Sourced Crepe fold-out) introduces itself as the first brand using the innovative fabric Re:Sourced Crepe. This same messaging is also found over on Filippa K's Instagram (Figure 31).
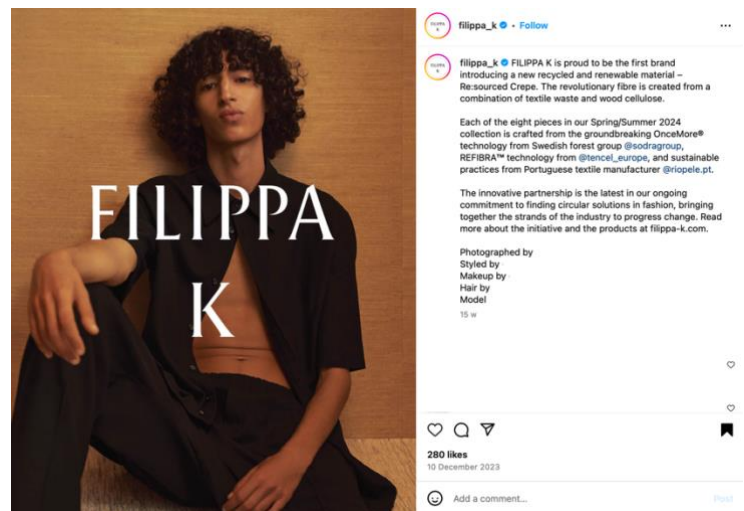

Figure 30: Arket (2024g)

Figure 31: Filippa K (2023b)

All brands also highlight third party ecological and social labels, which provide the strongest evidence of claims related to materials (Koszewska, 2011, pp. 22-23; Velasco-Molpeceres et al., 2022, p. 15). On Instagram such certifications are noted to occasionally be mentioned in post captions. Responsible Wool Standard (RSW) is, for example, mentioned in posts from Arket and Cos (Figures 32-33). Besides being an ecological and social label, this certification also signals the ethical values of animal welfare (Niinimäki, 2015, p. 5).
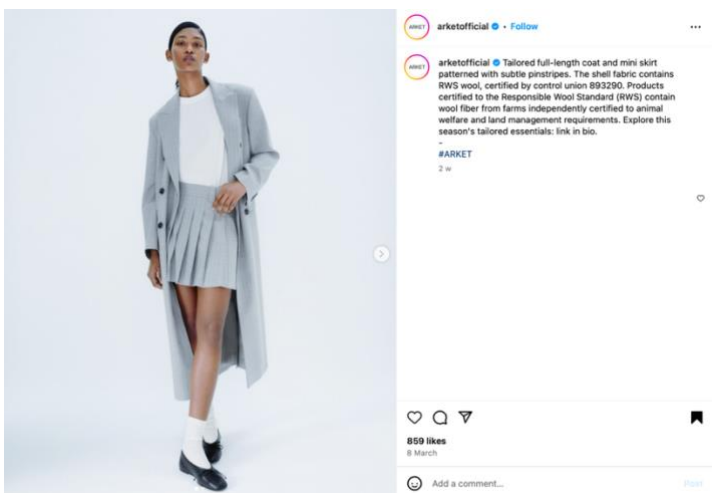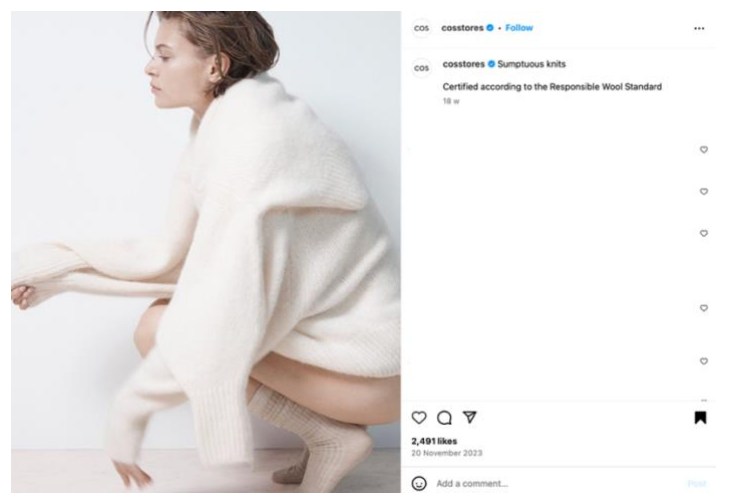

Figure 32: Arket (2024f)

Figure 33: Cos (2023c)

The brands' web-based communication highlights a wide range of social and ecological labels to prove working conditions and environmental standards, with the most noted certification being RSW, in addition to recycling certifications. Notably, differing opinions among brands are noted when it comes to the certification of cotton. Asket (2024g, para. 2) and Filippa K (2024b, section 2.5, GOTS fold-out) mention GOTS standard for organic cotton. Cos (2024j, section Regenerative or Organic, Regenerative organic Certified® Cotton fold-out) is noted to mention Regenerative Organic Certification. Nudie Jeans (2024k, para. 2) highlights Fairtrade cotton as a way to guarantee fair pay and working conditions (Koszewska, 2011, p. 22-23; Textile & Fashion 2030, p. 15). Meanwhile, Tiger of Sweden (2024e, section Cellulosic Fibres, para. 4) mentions the Better Cotton Initiative. Interestingly, there is a clash here as Nudie Jeans (2024d) takes a stance against the Better Cotton Initiative by stating: "We do not classify cotton grown in accordance with the Better Cotton Initiative (BCI) principles as sustainable as it is neither organic nor traceable . . . . will not use BCI cotton when we can use organic cotton." (section Organic Cotton vs. BCI, para. 1). This showcases different certification standards between the brands. These differences in turn indicate that since the industry is missing clear standards around sustainability, brands can decide for themselves what sustainable materials are (Sierra, 2023b, para. 3).

4.3.2.   Enhancing material sustainability

Swedish fashion brands are identified to occasionally enhance their material sustainability. Firstly, this relates to claims that come across as vague and lack clear proof by simply stating organic, a term already previously linked to greenwashing (Yan et al., 2012, p. 151). On Instagram, organic cotton is identified as the most commonly mentioned material brought forward by Arket, Asket, Cos, and Filippa K. However, no brand clarifies the specific certification standard (Figures 34-35). This pattern is also noted over on fast fashion brands' and premium fashion brands' webpages with the term often being used in material guides without naming the certification standard. Brands are also noted to claim other material certifications without specifications. For example, on Instagram, Filippa K (2023h, para. 1) mentions "certified lambswool" without detailing the type of certification (Figure 36). Similar traits are found on the web-based communication in relation to, for example, wood pulp used in cellulose-based materials as fast fashion brands and premium fashion brands commonly relate these to certified forestry without further proof such as an FSC-label (Textile & Fashion 2030, 2019, pp. 26-27). For example, Cos (2024j) claims: "These fibres are sourced from certified forests, which guarantees responsible cutting and replanting of the trees." (section Responsible, Tencel Lyocell™ fold-out). All in all, whilst brands do hold various certification standards, as seen in the chapter above, in the case when brands only state a material to be organic or certified it becomes hard to ensure if these are connected to previously highlighted certifications.
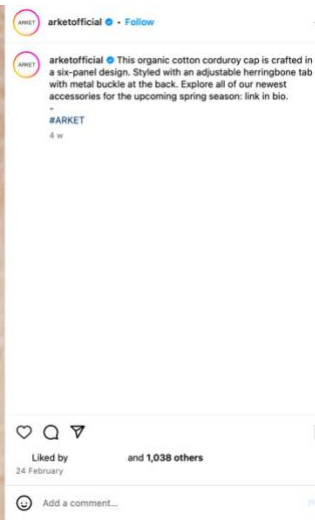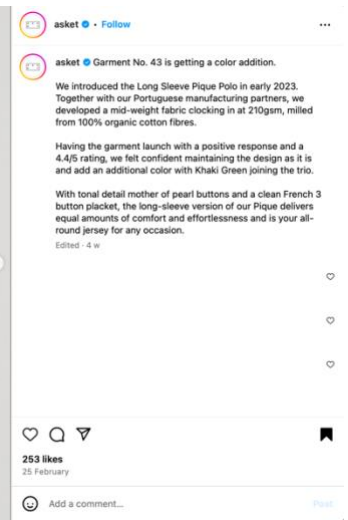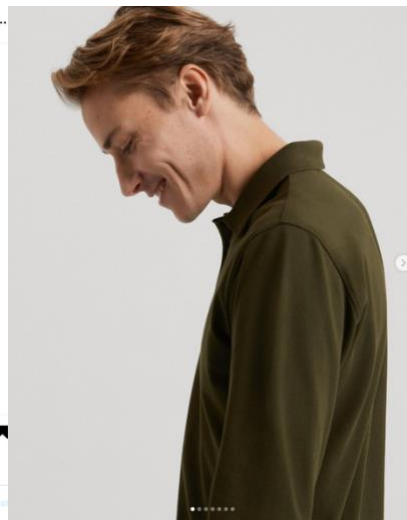
Figure 34: Arket (2024h)
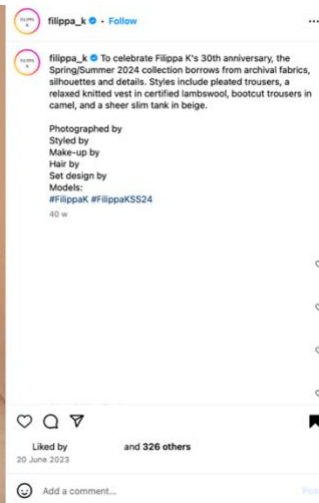

Figure 35: Asket (2024d)

Figure 36: Filippa K (2023h)

Furthermore, brands are identified to communicate about material biodegradability in a manner that is both vague and lacks proof. This is most often noted in brands' material guides where it is presented as material quality among Arket, Asket, Filippa K, and Tiger of Sweden. For example, Tiger of Sweden (2024f) notes that natural fibres are favoured by the brand thanks to "their sustainable qualities and ability to be recycled into new products or biodegrade back to nature." (section Our Design Handwriting, para. 5). However, biodegradability needs further definition to seem less vague. Additionally, further proof is needed to showcase that materials are still biodegradable once they are made into finished garments. Therefore, claiming biodegradability can be linked to potential greenwashing under the new EU directive (European Parliament, 2024, p. 11).

In relation to material information provided on sustainability-related webpages, all brands, except Arket, are noted to share their own ranking systems for sustainable materials using different wordings and scales. For example, Asket (2024h, section 44 Material Classification, para. 1) places materials in categories from A to E, whilst Nudie Jeans (2024d, section Nudie Jeans Materia Tool, para. 3) ranks materials from sustainable to do not use. Meanwhile, Filippa K (2024a, para. 3) simply marks

materials deemed as more sustainable with a *-symbol. Even if there is a common ground for what is seen as a more sustainable material, with each brand having their own way of ranking these it becomes hard to prove which is the most reliable approach. Building on this, Cos (2024j) states that based on its material framework 95% of its materials are currently "more sustainably sourced" (para. 2). Meanwhile, Tiger of Sweden (2024d, section Initiatives, para. 1) notes its sustainable materials to be "preferred fibres". This type of terminology has previously been linked to greenwashing, placing the brands' statements linked to material ranking systems on a vague ground (Nemes et al., 2022, Supplementary Table S1; Trunk et al., 2021, p. 8). Moreover, Tiger of Sweden (2024d, section Initiatives, para. 1) gives garments that meet its material ranking standard its own sustainability label called "responsible choice", which is linked to the greenwashing trait of misleading symbols due to the label not having third party backing (European Parliament, 2024, p. 9; Nemes et al., 2022, Supplementary Table S1).

