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The SocioLog.dx Experience:
A Global Expert Study on
Sustainable Fashion

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a global expert study
on sustainable fashion

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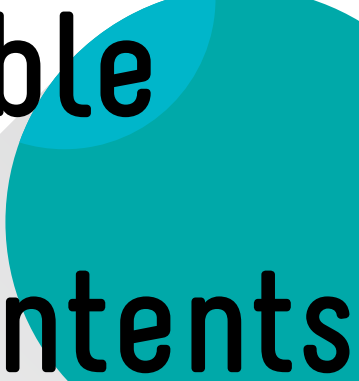


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executive summary

In May 2013, Copenhagen Business School (CBS), in collaboration with GfK (Growth from Knowledge), conducted a global expert study on sustainable fashion, which is essentially about improving the social, environmental and economic footprint of the entire fashion supply chain (design, manufacturing, transport, consumption, etc.).¹ During the five-day event, an online forum (Sociolog.dx) was established; there, 36 experts from business, academia and civil society shared ideas about sustainable fashion, whether it concerned new materials, partnerships, consumption patterns, or policy options. The expert study is part of MISTRA Future Fashion, an international research program intended to promote systemic changes toward sustainability in the fashion industry. The experts participating in the study portrayed conventional fashion as being in a state of crisis, in terms of sustainability, but also highlighted a number of innovative solutions for coping with social and environmental challenges facing the industry. Some of the conclusions derived from the study are summarised below:

- The long, complex and fragmented fashion supply chain lowers transparency and control and creates a disconnect between the few who reap the benefits from fashion and the many who pay the social and environmental costs.
- There is an unhealthy “throwaway” consumer culture that fosters overconsumption and waste. Consumers are becoming increasingly accustomed to cheap, poor-quality fashion that they can throw in the garbage after a few washes.
- “Fast fashion” is repeatedly criticized for creating a level of consumption that is neither socially nor environmentally sustainable. There is a need to challenge the dominant “fast fashion” business model, which is based on large quantities of new, low-priced collections.
- In an existing “race to the bottom,” increasing demand for cheap fashion has a negative impact on social and environmental performance in the fashion supply chain.

executive summary

- Fashion companies do not have sufficient knowledge and competence to address sustainability; likewise, the curricula at most design schools and universities do little to bridge this competence gap.
- A number of fashion companies are introducing innovative materials, manufacturing technologies, management systems, and business models that create value for both business and society.
- Sustainability should not be an isolated add-on project – for instance, within the communications department. Workshops, lectures, panels, etc., can be used to inspire employees across departments to work with company-specific sustainability challenges and opportunities.
- Multi-stakeholder partnerships are highlighted as an important precondition for bringing about changes toward sustainability in the fashion industry.
- Sustainable consumer behavior can be promoted through an increased focus on repair, customization, communication, campaigns, price mechanisms, labelling, competitions, etc.
- Policymakers can promote sustainable fashion by using a variety of “carrot and stick” mechanisms, including tax incentives, minimum product standards, mandatory reporting requirements and awareness-raising campaigns.
- Future trends highlighted by the Sociolog.dx participants include new technologies for transparency/traceability, the emergence of closed-loop business models, and an increased focus on collaborative design, manufacturing and consumption.

The insights from the Sociolog.dx experience will be integrated in a forthcoming event, to be arranged by Copenhagen Business School in 2014 as part of MISTRA Future Fashion. Therefore, we welcome all feedback, comments, and examples that can help us advance knowledge on how to promote sustainability in the fashion industry. Write an email directly to erp.ikl@cbs.dk.

The researchers would like to thank the participating experts for their contribution to this study, which has produced important new insights about the barriers to and opportunities for sustainable fashion. Moreover, the researchers would like to thank Line Pedini Rasmussen, Sonia Washuus de Carvalho, and Thordis Bjartmarz for writing case examples and/or contributing to the analysis.



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methodology: the Sociolog.dx experience

The study was conducted as a Sociolog.dx, a digital qualitative research tool provided by the data provider GfK (Growth from Knowledge). The Sociolog.dx is an online forum with restricted access, where a group of participants answer questions, solve tasks, and share various materials (pictures, links, drawings, etc.).

The main advantage of the Sociolog.dx is that the method is flexible and allows participants from around the world to decide for themselves when to contribute. Moreover, contrary to traditional interviews and questionnaires, the participants in the Sociolog.dx gain insights from the contributions of other experts and are able to comment on their thoughts and statements.