4.4. Towards circular and slower fashion models

The fourth theme shows that Swedish fashion brands also present sustainability through notions of circularity and slow fashion. These findings are further discussed under four identified sub-themes: 1) towards increased circularity, 2) a slower fashion approach, 3) guiding consumers towards slower consumption, and 4) enhancing the circular and slower fashion image. Relating this theme to TBL, only people and profit were coded to be present through SDG8 (people and profit) and SDG12 (people and profit).

4.4.1.   Towards increased circularity

Circularity is a topic brought forward by all brands, as they use both communication channels to inform about circularity initiatives. This shows a push among brands to incorporate a more circular business model whilst informing their consumers about their current circularity initiatives (Daukantienė's. 2023, p. 999; Textile & Fashion 2030, 2019, pp. 14-23). However, the circularity discussion is identified to be less prominent on Instagram with only four brands sharing posts related to circularity, totalling in 16 posts out of 180. Here sustainably-positioned brands take the lead. Asket shares two posts about the brand's garment repair offerings, as well as three about their revival program for collecting used clothes to be resold or stored for future recycling initiatives (Figures 37-38). Meanwhile, Nudie Jeans shares one post about their garment collection initiative, two in relation to garment repairs, and one about reselling selling old jeans (Figures 39-40). Looking at the web-based communication, take-back clothing programs along with information about resell options are mentioned among most brands. However, Arket's (2024c, para. 2) only clear circularity nod is a sub-page where the brand encourages consumers to recycle old clothes in-store. Similarly, Tiger of Sweden (2024c, para. 2) only shares about textile waste is being utilised in its production. Meanwhile,

Asket and Nudie Jeans go beyond most as they are identified as the only brands offering free in-store repair services, which Nudie Jeans (2024i) gives as a guarantee to its consumers: "Every pair of Nudie Jeans comes with a promise of free repairs. No matter when or where you got them." (section Free Repairs Forever, para. 1).
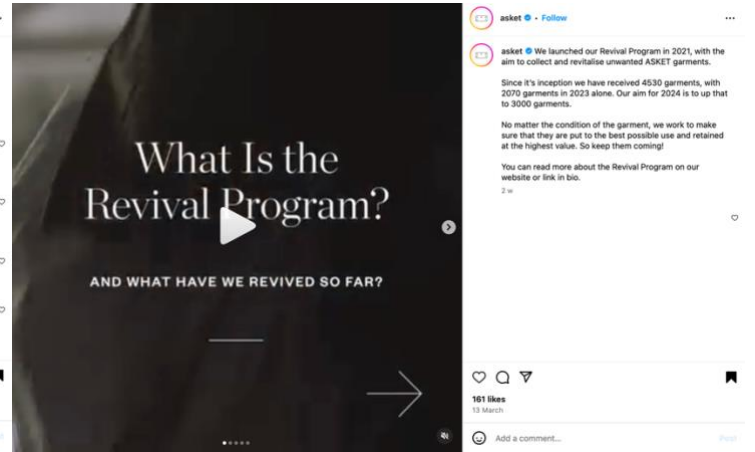

Figure 37: Asket (2024j)

Figure 38: Asket (2024k)
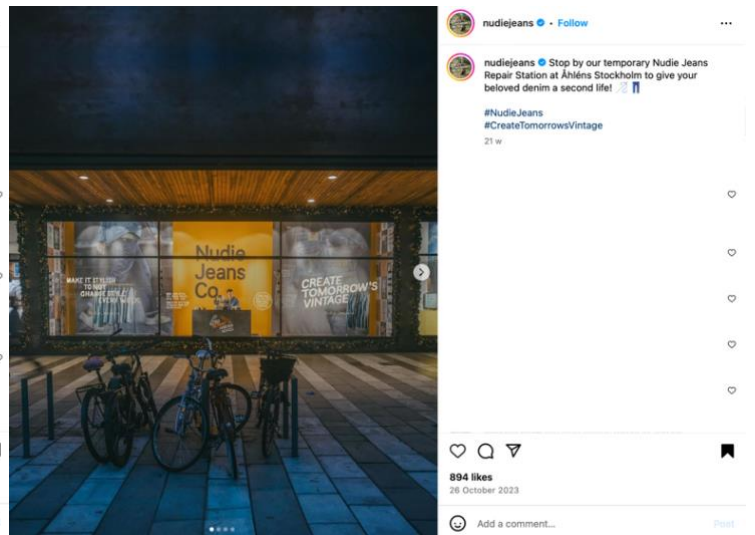

Figure 39: Nudie Jeans (2023f)

Figure 40: Nudie Jeans (2023d)

Going beyond the above-mentioned circularity initiatives, designing new garments with circularity-related aspects in mind is also highlighted as an important effort among Swedish fashion brands in order to close the loop within the fashion industry (Niinimäki, 2015, p. 10; Textile & Fashion 2030, 2019, pp. 14-23). This idea is presented via the web-based communication where, for example, Cos (2024a) informs how it is considering circularity in its designs and wishes to reduce waste through clothes that are "made to be made again" (para. 3). Filippa K (2024b) also takes a broader approach to circularity, as the brand considers the complete lifecycle of its garments: "Circularity is central to minimising our environmental footprint and encouraging mindful consumption. We consider the full lifecycle of our products from design and production, to the user

phase, and on to its second life." (section 3, paras. 2-3). This approach matches what Asket (2024a) calls "lifecycle responsibility", which the brand describes as: "We take responsibility beyond the point of purchase, with care, repair and take-back programs, keeping our clothing in use and out of landfill." (section Lifecycle Responsibility, para. 1).

4.4.2. A slower fashion approach

Slow fashion is identified as the most common sustainability aspect covered by all brands over on Instagram as the topic is identified to be present in 109 out of the analysed 180 Instagram posts. For example, nods towards timeless design are highly present (Casto & DeLong, 2019, pp. 110-111), as Cos, Filippa K, and Tiger of Sweden briefly mention the slow fashion quality in various posts (Figures 41-43). Asket is also noted to utilise hashtags such as #timeless and #timelessstyle (Figure 44). Similarly to material traits, such slow fashion notions are mostly paired with fashion images.
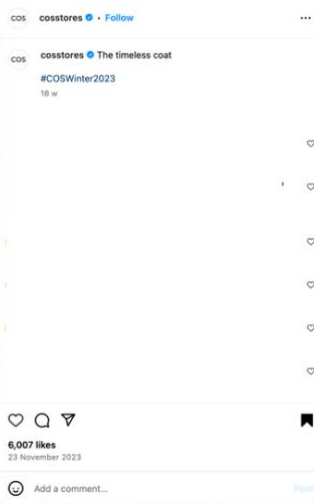

Figure 41: Cos (2023d)

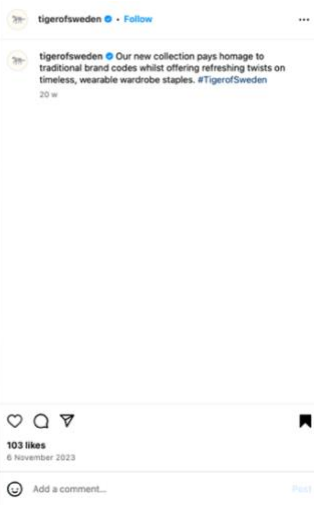*Figure 42: Filippa K (2023g)*

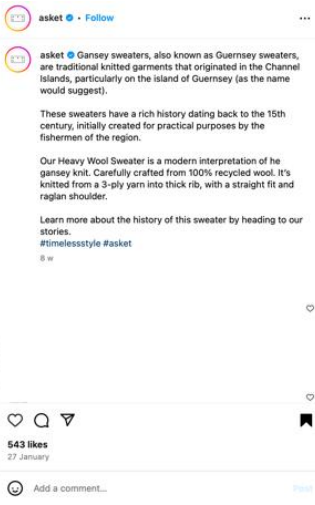
Figure 43: Tiger of Sweden (2023a)

Figure 44: Asket (2024b)

Beyond timelessness, brands hint towards seasonless and classic design, versatility, durability, and longevity via their slow fashion-focused Instagram communication (Casto & DeLong, 2019, pp. 110-111; Jung & Jin, 2014, pp. 5-6). Seasonless design is, for example, highlighted in a caption by Nudie Jeans (2024f) that states their clothes being "crafted to endure through seasons and trends" (para. 1) (Figure 45). Moreover, for example, Tiger of Sweden utilises the slow fashion term "classic" (Figure 46). The brand also mentions versatility by suggesting various styling options (Figure 47). Durability is, for example, highlighted by Arket as an important aspect of their design (Figure 48). Longevity is on the other hand hinted in a caption by Asket (2024e) which reads "garment that stand the test of time." (para. 2) (Figure 49). Slow fashion qualities also allow brands to capture the essence of their brand on Instagram. This approach is utilised by Filippa K as the brand has built its principles around slow fashion traits of timelessness, quality, and versatility (Figures 50-51). Another approach is taken by Nudie Jeans, as the brand is identified to signal timelessness, seasonless design, and longevity via the hashtag #createtomorrowsvintage which is attached to all of the 30 analysed posts from the brand, coming across as a pillar that the Nudie Jeans builds its practices around (Figure 45).
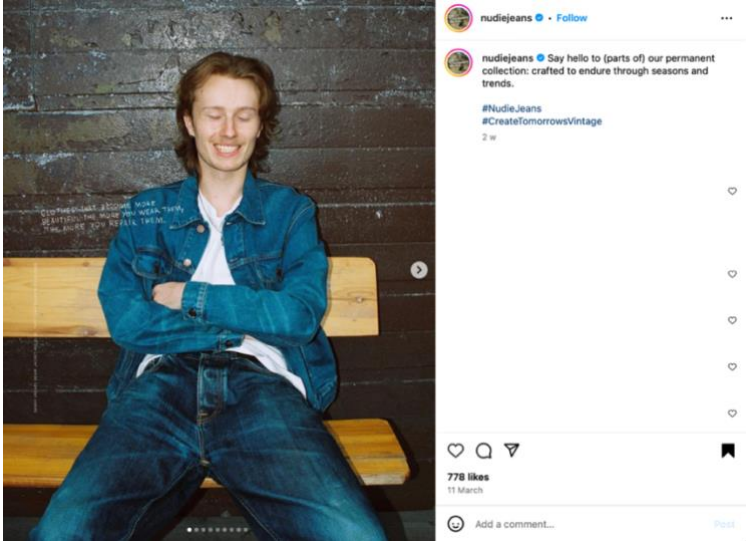

Figure 45: Nudie Jeans (2024f)

Figure 46: Tiger of Sweden (2023b)

Figure 47: Tiger of Sweden (2024h)