In this study, the data provider recruited 51 participants to the Sociolog.dx, based on a contact list of potential candidates provided by the researchers. Thirty-six participants ended up taking part in the implementation, which took place May 6-10, 2013. The experts in the Sociolog.dx included independent designers, business representatives and faculty members, as well as civil society organisations from 13 countries. All participants in this study were given the opportunity to remain anonymous to the other experts participating in the Sociolog.dx.

The discussions in the Sociolog.dx were structured around a limited number of activities/questions within the field of sustainable fashion, such as training/education, consumer behavior, policy-making and so on. Moreover, a moderator from the data provider helped facilitate the discussions. The researchers were able to observe the activities on the Sociolog.dx. but did not interfere in the discussions between the experts.

The researchers received full transcripts of all Sociolog.dx activities, which were subsequently analyzed. The analysis began with an open-ended coding of themes from the discussions under each activity/question. In the second phase, the data were grouped into higher-level categories and organized in various typologies inspired by the existing literature.² Finally, quotations, links and pictures were selected to illustrate the categories identified during the previous analysis stages.

today's fashion industry

There is more to fashion than catwalks, red carpets and blitz lights. Fashion is also about polluting production, miserable working conditions, and shoddy products.

When a factory building recently collapsed in Bangladesh and killed hundreds of workers, it was not the first time the long and complex fashion supply chain attracted negative attention from politicians, media, human rights groups, etc.³ Rather, the incident represented the tragic climax of a decades-long criticism of social and environmental performance of the fashion industry, whether it concerns workers' health, pesticides, toxic chemicals, water use, child labor or unfair wages.⁴ For instance, repeated criticism of Nike's subcontractors made the brand synonymous with poor wages and working conditions in the 1990s.⁵ More recently, Greenpeace has orchestrated a number of attacks on big fashion brands to urge them to get rid of hazardous chemicals in their products.⁶ A long list of publications also reports poor social performance in the fashion industry, including *Offside*, *Fashion Victims*, *Let's Clean Up Fashion*, *Killer Jeans*, and *Stitched Up*.⁷

the hidden price tag of fashion

Lack of visibility in the fashion supply chain is repeatedly highlighted as a problem by the experts participating in the Sociolog.dx experience. As an example, one of the participants has chosen a retail window to illustrate what most people see when it comes to fashion: a retail window looks glamorous and changes frequently but provides little information about the journey of the individual garments. Another participant echoes this view by arguing that "(...) consumers, wearers and fans of fashion are far too disconnected from the source to understand the resources required to produce a garment/item."

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today's fashion industry

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Therefore, people are unaware of the hidden price tag of fashion when shopping. Fashion companies are also perceived as often having little knowledge of what actually goes on in the supply chain, which makes it difficult for them to make enlightened decisions about sustainability.

On a positive note, experts highlight the fact that media, non-governmental organisations (NGOs) and social networks are increasingly active in spreading news about social and environmental mismanagement among fashion brands. However, some of the participants argue that public interest in the fashion supply chain often is restricted to sweatshops/child labor in the garment manufacturing process, thus providing only a glimpse of the negative social and environmental problems in the fashion supply chain and leaving out other issues, such as those related to cotton picking and dying processes.

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images
of the
fashion
industry

- **Participants in the Sociolog.dx experience**
- were asked to visualize the fashion industry
- by uploading photos, drawings, videos or
- other material that best represented their
- view of the industry and then reflect on
- their choice.
-
- The analysis of the pictures clearly demonstrates
- that the fashion industry has a serious image
- problem, as most experts portray the sector as
- superficial, irresponsible, unsustainable and/or
- unethical. For instance, one of the participants
- uses a ticking time bomb as a symbol of today's
- fashion industry, with the following explanation:
-
- *"I chose the image of the ticking time bomb with*
- *the person standing next to it unsure of what to do,*
- *as today's global fashion industry seems to have*
- *reached a level that is unsustainable for the long-term,*
- *and we are unsure of what is the best thing to do."*

.....



throwaway consumer culture

Just as there are a number of upstream challenges in the fashion supply chain, there is also a need to address the downstream challenges caused by a throw-away consumer culture that is all about buying new stuff. The sheer amount of garments being produced and sold is one of the primary causes of unsustainability in the fashion industry. Today, the desire for fast fashion has created demand for 80 billion new garments a year⁸ — a consumption hysteria that far exceeds human needs and planetary boundaries. In the words of one of the Sociolog.dx participants:

"We certainly don't need all the clothes and fashion that is produced today. We produce and consume in excess. All these clothes, all these resources, when the charm of novelty fades, are soon thrown on the dump. We are very much involved in luxury production and consumption, for the sheer enjoyment of creating and buying something new, again and again. But this has implications. The textile industry exerts a heavy toll on the environment and on the people involved in production, and after the textiles are discarded they create a lot of waste and a further burden on the environment."

today's fashion industry

heading for a hard landing?

The vast number of sustainability initiatives introduced by fashion brands in recent years has not changed the dominant perception of the fashion industry as being a social and environmental mess. Actually, despite much enthusiasm about these innovations (see subsequent chapters), there is an element of disillusion with the current sustainability efforts undertaken by the industry. For instance, some of the participants argue that sustainable fashion is growing at a much slower pace than fast fashion and overall consumption. Therefore, the industry is heading for a hard landing, sooner or later. One Sociolog.dx participant argues that the sustainability initiatives of big fashion companies are often about being "less bad" within a limited number of areas rather than making more fundamental changes in the organisation:

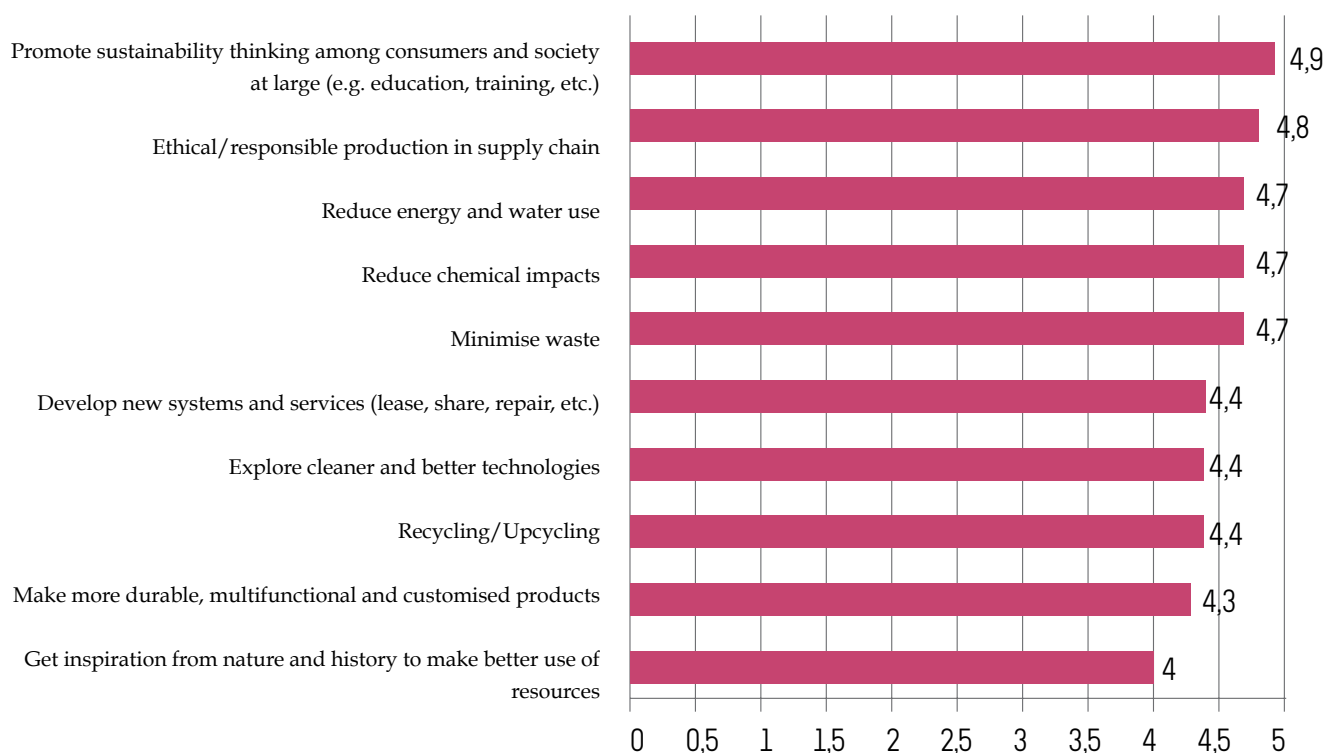
"[They] change a small portion of some material to be a bit less bad, but don't think of the production process as a whole. We should think [of] the life cycle of a product and its impact on the environment and people. We cannot be just a bit less bad — we should change the fashion industry to be truly good."