Figure 48: Arket (2024a)
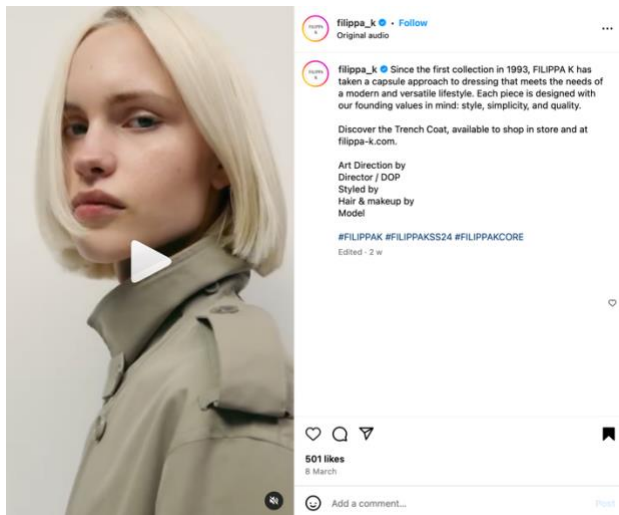

Figure 49: Asket (2024e)
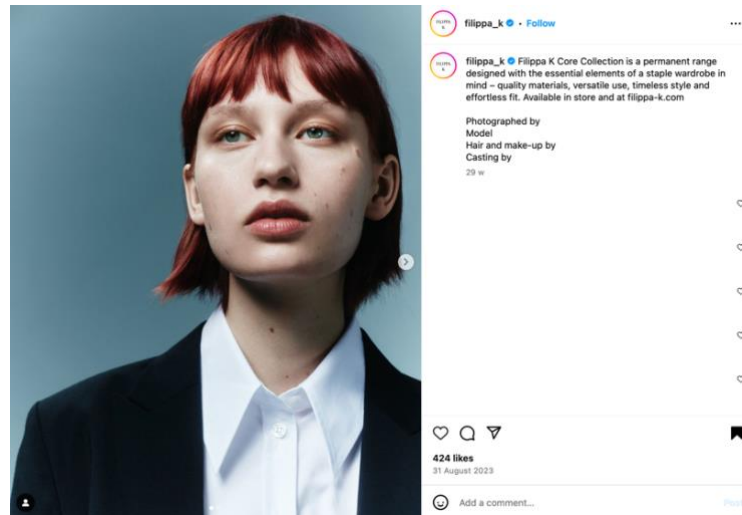

Figure 50: Filippa K (2024c)

Figure 51: Filippa K (2023a)

This essence capturing approach is also utilised by all brands in their web-based communication. For example, Filippa K (2024b) states that its focus is on quality, versatility, and timelessness: "Designed with the essential elements of a staple wardrobe in mind – quality materials, versatile use, timeless style." (section 3.2, para. 3). Notions of timelessness are also mentioned by Tiger of Sweden (2024f): "Create carefully designed fashion pieces with a timeless, yet contemporary expression rooted in an appreciation for Scandinavian design principles." (section Our Design Handwriting, para. 4). Furthermore, Cos (2024b) highlights timelessness, whilst also bringing forward notions of longevity and quality: "The way we design has been different since day one, choosing timelessness over passing trends, longevity and quality over throwaway fashion." (para. 1). Timelessness and longevity are also brought forward by Nudie Jeans (2024d) who additionally highlights the idea of seasonless clothes: "Characterised by timeless design. We want to create timeless and seasonless garments, clothes you want to wear every day and keep over time, garments that last, and garments that can live through repair." (para. 1). Other brands follow, with, for example, Arket (2024b) focusing

on longevity and seasonless design: "Each of our products is carefully made to be used and loved for a long time . . . and build style beyond seasons." (para. 1). Similarly, Asket (2024a) states: "We don't design for seasons, we create for forever." (para. 1).

The slow fashion trait localism is also noted (Henninger et al., 2016, p. 410; Jung & Jin, 2014, pp. 5-6; Textile & Fashion 2030, 2019, p. 14). Here Filippa K is the most dominant as localism is present on the brand's both online channels. On Instagram, the brand, for example, mentions the use of Swedish wool, as well as working together with a Swedish brand and a local jewellery maker (Figures 52-54). Over on its webpage the brand also highlights Swedish suppliers and materials (Filippa K, 2024a, section Wool, para. 6; section Leather, para. 5). In relation to production aspects, slow fashion is also brought forward by brands through notions of craftsmanship and artisanal (Jung & Jin, 2014, p. 5). However, these aspects are identified to fall under ways to enhance a slow production image. Therefore, these are further discussed under section 4.4.4.
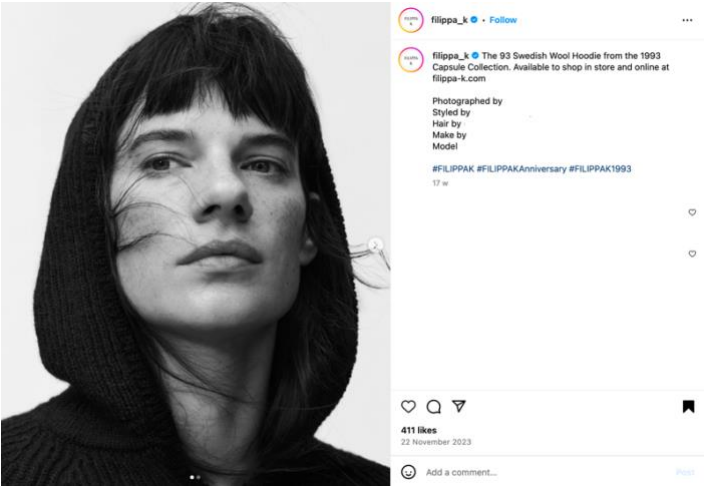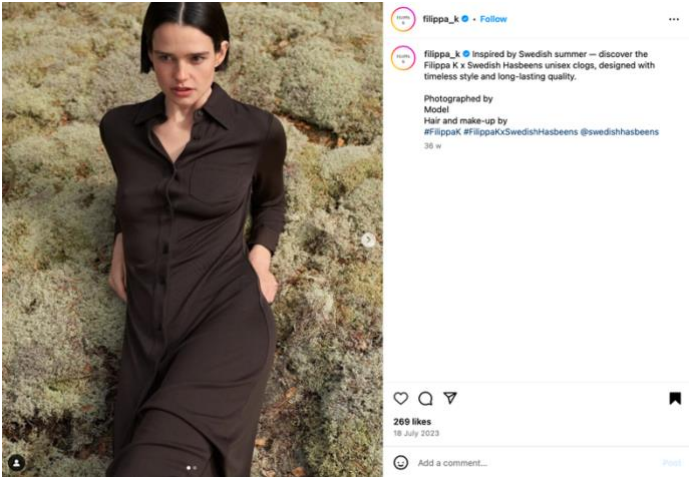

Figure 52: Filippa K (2023e)
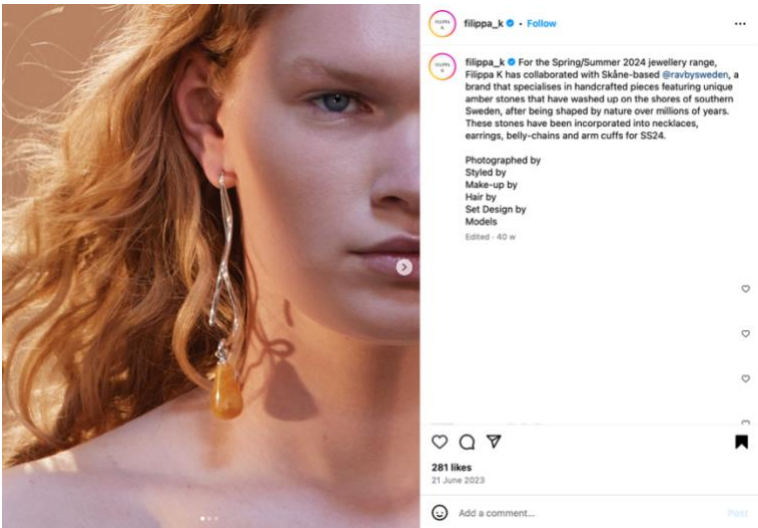

Figure 53: Filippa K (2023d)

Figure 54: Filippa K (2023c)

4.4.3. Guiding consumers towards slower consumption

Swedish fashion brands are identified to take on an educational role in relation to this theme as they are noted to encourage more responsible consumption habits (Textile & Fashion, 2019, pp. 19-22). Again, hinting towards a willingness to create change through sustainability communication practices (Kemper & Ballatine, 2019, p. 287). This idea is echoed by Cos (2024i) over on its webpage as the brand highlights the importance of having a like-minded community to foster change: "To make the products we love last beyond one season, we have to go beyond what we create to educate and empower our community." (para. 1).

Various forms of educational content are found on brands' sustainability-related webpages. For example, most brands provide garment care guides which increase consumer awareness around relating to improving garment longevity (Textile & Fashion 2030, 2019, p. 24). Such guides are summarised by Tiger of Sweden (2024c) the following way: "Care for garments is essential to us. We encourage our customers to use their clothes for as long as possible, and to sew, mend or repair any signs of wear and tear." (para. 5). Furthermore, brands educate about circularity options that go beyond what the brands themselves offer. For example, Arket (2024c) gives the following statement: "If they're not for you anymore, they could be swapped, resold, passed on to friends and family, or given to charity." (para. 2). Brands also communicate about a deep-rooted value for a more mindful consumption approach. For example, Filippa K (2024b) shares that its mission is "to drive a movement of mindful consumption: creating wardrobe staples designed to last, and encouraging our community to buy fewer but better pieces to wear and love for years." (para. 1). Whilst Asket (2024a) shares its goal of what the brand calls "pursuit of less" which is summarised as: "We envision a world free of fast consumption. A world with less clutter, less waste." (para. 1).

When looking at Instagram, sustainably-positioned brands take the lead. Nudie Jeans (2024j) pushes for normalising wearing clothes longer with the quote "Clothes that become more beautiful the more you wear them." written across multiple visuals (Figure 55). The brand also shows appreciation for wear and tear (Figure 56). Asket is identified as the only brand urging consumers to consume less through its hashtag #thepursuitofless (Figure 57). Asket further stands out with a post from Black Friday in which the brand takes a stance against consumption by closing its web shop (Figure 58). The importance of a like-minded consumer community is also identified as, for instance, Nudie Jeans signals wanting to build a caring community with its mission going beyond selling jeans (Figure 59).