Despite this negative image of the fashion industry today, the Sociolog.dx participants do see some positive aspects. Many agree that good things are happening everywhere, slowly but steadily, and improving mainstream fashion industry. To quote a participant, "[The] fashion industry is getting organized, is more connected, and it's also gaining space in the media, spreading new values, connected to quality rather than quantity."

where to start the sustainability journey?

During the Sociolog.dx experience, participating experts were asked to prioritize which sustainability areas deserved the most attention by the fashion industry. The experts could choose among 10 alternatives, which were based on [TED's Ten](#). All sustainability areas were considered important overall, but the experts ranked awareness-raising among consumers and the general public as well as sustainable supply chains as the urgent issues that need to be addressed by the fashion industry.

Overall, what sustainability areas deserve the most attention by the fashion industry (1=Irrelevant, 5=Very Important):



barriers to sustainable fashion

It is not always an easy endeavour to introduce sustainability thinking in a fashion company. Successful implementation of social and environmental initiatives often requires a break with the prevalent mindset within the organisation and among business partners.

There is a wealth of literature on barriers to sustainability, relating to the company, the industry, and the general economy. At the company level, lack of top management commitment, organisational inertia, absence of business cases, and limited technical, financial and human resources are frequently-mentioned reasons for failed implementation of social and environmental initiatives.⁹ At the industry level, the fashion industry may be faced with specific challenges associated with the nature of the business and the layout of the supply chain.¹⁰ Looking at the economy in general, there may also be challenges to sustainability that are linked to prevalent corporate and consumer culture. For instance, short-termism is occasionally said to stand in the way of a more conscious capitalism.¹¹

out of sight, out of mind

The Sociolog.dx experts express concerns about the prevailing layout of the fashion supply chain, which is long, complex and fragmented. The nature of the supply chain hampers visibility; as a result, both consumers and marketers become disconnected from problems arising in the supply chain. Generally, most people have little or no knowledge of wages paid, chemicals used, and treatment of workers simply because the industry has moved too far out of our sight. One participant makes a reference to Adam Smith, who argued that companies exist to create value for the community and society at large. Today, however, companies mainly serve themselves and may, in fact, destroy value in the communities where the garments are made.

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barriers to sustainable fashion

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Another participant notes that there is a global governance problem, which enables some fashion companies to make profit by exploiting both people and planet through outsourcing:

"The coordination problem between civil society, companies and governments across national borders: leaving some with the short-term benefits of the international distribution and others with bearing the brunt of the immediate costs – ultimately sustaining a business model of consistently outpacing the earth's regenerative capacity and supporting undignified treatment of fellow human beings."

the downward spiral

Downward price pressure means that consumers are getting increasingly accustomed to cheap fashion and, by the same process, may get used to poor-quality fashion. Some of the participants argue that the value of fashion deteriorates with the present oversupply of cheap, poor-quality garments. "McFashion" is a term used by several participants, referring to the fact that the same type of cheap, poor-quality clothes can be bought everywhere throughout the world. Moreover, when consumers demand lower prices, fashion companies will try to maintain profits by pressuring suppliers, which, in turn, incentivizes them to cut corners when it comes to social and environmental performance.

This downward price pressure may result in a "race to the bottom," in which consumers hunt cheap fashion and companies hunt higher profit. In this environment, it becomes difficult for a company to take the first step to reach higher levels of sustainability. To quote one of the participants, *"Our economic models are all driven by profit (and loss). Consumers are mostly driven by price. In order to make a real change, everybody has to step up and acknowledge their role in the supply chain and, with that, their responsibilities."*

The tendency to produce and consume cheap, low-quality products also means that few companies see a business case for sustainability, since the average consumer bases his or her purchase decision on price rather than sustainability. This is especially the case because there is no other system to reward sustainable companies and sanction the unsustainable ones.

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barriers to sustainable fashion

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need for speed

Another barrier is the need for constant change in the fashion industry, a tendency that promotes overproduction, overconsumption and waste. Colors, shapes, materials, etc., keep changing at a fast rate, which goes against the idea of longevity of clothes. One participant says that it is remarkable that fashion trends previously lasted for hundreds of years but now change every season. This change comes from external pressure, which the industry has to satisfy. *"Today's fashion is characterized by the pressure to always have something new for your customers without too much concern [for] how long they will use the garment (e.g., its quality) or how much resources we are consuming to create those garments."* The comment is accompanied with a link to an article on fast fashion that highlights the massive destruction of excess inventory among major fashion brands.¹²

style vs. sustainability?