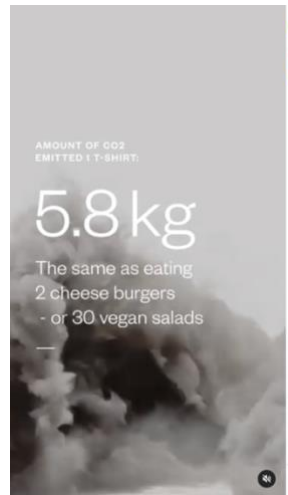*Figure 55: Nudie Jeans (2024j)*

Figure 56: Nudie Jeans (2023a)

Figure 57: Asket (2023c)
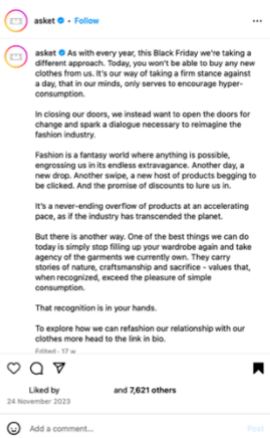

Figure 58: Asket (2023b)

Figure 59: Nudie Jeans (2023b)

4.4.4. Enhancing the circular and slower fashion image

Swedish fashion brands are identified to use some communicational aspects that enhance their circular and slow fashion image on unclear grounds. Starting with circularity, Tiger of Sweden is the brand identified to share the least about such initiatives. However, the brand provides the following statement on its webpage: "Tomorrow, we need to become a business that further supports a circular system." (Tiger of Sweden, 2024f, section Our Commitments, para. 3). Notably, this statement lacks clear steps of action and could be improved by showcasing how the brand will improve its circularity efforts, rather than stating tomorrow, which now signals an empty circularity claim (Nemes et al., 2022, Supplementary Table S1). Communication around garment collection must also be addressed, as Asket, Arket, Filippa K, and Nudie Jeans are noted to offer discounts or credits as a reward for recycling efforts, as seen in an Instagram post by Nudie Jeans (Figure 60) or in the following statement from Filippa K's (2024b) webpage: "You're welcome to bring in unwanted Filippa K garments for credit towards your next purchase with us." (section 3.2, Collect fold-out). This kind of communication may come across as attempts to push guilt-free consumption of new clothes, also signalling empty circularity claims linked to a marketing scheme (Adamkiewicz et al., 2022, p. 3; Trunk et al., 2023, p. 5).

Figure 60: Nudie Jeans (2023f)

However, most brands are transparent by providing further evidence about what happens to the clothes that are collected, making this seem like a more genuine circularity effort. Only Arket (2024c) falls short, as the brand simply states: "Please bring any textiles to our store and we'll make sure they will be of new use." (para. 2). This comes across as a potential greenwashing trait in relation selective circularity disclosure, as Arket is not clearly indicating if the brand is practicing genuine circularity as there is no information about what actually happens to the collected clothes (Nemes et al., 2022, Supplementary Table S1). More genuine circularity efforts are, for example, shared by Nudie Jeans

(2024g) who provides clear collection statistics and further information about reuse as seen in the following quote:

> In 2022, we collected 20,772 pairs of Nudie jeans through our Reuse program . . . . This way we can continue to prolong the life of the cotton fibre, regardless of whether it is as a pair of Reuse jeans, patches for the repairs, fabric for new denim accessories, or as fibre input to a recycled fabric blends for new jeans. (para. 20)

When turning to slow fashion, brands are identified to use words such as crafted, craftsmanship, and artisanal in a vague manner making them easily misunderstood (Nemes et al., 2022, Supplementary Table S1). In addition, there is no clear proof provided in relation to these statements, as these terms can be seen to relate to production aspects of slow fashion (Jung & Jin, 2014, pp. 5-6). This type of communication is mostly dominant over on Instagram. The vague term "crafted" is utilised by all brands, creating an idea of something being made by hand or great skill (Figures 61-62). However, brands are not providing proof of this being the case. Furthermore, notions of craftsmanship are noted among all three brand segments. However, Tiger of Sweden is identified the most prominent user of the term, as the brand lists craftsmanship as one of the brands four key values in relation to more sustainable practices. This is, for example, seen in the following statement: "We rely on quality craftsmanship and carefully selected materials to ensure every piece is designed with longevity in mind." (Tiger of Sweden, 2024f, section Our Design Handwriting, para. 2). Moreover, 12 out of the brand's 30 Instagram posts mention craftsmanship (Figures 63-64). Despite craftsmanship being prominent in the brand's sustainability communication, no definition alongside proof is provided. A second prominent case is Cos, as the brand mentions craftsmanship and artisan-related work on its Instagram eight times (Figures 65-66). Cos (2024c) does bring forward craftsmanship and work of artisans in relation to one of its suppliers in its web-based supplier highlights by stating: *"Collaborating with local artisans to keep the traditions of Italian craftsmanship alive"* (section Manteco, para. 1). However, it remains unclear if the Instagram posts relate to this specific supplier. All in all, such claims as of how they are presented now come across as a way to idealise slow production standards.
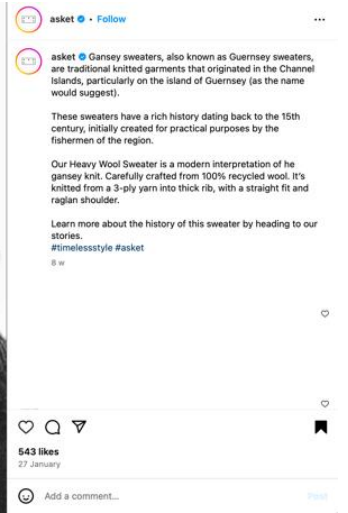
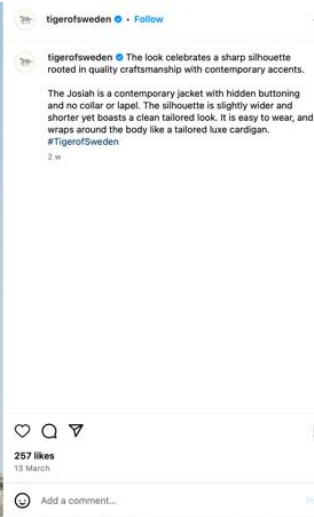*Figure 61: Arket (2024i)*

Figure 62: Asket (2024b)

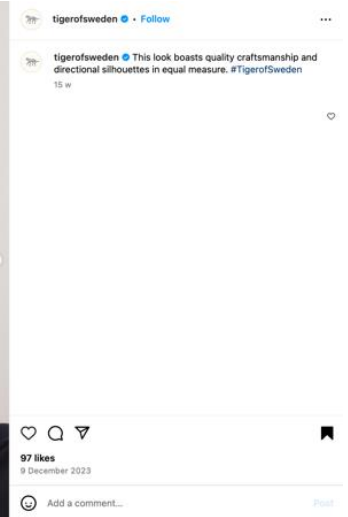*Figure 63: Tiger of Sweden (2024g)*
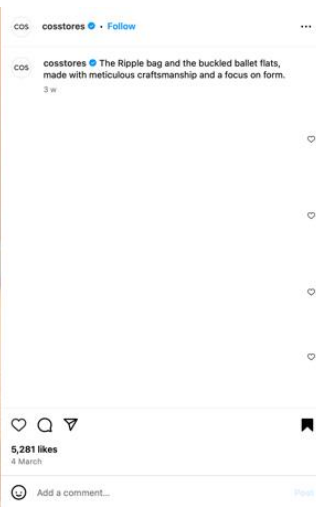

Figure 64: Tiger of Sweden (2023d)
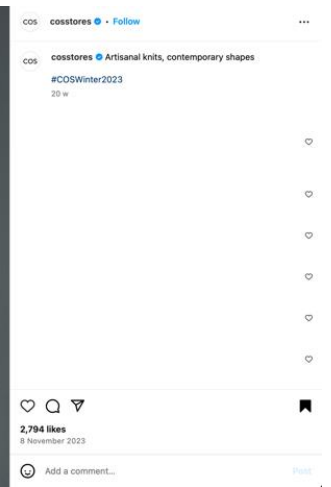

Figure 65: Cos (2024k)

Figure 66: Cos (2023a)

5. Discussion and conclusion

The aim of this thesis has been to gain insights around Swedish fashion brands' online sustainability communication practices by performing a thematic analysis on 180 Instagram posts and 62 sustainability-related webpages. The following research questions have guided the research: "How is sustainability presented by Swedish fashion brands via Instagram posts and on their websites' sustainability-related pages?", and "How evidence-based does the online sustainability communication of Swedish fashion brands appear to be?", alongside the sub-question "What should Swedish fashion brands consider in their current online sustainability communication practices to avoid potential greenwashing accusations?".

After analysing the online sustainability communication content, findings show that sustainability is presented by Swedish fashion brands via the themes "the environmental impact of fashion", "supply chain developments", "sustainability through improved materials", and "towards circular and slower fashion models". Together these themes cover aspects from all 3Ps of TBL, showing that Swedish fashion brands present sustainability from a wide perspective, differing from previous research which noted the environmental aspect to be favoured in fashion brands' sustainability communication on both online channels (Da Giau et al., 2016, p. 84; Kwon & Lee, 2021, p. 711). Moreover, rather than just informing about its own sustainability efforts, an educational approach is present, indicating that Swedish fashion brands utilise sustainability communication beyond marketing purposes related to product promotion and improving reputation and loyalty among consumers (Kemper & Ballantine, 2019, p. 284-289). This is seen as the brands share educational content towards the consumer about fashion's environmental impact, whilst informing about more mindful consumption habits.

However, it is important to mention that how sustainability is presented differs across online channels, matching what Brydges et al. (2023, p. 365) found when investigating Swedish fashion brands' sustainability communication. Starting with Instagram, sustainability is presented on a more surface-level, with the main focus being on slow fashion and materials qualities, partially matching the findings of Zhao et al. (2022, pp. 11-12). However, in this case, the included brand segments show a more coherent focus. The notion of material qualities being a popular topic on Instagram, also matches similar findings of Kwon and Lee (2021, pp. 710-711), taking this finding beyond only fast fashion brands. Fashion-related imagery is also widely used alongside these two sustainability themes, a popular image type for Instagram also recognised by Milanesi et al. (2022, p. 10). Notably, sustainable-positioned fashion brands are identified to be more in-depth in the information they share on Instagram, whilst also touching more on the topics of environmental impact, and circularity in comparison to the other two included brand segments. However, social and production related aspects are noted as the least covered topics on Instagram overall, echoing findings of Milanesi et al. (2022, p. 11) and Kwon and Lee (2021, p. 711). Meanwhile, the sustainability-related webpages are where brands present sustainability more in-depth, matching previous research that found webpages to be

utilised by fashion brands to provide rich and educational sustainability content (Brydges et al., 2022, p. 366; Han et al., 2017, p. 142; SanMiguel et al., 2021, p. 18). This is evident, as all identified sustainability themes are covered on this communication channel. The brands, for example, share about environmental impact efforts and supply chain developments in a broad and in-depth manner, whilst providing thorough material information, informing about circularity efforts, and presenting their brand essence through notions of slow fashion.

Moving to how evidence-based the online sustainability communication is, the findings show that evidence-based sustainability communication is present as the brands are found to communicate about sustainability efforts in a transparent manner. This is, for example, seen with brands providing explanations and definitions, alongside current statistics, time-based goals, and steps of action. Here sustainability-related webpages come across as the more evidence-based source since this communication channel is where brands are able to provide a wider range of in-depth information. Whilst information brought forward by the brands themselves can be hard to confirm, third party confirmation through different labels, as well as partnerships, are identified as the most substantial evidence (Koszewska, 2011, pp. 22-24; Velasco-Molpeceres et al., 2022, p. 15). However, the research does discover pitfalls, as evidence is occasionally lacking in all brands' online sustainability communication. Moreover, sometimes evidence can be used to highlight certain accomplishments over others to enhance reality. This indicates that fully evidence-based sustainability communication is not yet achieved among the fast fashion brands, premium fashion brands, or sustainably-positioned fashion brands included in this study. By acknowledging these pitfalls this research helps showcase what communicational aspects Swedish fashion brands should consider in their current online sustainability communication to avoid potential greenwashing accusations, hence also providing answers to the presented sub-question.

To begin, Swedish fashion brands should avoid making sustainability claims that come across as vague and lack substantial proof (Nemes, et al., 2022, Supplementary Table S1). Such claims are found to be present on both communication channels. These include various general environmental claims presented among all three included brand segments related to production practices or materials by, for example, stating something to be "planet-friendly" or "biodegradable", alongside the general social term "conscious" which is utilised by both fast fashion brands and sustainably-positioned fashion brands (European Parliament, 2024, pp. 11-12). Terms such as "crafted", "craftsmanship", and "artisanal" are also used to a varying degree among the three brand segments idealising slow fashion production (Jung & Jin, 2014, pp. 5-6). Additionally, brands within all three segments use the term "organic" without clarifying the specific certification standard (Yan et al., 2012, pp. 151-152). Similarly, brands state something to be certified without further clarification of a specific third party label. Besides these findings, own material rankings are presented across all brand segments showing a lack of industry standards around what sustainable materials entail, making these hard to prove. In relation to these material rankings premium fashion brands and fast fashion brands present claims

previously linked to greenwashing such as "preferred fibre" or "more sustainably sourced" (Trunk et al., 2021, p. 8). All of these mentioned claims should ideally be clarified and supported by further evidence to stand on strong ground and not come across as a way to enhance a sustainably friendly image or potential greenwashing. Moreover, brands should be consistent in how such terms are presented across their communication channels to avoid any misunderstandings.

Swedish fashion brands should also avoid presenting empty claims that boast their sustainability image (Nemes, et al., 2022, Supplementary Table S1). Instead, brands should always back up claims made in relation to sustainability efforts and showcase honest intentions. For example, one premium fashion brand places emission reduction and circularity initiatives as something for "tomorrow". However, without sharing clear further steps this communication tactic signals empty claims that are presented to enhance the sustainability image, whilst providing more transparent information would showcase genuine intentions. Furthermore, when it comes to take-back clothing programs, brands across all three segments offer discounts or credits in return, which initiates the consumption of new products and breaks the cycle of true circularity (Adamkiewicz et al., 2022, p. 3; Trunk et al., 2023, p. 5). Therefore, such efforts signal a marketing scheme for increased consumption, which bases garment collection efforts partly on empty claims.

Garment collection is further linked to selective disclosure, as one fast fashion brand fails to provide evidence of what is done to garments after collection which may indicate lacking circularity solutions (Trunk et al., 2023, p. 5). Another form of selective disclosure is found as all six brands favour highlighting reputative suppliers. However, this only shows an ideal side of the supply chain, rather than the full nature of it (Niinimäki et al., 2020, p. 190; Sweet & Wennberg, 2021, p. 6). To move away from notions of selective disclosure, which only highlights a narrow set of aspects to paint sustainability efforts in a positive light, Swedish fashion brands should opt for further transparency (Henninger et al., 2016, p. 412; Torres et al., 2022, p. 360; Nemes, et al., 2022, Supplementary Table S1). Moreover, a more wholesome communicational approach throughout is recommendable to avoid enhancing certain accomplishments whilst hiding other aspects of the supply chain (Thomas, 2018, pp. 1532-1533). It is better to acknowledge imperfections, rather than brush over them.

Lastly, misleading symbols are found to be present in the form of the occasional use of beautiful nature imagery as a way to paint an environmental ideal that is not based on genuine evidence (Nemes, et al., 2022, Supplementary Table S1; Sailer et al., 2022, pp. 8-9). These are utilised by fast fashion brands and premium fashion brands. Whilst still present these images are used sparingly on Instagram, as they are found to more often be a part of the environmental impact discussion on sustainability-related webpages. Swedish fashion brands should consider how they use beautiful nature images in their online sustainability communication since these do not help paint a realistic image around brands' environmental sustainability work. Additionally, one premium fashion brand utilises its own material label called "responsible choice". However, labels that are not based on a third party standard

can also be seen as misleading symbols and fall under potential greenwashing (European Parliament, 2024, p. 19; Nemes, et al., 2022, Supplementary Table S1).

To conclude, Swedish fashion brands are presenting sustainability from a broad approach via their online communication channels, covering aspects of all 3Ps relating to both brand reputation and product marketing practices, and as an effort to educate consumers about sustainable consumption. Whilst Swedish fashion brands are widely transparent in their sustainability communication, the findings highlight the importance of practising coherent evidence-based sustainability communication across both online communication channels in a wholesome manner by always backing up, clarifying, and providing proof, ideally supported by a third party, to avoid potential greenwashing accusations.

5.1. Theoretical and practical implications

When looking at theoretical implications, this study confirms that Swedish fashion brands' approach to sustainability in relation to fashion matches the concepts presented in this study's theoretical framework, as well as multiple recommended actions brought forward by the Swedish sustainable fashion program Textile & Fashion 2030 (2019, pp. 10-29). By acknowledging the presence of a wide range of concepts, it becomes evident how broad of a topic sustainability in relation to fashion is, and how difficult it becomes for brands to cover all aspects of it perfectly. Whilst the overarching sustainability themes are noted to be the same among Swedish fashion brands, no brand, or even segment, are completely unanimous in their communication, as some bring forward more information about certain topics. This confirms that the fashion industry would benefit from an agreed-upon baseline definition for sustainable fashion in line with what previous research has been trying to define (Henninger et al., 2016, p. 412; Niinimäki, 2015, pp. 5-10).

Moreover, this study contributes new insights to the research around fashion brands' sustainability communication practices and potential greenwashing in relation to evidence-based communication within the Swedish realm. In relation to previous research that studied fashion brands' online sustainability communication this study's findings confirm various findings relating to how online communication channels are utilised and the preferred content (Han et al., 2017, p. 142; Kwon & Lee, 2021, pp. 710-711; Milanesi et al., 2022, p. 10; SanMiguel et al., 2021, p. 18; Zhao et al., 2022, pp. 11-12). It also matches Brydges et al. (2023, p. 365) findings about Swedish fashion brands' sustainability communication practices, whilst providing further insight into the actual content shared on the studied online channels. Moreover, findings from this study show that fashion brands from various segments take on a broader approach covering similar topics of sustainability when looking at the online channels as a whole, whilst previous research, which only studied one of the two platforms whilst covering various countries and brand segments, found sustainability to be presented from more singular topic approach alongside differing focuses between fashion brand segments (Da Giau et al., 2016, p. 84; Kwon & Lee, 2021, p. 711; Milanesi et al., 2022, p. 10; Zhao et al., 2022, pp. 11-12).

It should also be noted that the way sustainability is presented matches Kemper and Ballantine's (2019, pp. 284-289) theory, bringing forward traits of ASM and RSM, showing that brands are willing to go beyond reputational marketing purposes in their sustainability communication to facilitate change. Building on this, whilst the presence of RSM traits highlight a more sincere approach to sustainability communication, the greenwashing framework utilised does confirm that potential greenwashing pitfalls are currently present in Swedish fashion brands sustainability communication and these match previously noted greenwashing traits (Adamkiewicz et al., 2022, p. 3; European Parliament, 2024, pp. 7-14; Nemes, et al., 2022, Supplementary Table S1; Sailer et al., 2022, pp. 8-18; Trunk et al., 2021, p. 8; Trunk et al., 2023, p. 5; Yan et al., 2012, pp. 151-152). Moreover, as brands are presenting sustainability from a broad perspective this also becomes the case for greenwashing. Therefore, it is important to not only focus on the "green" aspect of greenwashing, but to connect it fully to the TBL model when reviewing businesses' sustainability communication (Seele & Gatti, 2017, p. 240).

Considering practical implications, it becomes important to state that this study is not accusing any Swedish fashion brand of greenwashing but instead encourages brands to review current online sustainability communication practices. Therefore, the findings of this study become useful for a wider range of fashion brands based within the EU, and communication practitioners who work with brands' online sustainability communication. This study's findings also bring forward the power fashion brands hold when it comes to providing consumers with sustainability-related information, as shown with Swedish fashion brands including an educational approach. Therefore, fashion brands must consider the power they hold to start conversations, educate, and facilitate change. Moreover, whilst third party confirmations are identified as the strongest proof, matching notions of Velasco-Morpetz (2022, p. 15), this study notices differing opinions on this front, which alongside fashion brands creating their own material ranking systems, brings forward the need for clearer industry standards to guide evidence-based sustainability communication alongside the new EU greenwashing guidelines.

5.2. Limitations and future research

Limitations of this research must be discussed. Due to this study's qualitative approach, it is important to note that the presented findings are based on the researcher's interpretations and another researcher may potentially have come to different conclusions or found additional approaches to sustainability among the six Swedish fashion brands. Therefore, this study could have benefited from a broader set of interpretations, which could have been gained by including multiple coders in the data analysis process. However, due to time limitations this was not a realistic approach. Hence if this research is reproduced in the future, it is recommended that multiple coders would be utilised for potential further insights.

It should also be mentioned that the collected sample provided some limitations, resulting in potential gaps when it comes to gaining a full overview of how Swedish fashion brands present sustainability. This is due to brands utilising multiple sub-pages on their sustainability-related webpages and having different website structures. This made the sampling challenging and may have led to some important sub-pages being left out from the final sample, as there had to be a set limit in place to keep the sample size manageable. This problem could have been avoided by potentially focusing on only one or two brands. Hence, future research might benefit from looking at fewer brands in-depth. Moreover, because the sampling of Instagram images followed the theoretical framework, potential notions of sustainability may have been missed, possibly leaving some posts out of the sample. The Instagram sample size was also relatively small per brand, which may mean that the sampled Instagram posts do not fully cover how brands present sustainability.

When addressing future research, it would be recommended to extend this research to other social media platforms, as well as other digital or analogue communication channels utilised by Swedish fashion brands, or to look into Swedish fashion brands' annual sustainability reports, to gain insights into how evidence-based these different formats currently are. It would also be beneficial to research a wider range of EU-based fashion brands, to understand how sustainability is currently being presented by fashion brands within the Union, and if these presentations matches the upcoming legislative changes related to greenwashing.