Sustainability may also, in itself, be a barrier to change. Some of the participants note that there is still a stigma around sustainability in the fashion industry. Consequently, there is a need to work with people's presumptions because sustainability rarely is the primary buying criterion. As noted by one of the participants, a consumer purchases a fashion piece that fits with his/her moral concerns, not a sustainable piece fitting with fashion trends. However, some of the other participants disagree with this view, arguing that sustainable fashion is no longer perceived as ugly or boring. There is an ever-increasing group of young, hip designers who are adopting the sustainability agenda, which means that sustainable fashion is available for everyone:

"I do believe we are reaching a tipping point finally, blowing the outdated myth that eco fashion is scratchy and ugly or boring. There are now so many designers at so many different tiers of distribution, with so many varied tastes, styles and fits, that there is no shortage of choice for the consumer and no restriction to any out-moded concept of boring and beige."

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the competence gap

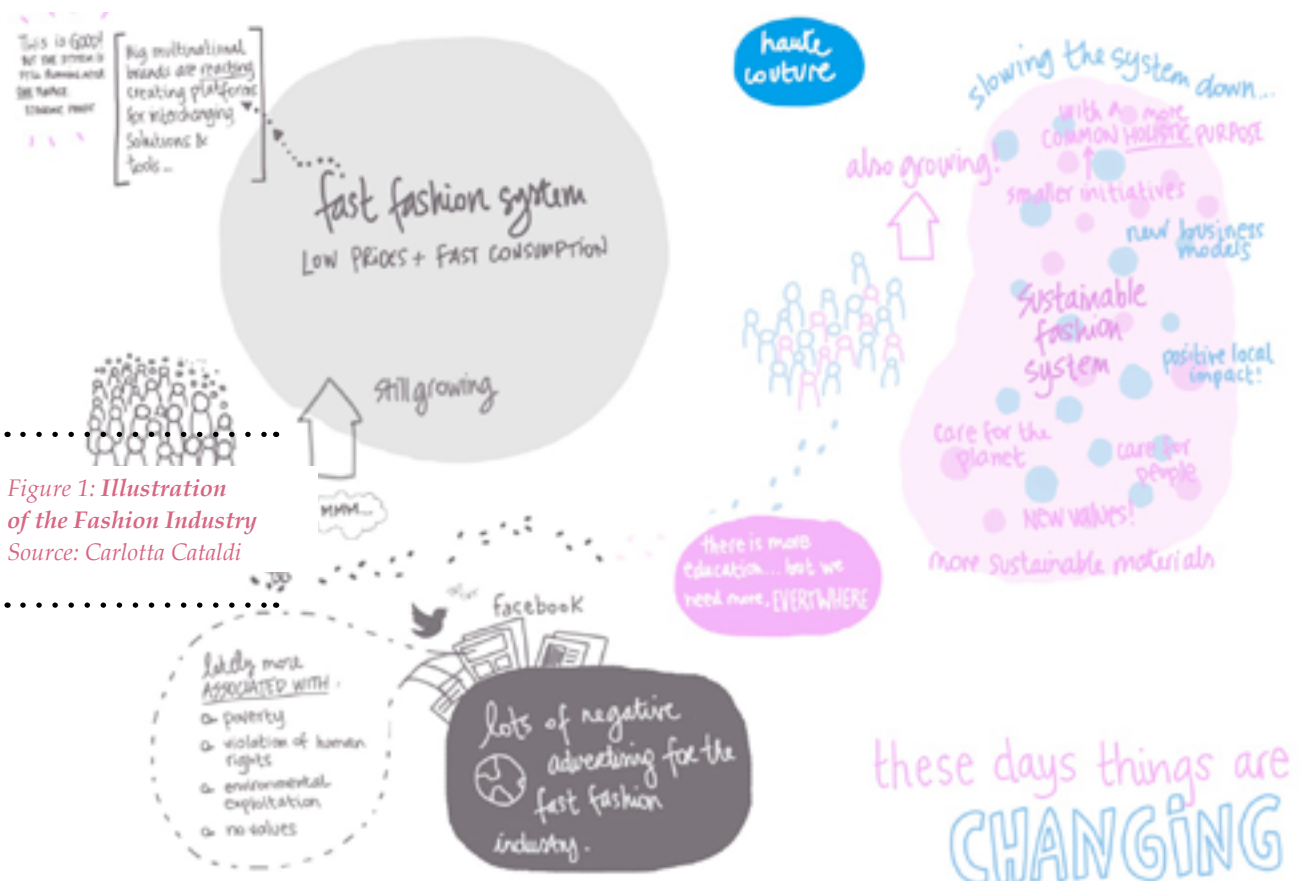
Sociolog.dx participants also argue that today's managers and employees are not sufficiently trained to begin the sustainability journey. Lack of knowledge makes it difficult for fashion companies to break with the status quo and develop new business models that have sustainability as a core value. It is argued that the fashion industry is especially short on technical knowledge. The creative people in the industry have to collaborate more closely with technical specialists on sustainable fashion:

"Today many fashion companies are started by creative people, which is great, but adding to creativity more technical knowledge and innovation has to enter into the fashion industry – not only at supplier level but also at fashion company level. We should be an innovative industry within creativity and design but also within the production process and product itself. The key to more sustainable products lies in the mix of creativity and technical knowledge."

Future designers and managers should also be better equipped to deal with the sustainability challenges in the fashion industry. Some educational institutions have demonstrated significant progress in this area, but, in general, sustainability is not sufficiently integrated into curricula at design schools and universities, which means that future designers and managers in the fashion industry do not have the right competences to reduce the industry's social and environmental footprints. As an example, a participant argues that:

"(...) sustainability is not embedded in the fashion design curricula as a core subject; thus designers – who are key actors in influencing sustainable practices both in production as well as in consumption – get their degree without having deep knowledge or training in this regard."

barriers to sustainable fashion



solutions to the sustainability crisis in the fashion industry

Today, we are seeing growth in innovations in technologies, products, and business models that hold promise for a more sustainable future in the fashion industry.

An increasing number of companies are experimenting with new products and processes to cope with the social and environmental challenges in the fashion industry. For instance, companies are increasingly exploring alternatives to conventional cotton as well as new technology to lower the environmental impact of fashion manufacturing. As an example, Levi's Water<Less™ campaign enabled the company to reduce water consumption significantly in the finishing process. Moreover, the company Trigema is now offering clothing based on the Cradle-to-Cradle principles.¹³ A large number of brands have recently introduced various take-back systems, repair services, and recycling schemes.¹⁴ This number includes

companies such as Canadian outdoor company Mountain Equipment Co-Op (MEC), which promotes recycling by allowing people to sell or swap outdoor products on their website. Moreover, several companies have built a business on transforming used materials into new products. One example, the Finnish fashion brand Globe Hope, has developed competences in turning existing materials (military laundry bags, seat belts, etc.) into new fashion products. The above-mentioned innovations in sustainable fashion are not only for the good of society. They can also be a source of profit, growth, and competitive advantages.

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solutions to the sustainability crisis in the fashion industry

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closing the circle

The experts participating in the Sociolog.dx experience were asked to provide examples, pictures, links, etc., of innovative sustainability initiatives within the fashion industry. A number of participants highlight the various take-back systems, recycling arrangements, and cradle-to-cradle (C2C) initiatives that are currently being introduced in the fashion industry. These initiatives are first steps in breaking with the current linear system through which fashion products end up on the landfill.¹⁵ For example, Puma is highlighted as one of the active companies in this field with their Bring Me Back bins and InCycle collections, both of which are certified by C2C. Another example is H&M's Garment collection initiative (not limited to H&M clothes), which has been rolled out globally.¹⁶ Lastly, Filippa K is highlighted for facilitating sales of its second-hand products, a model that has existed in the car industry for decades. All of these initiatives help change consumer behavior and can be a valuable component in a sustainability strategy:

"I recently saw H&M's recycling bin in a store and realized that they are appealing to people with children to drive this effort (the bin was in the children's section with images from their 'conscious collection'). I think this can be effective and is a manageable amount of information for a consumer to consider while shopping, and allows H&M to gradually scale up its advertising efforts around sustainability."