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Nudie Jeans. (2024d). *Materials*. Retrieved February 27, 2024, https://www.nudiejeans.com/sustainability/materials

Nudie Jeans. (2023c, November 28). *"Meet Ace Selvage, a 14.2 oz redcast selvage denim, woven by Shinya Mills in Japan"* [Photograph]. Instagram. https://www.instagram.com/p/C0MWJP5Kl-y/

Nudie Jeans. (2024e). *Production.* Retrieved February 27, 2024, https://www.nudiejeans.com/sustainability/sustainable-production

Nudie Jeans [@nudiejeans]. (2024f, March 11). *"Say hello to (parts of) our permanent collection: crafted to endure through seasons and trends".* [Photograph]. Instagram. https://www.instagram.com/p/C4YItONqolM/

Nudie Jeans [@nudiejeans]. (2023d, October 26). *"Stop by our temporary Nudie Jeans Repair Station at Åhléns Stockholm to give your beloved denim a second life!"* [Photograph]. Instagram. https://www.instagram.com/p/Cy3UjY7qzGm/

Nudie Jeans. (2024g). *The second skin*. Retrieved February 27, 2024, https://www.nudiejeans.com/sustainability/sustainable-products

Nudie Jeans [@nudiejeans]. (2023e, December 4) *"The only fashion victim is the planet."* [Photograph]. Instagram. https://www.instagram.com/p/C0b16NjKfA_/

Nudie Jeans. (2024h). *Transparency*. Retrieved February 27, 2024, https://www.nudiejeans.com/sustainability/transparency

Nudie Jeans. (2023f, November 1). *"We're on the hunt for more one-of-a-kind jeans! Trade in your well-loved jeans for 20% off a fresh pair!"* [Photograph]. Instagram. https://www.instagram.com/p/CzGypodqfMG/

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Nudie Jeans [@nudiejeans]. (2024j, March 27). *"15 years ago, we hoped this pair of Average Joe would become the vintage of tomorrow. Today, we're just proud* [Photograph]. Instagram. https://www.instagram.com/p/C5BYnePKFgL/

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Tiger of Sweden. (2024d). *Fibres & materials.* Retrieved February 27, 2024, https://www.tigerofsweden.com/nl/sustainability/fibres-materials-qualities.html

Tiger of Sweden. (2024e). *Our fibres*. Retrieved February 27, 2024,

    www.tigerofsweden.com/nl/sustainability/our-fibres.html

Tiger of Sweden [@tigerofsweden]. (2023a, November 6). *"Our new collection pays homage to*

    traditional brand codes whilst offering refreshing twists on timeless, wearable wardrobe

    staples." [Photograph]. Instagram. https://www.instagram.com/p/CzT-3mbMdpp/

Tiger of Sweden. (2024f). *Sustainability at Tiger of Sweden.* Retrieved February 27, 2024,

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Tiger of Sweden [@tigerofsweden]. (2023b, December 6). *"The Jeffers blazer boasts a classic tuxedo*

    silhouette in a high-quality fabric with a uniquely bold expression. Fabric-covered buttons

    adorn [Photograph]. Instagram. https://www.instagram.com/p/C0hPCKpO72j/

Tiger of Sweden [@tigerofsweden]. (2024g, March 13). *"The look celebrates a sharp silhouette*

    rooted in quality craftsmanship with contemporary accents. The Josiah is a contemporary

    jacket with [Photograph]. Instagram. https://www.instagram.com/p/C4dQKs2sUUO/

Tiger of Sweden [@tigerofsweden]. (2023c, October 30). *"The Soila includes a functional collar, a*

    hidden throat latch that can be buttoned further, deep front pockets, and wide [Photograph].

    Instagram. https://www.instagram.com/p/CzBNQQCugIH/

Tiger of Sweden [@tigerofsweden]. (2023d, December 9). *"This look boasts quality craftsmanship*

    and directional silhouettes in equal measure." [Photograph]. Instagram.

    https://www.instagram.com/p/C0o9MO_tLdS/

Tiger of Sweden [@tigerofsweden]. (2024h, March 14). *"This look is rooted in a relaxed silhouette*

    with elevated design details. The Tillis skirt can be worn in two [Photograph]. Instagram.

    https://www.instagram.com/p/C4f006DO0sR/

Tonti, L. (2024, January 18). 'It's the industry's dirty secret': Why fashion's oversupply problem is an

    enviromental disaster. *The Guardian.* https://www.theguardian.com/fashion/2024/jan/18/its-

    the-industrys-dirty-secret-why-fashions-oversupply-problem-is-an-environmental-disaster?

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    – Fashion brand's addiction to fossil fuels. The Changing Markets Foundation.

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    format.pdf

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    content/uploads/2023/07/Take-back-trickery.pdf

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Appendix A

Overview of collected sample: Instagram posts
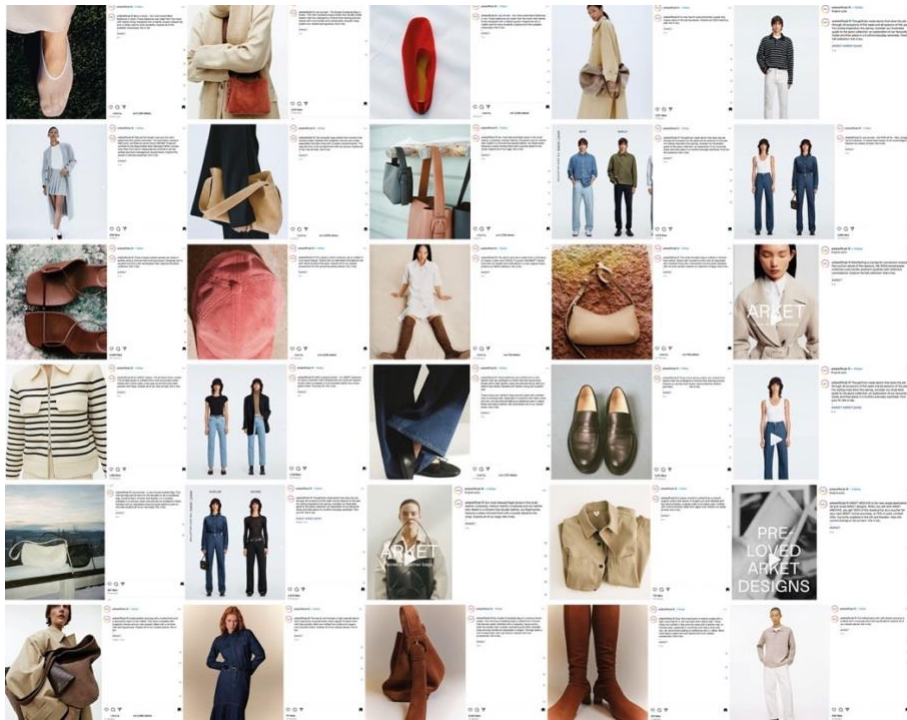
Arket [@arketofficial] (2024, January 8 - March 28). *Posts* [Instagram profile]. Instagram.

https://www.instagram.com/arketofficial/
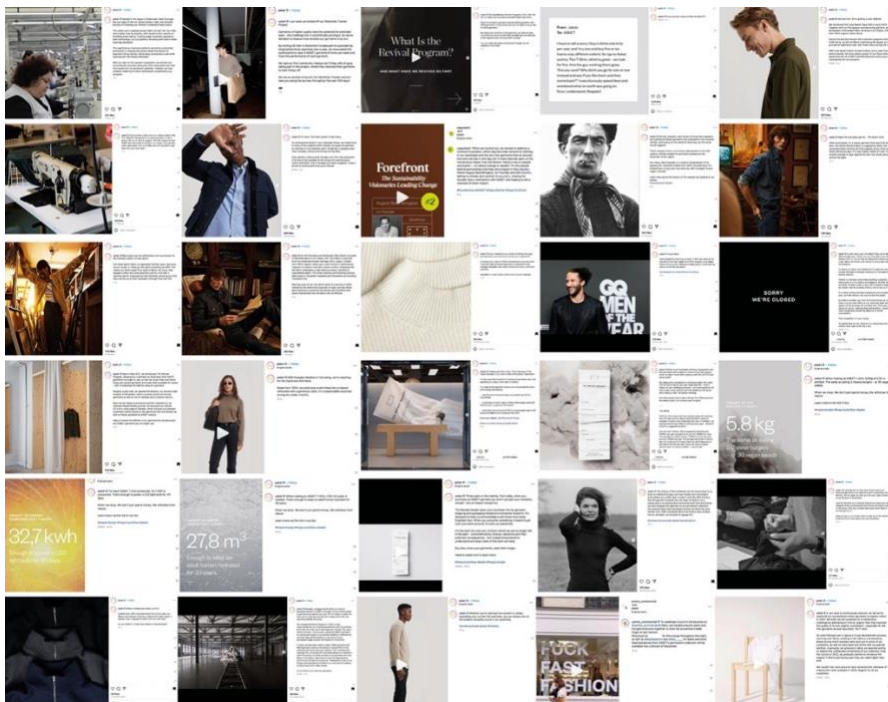
Asket [@asket] (2023, October 15 - 2024, March 21). *Posts* [Instagram profile]. Instagram.

https://www.instagram.com/asket/
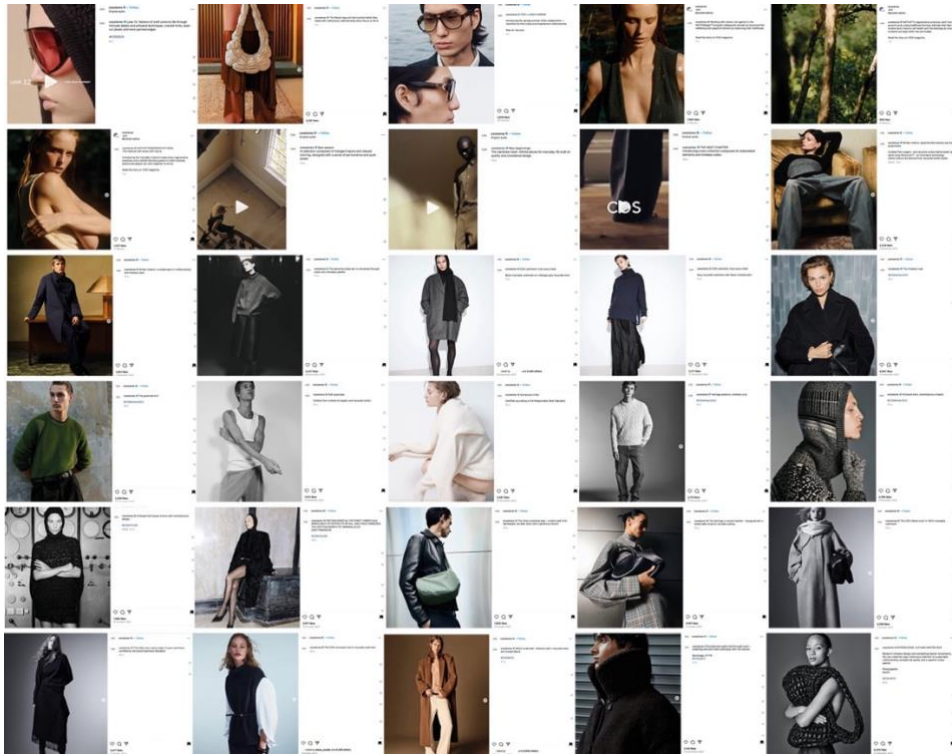
Cos [@cosstores] (2023, September 8 - 2024, March 28). *Posts* [Instagram profile]. Instagram.