A number of participants focus particularly on "upcyclers" – companies producing new materials from textiles and garments no longer being used in their existing state. Currently, the most sustainable fashion is made with zero new materials. Reusing what already

exists allows the designer to be creative in developing solutions. This may be the reason why we, according to a participant, are witnessing "(...) *an endless array of truly cutting edge, as well as playful, youthful, sophisticated, cerebral and intellectual designers that choose to upcycle both pre- and post-consumer waste.*"

Examples are many but include, for instance, "Goodone" and "From Somewhere" in the UK. Goodone uses post-consumer waste – that is, the stuff we throw out when we are tired of it – whereas From Somewhere uses pre-consumer waste such as cuts and leftover fabrics from world-renowned designers. From Somewhere is especially well known for its collaboration with Speedo on transforming the banned LZR racer suit into new fashion items.¹⁷ Other organisations involved in upcycling include Upcycling Fashion, Zweiter Frühling, Milch, Silent People, Tamara Fogle, Piece x Piece, Christopher Raeburn, and Saisei. Last, Marks & Spencer's Shwop Coat has also received a great deal of attention. To quote one of the participants, "*This is an example of a closed loop system and has been effective because Marks and Spencer have used their supply chain expertise so that the recycled wool is used in a new coat that is made for sale.*"

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solutions to the sustainability crisis in the fashion industry

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supply chain solutions

A number of solutions identified by participants are related to the fashion supply chain, which has been targeted with a great deal of criticism in recent decades. For instance, new tools for transparency and traceability are proposed for the fashion supply chain, including Livecams, metric tools, LCA software, and RFID or smart tags. Moreover, participants highlight increased training and education of managers, designers, and consumers as potential solutions. For example, one of the participants is engaged in an education program that involves internships in Asia, where students develop a deeper understanding of

the fashion supply chain. In addition, participants refer to various initiatives that aim to create a more responsible and sustainable fashion supply chain, including “Garments Without Guilt” and “LaurenceAirline.” References are also made to the “IOweYou (IOU)” Project, which reconnects the maker of the fabric, the maker of the garment, and, finally, the consumer. In the words of one of the participants: *“Every actor in this seemingly shorter supply chain is connected visibly, and this adds to the garment a story and a feeling that is not possible to ‘buy’ in a regular store.”* Lastly, Manufacture NY is highlighted as an idea to promote transparency and local production by uniting the whole supply chain under the same roof.

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the
IOWEYOU
project
(IOU)¹⁸

IOWEYOU

The IOU project’s mission is to get consumers to think about how products can be produced and sold in a way that benefits the actors in the supply chain and the environment. The IOU Project works with the notion of the “prosperity chain” instead of the generic term supply chain. What the project claims as the distinguishing feature is that the prosperity chain seeks to empower the artisans, making traceability and transparency top priorities while utilizing the power of social networks to make consumers think about responsible sourcing.

The IOU Project is engaged in meeting the demands of consumers who would like to know where their clothes originate and further leveraging the power of social networks. The customer has the opportunity to trace the piece, from the weaving of the fabric in India to the design by craftspeople in Europe; ultimately, the customer is invited to “end” the chain by uploading a picture of where the garment ended up. The premise of the brand is that “every IOU item has a story.”



design(ers) for change

Designers play a pivotal role in transforming the fashion industry. They have the opportunity to pave the way for various types of sustainable fashion, whether it concerns the introduction of new materials, changes in consumption patterns (such as laundry requirements), or the development of recycling/upcycling. Therefore, it is also positive that progressive design schools are now working hard to integrate sustainability into their training and education activities. Moreover, we are seeing an increasing number of design competitions and awards that explicitly focus on design.¹⁹ When well-known designers like Stella McCartney start to take social and environmental issues seriously, it also helps create awareness of sustainable fashion in the wider designer community. Therefore, designers have the potential to bring sustainable fashion to the next level. To quote one of the participants:

"The industry – and specifically the designers within it – need to start imagining less impactful ways to provide for human need and desire, and take the consumers on a creative journey with them. I am talking about service design, of course, as well as materials and processes that significantly lower impacts. I am talking about colour, design, pleasure, and change, but in ways that break with the traditional industrial revolution models."

kuyichi

Kuyichi was founded in 2001 by Solidaridad, an NGO with a mission to create a sustainable supply chain in the clothing industry. The idea was to introduce organic cotton to the clothing industry; after being turned down by several big players in the denim industry, the NGO decided to start their own fashion brand. In 2001, Kuyichi was focused on organic cotton jeans. Today, it has developed into a thriving fashion brand that uses recycled plastic bottles and alternative resources such as hemp and Tencel® to produce sustainable garments. Kuyichi has also partnered up with MADE-BY to introduce the "Deposit Denim" concept. Realizing that millions of kilos of textiles are thrown away every year in Europe, they launched the first closed-loop life cycle for reusing denim. Consumers are asked to return an old pair of jeans of any brand when they buy a new pair. Participating consumers receive a €10 (approximately US\$13.50) discount and become part of the production of sustainable fashion. Kuyichi collects the legs of all the returned jeans and supplements them with new fibers of organic cotton to spin new yarn, which is used to make new jeans and t-shirts. On its company webpage, Kuyichi states that quality fashion should be created in a 100% sustainable and responsible way.