https://www.instagram.com/cosstores/
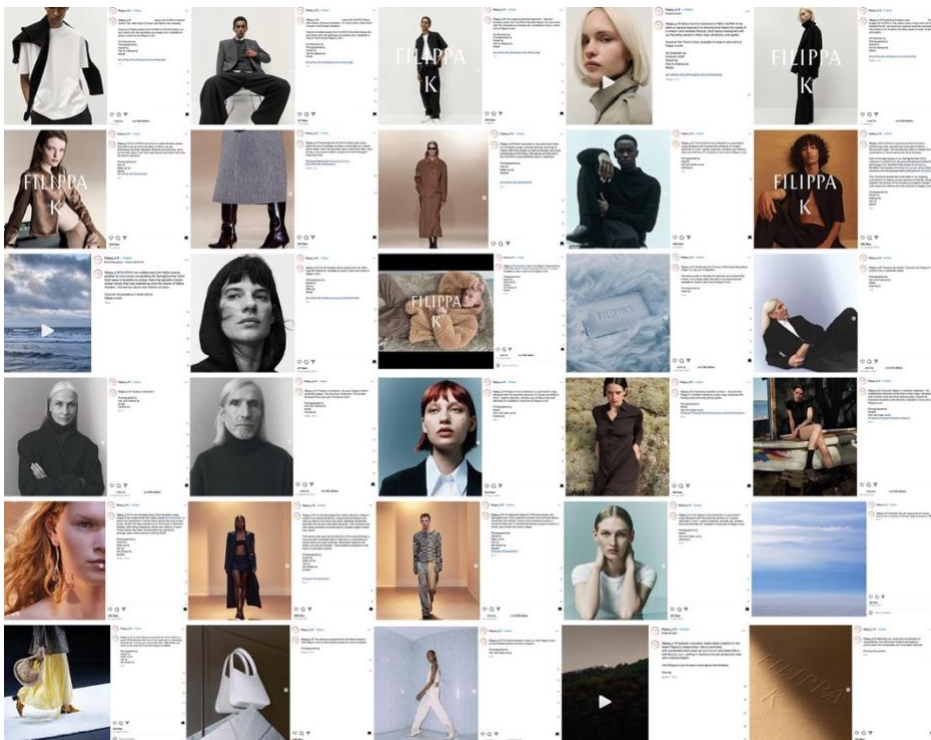
Filippa K [@filippa_k] (2022, August 6 - 2024, March 26). *Posts* [Instagram profile]. Instagram.

https://www.instagram.com/filippa_k/
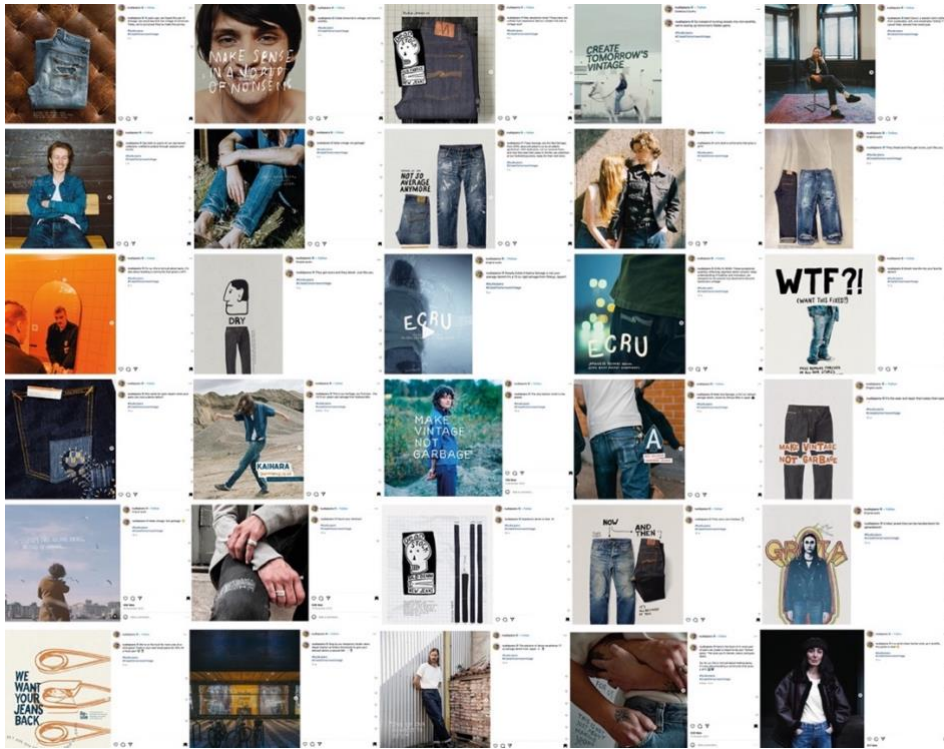
Nudie Jeans [@nudiejeans] (2023, October 11 - 2024, March 27). *Posts* [Instagram profile].

Instagram. https://www.instagram.com/nudiejeans/
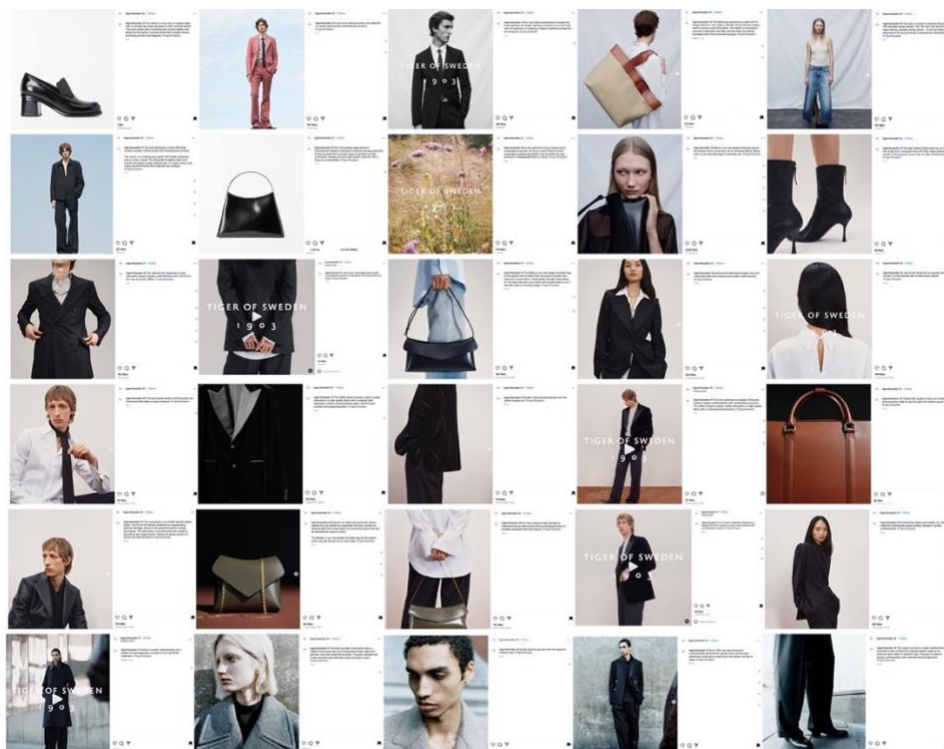
Tiger of Sweden [@tigerofsweden] (2023, October 9 - 2024, March 28). *Posts* [Instagram profile].

Instagram. https://www.instagram.com/tigerofsweden/

Appendix B

Overview of collected sample: Sustainability-related webpages

Source	Sustainability webpage heading	Related sub-page heading	Sub-page of sub-page
Arket. (2024). [Website]. https://www.arket.com/en_eur/	Community: Leaving a positive footprint	Women in leadership Sharing stories and learning from each other	
	Environment: Taking responsibility for the impact we have	A conversation on taking responsibility for the impact we have Recycle with Arket	
	Knowledge: How to take care of your products	Denim Leather Synthetic fibres	
	Materials: What we are made of*		
	Suppliers: The people who make or products		
Asket. (2024). [Website]. https://www.asket.com/nl	About us – The pursuit of less	Zero compromise garments	Our materials* Our factories
		Full transparency	Full traceability Impact transparency The impact receipt
		Lifecycle responsibility	Garment care and stain guides Garment repair guides The revival program

Cos. (2024). [Website]. https://www.cos.com/en_eur/	Sustainability at Cos: Better looks beyond	People: Beyond us	Meet our suppliers
			How we work together
			Our progress
			Our mission
		Product: Beyond one season	Sustainably sourced materials
			Measuring success
			Circular solutions
			Circularity explained
			Designing for circularity
		Planet: Beyond the now	Our progress
			The life cycle assessment
Filippa K. (2024). [Website]. https://www. filippa-k.com/	Our sustainability approach	Material guide	
		Garment care	
Nudie Jeans. (2024). [Website]. https://www. nudiejeans.com/	Your lifestyle is sustainable		
	Materials	100% organic cotton	
		Not just denim	
	Production	Living wages	
		Chemicals	
		Climate	
		Transparency	
	The second skin		

Tiger of Sweden. (2024). [Website]. https://www.tiger ofsweden.com/nl/ en/home/	Sustainability at Tiger of Sweden	
	Climate action	
	Fibres & materials	
	Durability & quality	Knitwear care guide
		Denim care guide
		General shoe care
		Tailoring care guide
	Our fibres	
	People & factories	

*Additional material-related sub-pages added to sample as supplement

Operationalisation framework: Sustainable fashion

TBL: 3Ps	SDG	Indicators online sustainability communication
People	6 – clean water and sanitation	Fashion brand communicates about its improvements within the supply chain to reduce water shortage in production countries (Textile & Fashion 2030, 2019, pp. 11-12). Fashion brand communicates about how clean drinking water access is guaranteed in production countries (Textile & Fashion 2030, 2019, p. 12). Fashion brand educates consumers about water usage in relation to garments and their care by e.g. informing about the impact of washing in relation to chemicals and microplastics (Textile & Fashion 2030, 2019, p. 11). Fashion brand educates consumers how to minimise water use in relation to garments and their care by e.g. informing about washing clothes less frequently (Textile & Fashion 2030, 2019, p. 12).
	8 – decent work and economic growth	Fashion brand communicates transparently about the traceability of the supply chain by e.g. providing a full supplier list (Henninger et al., 2016, p. 412; Gracia-Torres et al., 2022, p. 360; Textile & Fashion 2030, 2019, p. 15). Fashion brand communicates about implementing social responsibility policies and supplier strategies for e.g. stopping forced labour and/or slavery, protecting workers' rights, and/or promoting a safe work environment (Henninger et al., 2016, p. 412; Niinimäki, 2015 pp. 4-10; Textile & Fashion 2030, 2019, pp. 14-15). Fashion brand communicates about supporting craftsmanship and/or local production in communities (Jung & Jin, 2014, p. 5; Textile & Fashion 2030, 2019, p. 14). Fashion brand has acquired third party social labels, e.g. Fairtrade (Koszewska, 2011, pp. 22-23; Textile & Fashion 2030, 2019, p. 15; Velasco-Molpeceres et al., 2022, p. 15).

	12 – responsible consumption and production	Fashion brand encourages and educates consumers about responsible consumption and sustainable lifestyle by e.g. informing about the impact of clothes and their production and/or garment care solutions for increased product longevity (Textile & Fashion 2030, 2019, pp. 20-24).
		Fashion brand communicates about their circularity offerings, e.g. clothing collection, reselling, and/or repair initiatives (Daukantienė, 2023, p. 999; Textile & Fashion 2030, 2019, p. 22).
		Fashion brand communicates about their clothes by referring to durability, high quality, versatility, classic design and/or timeless design (Casto & DeLong, 2019, pp. 110-111; Daukantienė, 2023, p. 999; Jung & Jin, 2014, p. 6).
		Fashion brand communicates about responsible handling of chemicals within their supply chain to ensure textile worker and consumer safety (Henninger et al., 2016, p. 412; Niinimäki, 2015, p. 10; Textile & Fashion 2030, 2019, p. 21).
		Fashion brand has acquired third party social labels, e.g. for safe product and/or ethical product (Koszewska, 2011, pp. 22-23; Niinimäki, 2015, p. 5, Velasco-Molpeceres et al., 2022, p. 15).
	17 – implementation of global partnerships	Fashion brand communicates about partnership and/or public membership in national and/or international sustainable fashion initiatives in relation to improving social issues (Koszewska, 2011, p. 24; Textile & Fashion 2030, 2019, pp. 28-29).
Planet	6 – clean water and sanitation	Fashion brand communicates about their water strategies by e.g. implementing efficient water use, preventing chemical water pollution, and/or treating wastewater (Textile & Fashion 2030, 2019, pp. 10-12).
	13 – climate action	Fashion brand communicates about a climate strategy and how emissions will be reduced through e.g. time-based goals for emission-free/energy efficient production (Textile & Fashion 2030, 2019, p. 24).
		Fashion brand communicates about their current emission rates via measured numbers (Textile & Fashion 2030, 2019, pp. 24-25).
	15 – life on land	Fashion brand communicates about sustainably farmed raw materials through e.g. organic production (Textile & Fashion 2030, 2019, p. 26).

		Fashion brand communicates about sustainable forestry in relation to cellulose-based fibres, e.g. FSC-label (Textile & Fashion 2030, 2019, p. 26).
		Fashion brand communicates about support towards restoring nature and/or improving healthy ecosystems and biodiversity (Textile & Fashion 2030, 2019, pp. 26-27).
		Fashion brand has acquired third party ecological labels (Koszewska, 2011, pp. 22-23; Velasco-Molpeceres et al., 2022, p. 15).
	17 – implementation of global partnerships	Fashion brand communicates about global partnerships and/or public membership in national and/or international sustainable fashion initiatives in relation to environmental issues (Koszewska, 2011, p. 24; Textile & Fashion 2030, 2019, pp. 28-29).
Profit	8 – decent work and economic growth	Fashion brand communicates about their work towards maintaining a profitable fashion industry by e.g. preserving and/or developing textile related local production in Sweden (Henninger et al., 2016, p. 410; Jung & Jin, 2014, p. 6; Textile & Fashion 2030, 2019, p. 14).
		Fashion brand communicates about moving towards a circular business model by e.g. focusing on material choice and product design, and/or focusing on recycling, repairing, and reselling initiatives in relation to a more circular industry (Daukantienė, 2023, p. 999; Textile & Fashion 2030, 2019, p. 14).
		Fashion brand communicates about supporting communities within their supply chain economically by e.g. creating work opportunities, supporting small businesses, and/or craftsmanship (Jung & Jin, 2014, p. 5; Textile & Fashion 2030, 2019, p. 14).
	9 – industry, innovation, and infrastructure	Fashion brand communicates about investments, support towards research and/or education in sustainable fashion (Textile & Fashion 2030, 2019, p. 18).
		Fashion brand communicates about investments towards innovative and resource efficient solutions by e.g. supporting supplier's technological improvements and/or investing in new technologies for improving circularity (Textile & Fashion 2030, 2019, pp. 17-18).

12 – responsible consumption and production	Fashion brand communicates about slower production phase of clothes by making less to a higher quality and/or reducing overproduction (Jung & Jin, 2016, p. 410; Niinimäki, 2015, p. 10; Velasco-Molperces et al., 2022 p. 1).
	Fashion brand communicates about developing responsible products by focusing on e.g. sustainable materials, longevity, recyclability and/or circularity (Henninger, 2016, p. 410; Niinimäki, 2010, p. 10; Textile & Fashion 2030, 2019, pp. 19-23).
	Fashion brand communicates about responsible handling of chemicals during production (Textile & Fashion 2030, 2019, p. 21).
	Fashion brand communicates about responsible production regarding reducing emissions and/or waste by e.g. energy efficient production/or reduce excess material (Textile & Fashion 2030, 2019, pp. 22-25).
17 – implementation of global partnerships	Fashion brand communicates about partnerships and/or public membership in national and/or international sustainable fashion initiatives in relation to economic issues (Koszewska, 2011, p. 24; Textile & Fashion 2030, 2019, pp. 28-29).

Appendix D

Operationalisation framework: Greenwashing

Type of greenwashing claim	Indicators in online sustainability communication
Selective disclosure – the sustainability claim distracts from the big picture by only bringing forward a small set of selected sustainability-related attributes (Nemes et al., 2022, Supplementary Table S1).	Fashion brand's sustainability claim only highlights a certain positive aspect in relation to their sustainability efforts, which does not present the honest full picture (Nemes et al., 2022, Supplementary Table S1). Fashion brand's sustainability claim does not consider a product's full life cycle, e.g. encouraging garment collection but not informing how collected clothes are being utilised (Trunk et al., 2023, pp. 5). Fashion brand's sustainability claim brings forward specific product categories as more sustainable without clear evidence, e.g. launching a sustainable clothing line (Adamkiewicz et al., 2022, pp. 2-3).
Empty claims – the sustainability claim is made to boast sustainability achievements which cannot be met (Nemes et al., 2022, Supplementary Table S1).	Fashion brand's sustainability claim exaggerates the brand's sustainability commitments due to no sign of concrete significant actions and/or measurable impact (Nemes et al., 2022, Supplementary Table S1). Fashion brand's sustainability claim links consumption with sustainability, e.g. making donations to charity for each purchase, offering social or eco-gift with purchase, changing name of a sales event to imply improved social or environmental compatibility, offering in-store recycling initiatives which fuel further consumption (Adamkiewicz et al., 2022, pp. 2-3; Sailer et al., 2022, p. 18; Trunk et al., 2023, p. 5).
No proof – the sustainability claim cannot be supported with further proof or verification (Nemes et al., 2022, Supplementary Table S1).	Fashion brand's sustainability claim uses unclear words without further evidence, e.g. third party certification/confirmation (European Parliament, 2024, pp. 9-36; Nemes et al., 2022, Supplementary Table S1; Velasco-Molpeceres et al., 2022, p.15; Koszewska, 2011, pp. 21-24). Terms to look out for are: • General sustainability claims: "sustainable", "sustainably sourced", "more sustainable", "preferred" etc. (Nemes et al., 2022, Supplementary Table S1; Trunk et al., 2021, p. 8; Yan et al., 2012, pp. 151-152).

	- General environmental claims: "biodegradable", "carbon neutral", "climate positive", "eco", "eco-friendly", "environmentally friendly", "carbon-friendly", "climate neutral", "green", "gentle on the environment", "natural", "non-toxic", "organic" etc. (European Parliament, 2024, p. 11; Nemes et al., 2022, Supplementary Table S1; Sailer et al., 2022, p. 11; Thomas, 2008, p. 528; Yan et al., 2012, pp. 151-152). - General social claims: "conscious", "responsible", "made with love", "fair" etc. (European Parliament, 2024, p. 12; Sailer et al., 2022, p. 11).
Vagueness – the sustainability claim is easily misinterpreted due to lack of clarity (Nemes et al., 2022, Supplementary Table S1).	Fashion brand's sustainability claim related to carbon neutrality is vague, e.g. claiming to be carbon neutral without further information whilst the carbon neutrality measure does not acknowledge the full lifecycle impact of the product and is not verified by a third party expert (European Parliament, 2024, pp. 7-14; Nemes et al., 2022, Supplementary Table S1). Fashion brand's sustainability claim uses vague and easily misunderstandable terms without giving a clear explanation what is meant (Nemes et al., 2022, Supplementary Table S1). Terms to look out for are: - General sustainability claims: "sustainable", "sustainably sourced", "more sustainable", "preferred" etc. (Nemes et al., 2022, Supplementary Table S1; Trunk et al., 2021, p. 8; Yan et al., 2012, pp. 151-152). - General environmental claims: "biodegradable", "carbon neutral", "climate positive", "eco", "eco-friendly", "environmentally friendly", "carbon-friendly", "climate neutral", "green", "gentle on the environment", "natural", "non-toxic", "organic" etc. (European Parliament, 2024, p. 11; Nemes et al., 2022, Supplementary Table S1; Sailer et al., 2022, p. 11; Thomas, 2008, p. 528; Yan et al., 2012, pp. 151-152). - General social claims: "conscious", "responsible", "made with love", "fair" etc. (European Parliament, 2024, p. 12, Sailer et al., 2022, p. 11).

| Misleading symbols – the sustainability claim uses visual elements to enhance sustainability image (Nemes et al., 2022, Supplementary Table S1). | Fashion brand's sustainability claim utilises some sort of visual element to comes across as more sustainable, e.g. layout, colours, nature images, social impact images, sustainability symbols, and/or non-credible sustainability labels (European Parliament, 2024, p. 9; Nemes et al., 2022, Supplementary Table S1; Sailer et al., 2022, pp. 8-9). |

Appendix E

Final thematic map

Themes	Sub-themes	Codes
The environmental impact of fashion	Towards reduced environmental impact	Production highest emissions
		Emission goals
		Emission reduction strategy
		Emission numbers
		Water use numbers
		Environmental partnerships
		Water saving technologies
		Wastewater systems
		Chemical impact
		Organic / regenerative farming
	Educating consumers about environmental impact	Industry impact
		Industry impact image
		Awareness about textile waste
		Consumer emission reduction
		Washing impact
		Microplastic alert
		Garment impact information
	Enhancing environmentally friendliness	Empty environmental impact claim
		Vague environmental impact claim
		No proof environmental impact claim
		Misleading nature image
Supply chain developments	Towards improved supply chain conditions	Transparency as core value
		Supply chain traceability
		Full supplier list
		Supplier presentations
		Supplier numbers
		Supplier requirements
		Supplier checks
		People / production image
		Fair wages
		Human rights
		Fair / safe working conditions
		Equality / diversity / inclusivity

		Social issue goals
		Social progress numbers
		Social partnerships
		Third party social reports
	Coming together to create change	Innovative collaboration
		Supplier co-investment
		Supporting supplier transition
		Supplier education
		Profit partnerships
	Enhancing supply chain image	Vague social claim
		No proof social claim
		Selective disclosure supply chain claim
Sustainability through improved materials	Focus on material qualities	Recycled
		Organic
		Water saving
		Ethical
		Reduced impact
		Less waste
		Less chemicals
		Innovative
		Material facts
		Material issues
		Material goals
		Third party certifications
		Material numbers
		Certification numbers
		Fashion-related image
	Enhancing material sustainability	Vague material claim
		No proof material claim
		Misleading material label
Towards circular and slower fashion models	Towards increased circularity	Repair offerings
		Resell platform / store
		Garment collection
		Repurpose material project
		Re-use clothing collection

	Spare parts / repair kits
	Responsible for full lifecycle
	Utilising textile waste in production
	Circularity goals
	Circular design
	Transparent about circularity efforts
A slower fashion approach	Longevity
	Quality
	Timeless
	Seasonless
	Classical
	Versatile
	Durable
	Supporting local
	Craftsmanship / artisanal
	Fashion-related image
Guiding consumers towards slower consumption	Building like-minded community
	Restoring appreciation for garments
	Consume less
	Anti-consumption
	Mindful consumption
	Mindful consumption image
	Garment care / repair
	Prolong garment life
	Normalising wearing clothes longer
	Encouraging further circularity
Enhancing the circular and slower fashion image	Empty circularity claim
	Selective disclosure circularity claim
	Vague slow production claim
	No proof slow production claim