smarter systems, tools, and technologies

A number of participants also highlight a wide range of new systems, tools, and technologies that support the development of sustainable fashion. Some of these solutions enable companies to reduce their social and environmental impact – for example, in manufacturing processes, packaging, and transportation. One example is Puma's Clever Little Bag, which attempts to minimize the use of packaging materials, and Dye-Coo, which provides industrial CO₂ dyeing equipment that eliminates water consumption. Other examples concern technologies that change the way we think of fashion, such as Spray On clothes²⁰ and new textiles from plants and fruits.²¹ Some Sociolog.dx participants also highlight new systems that assess the environmental impact of various garments, including Nike's Materials Sustainability Index²² and the Higg index.²³



solutions to the sustainability crisis in the fashion industry

solutions to the sustainability crisis in the

from
products
to
services

There is a need for focus to shift from products to services (swapping, leasing, repairing, hiring, etc.). As one of the participants argues: *"We all have plenty to wear! We need to be offered more support and encouragement in looking for the alternative 'new.'"* Service models like Rent the Runway, which promotes reuse through renting, and Stylish Girl, which enables consumers to organize a wardrobe, are mentioned by participants. Many, however, question whether well-established brands that have based their business model on fast production of commodity goods will be able or willing to change:

"I would agree with the importance of developing new business models, e.g., based around service rather than the production/commodity models. It is likely, however, that such models will have to come from outside/beyond those already invested [literally and figuratively] in the fashion status quo."



re-fashion[er]²⁴

Online communities for swapping clothes and selling vintage fashion are popular today. Re{fashion}er is an example not only of an online community for swapping, buying, and selling designer clothes but also of a rising trend on the internet: collaborative consumption. The trend reveals a shift in consumer values—from owning to wanting access. Re{fashion}er brings together consumers in search of sustainable living and those with a passion for designer clothing, without the means to buy expensive new clothes every month. At Re{fashion}er, you share with, buy from, sell, and give clothes to people you don't know, which requires a certain level of trust. When trading at Re{fashion}er, you can see reviews of the person with whom you are negotiating as well as how many sold items you have. This way, you have a chance to get a picture of the person with whom you are about to make a deal. If you still have doubts about trading with strangers online, clothes-swapping parties (where you trade with people face-to-face) have become an alternative.

partnerships for sustainable fashion?

Fashion companies increasingly explore partnerships as a potential solution to social and environmental problems in the supply chain.

The sustainability challenges in the fashion industry are so varied in nature and of such a scale that single actors cannot solve all problems by themselves. Acknowledging the complex nature of the sustainability problems, various organisations have partnered up to create a “tipping point” for sustainable fashion.²⁵ For instance, partnerships exist between companies and other commercial partners (e.g., online platforms), non-governmental organisations (second-hand groups, for example), communities (such as local artisans), state organisations (for instance, public universities and design schools), and international organisations (UN Global Compact, for one). In addition, companies collaborate with broader groups of actors in various multi-stakeholder initiatives such as Better Cotton Initiative and the Sustainable Apparel Coalition.

multi- stakeholder partnerships for sustainability

The partnerships mentioned in the Sociolog.dx discussions often have a project-like character, which involves a limited number of actors for a limited period. However, the Sociolog.dx participants are not blind to the need for concerted action in coping with sustainability challenges in fashion. According to one of the participants: “(...) we work with brands and retailers, public and private investors, factories, farmers, and local stakeholders such as government, etc. All actors in the supply chain have a role to play.”

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partnerships for sustainable fashion

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Consequently, it is also difficult for one actor to make a real change toward sustainability, as it requires the active commitment of everyone in the supply chain. Sustainable cotton is given as an example that requires the involvement of all stakeholders, from local farmers to brand owners and retailers.

Moreover, the Sociolog.dx participants highlight the Sustainable Apparel Coalition and the Sustainable Clothing Action Plan as innovative multi-stakeholder approaches to sustainable fashion. With regards to the former, one of the Sociolog.dx participants argues the following:

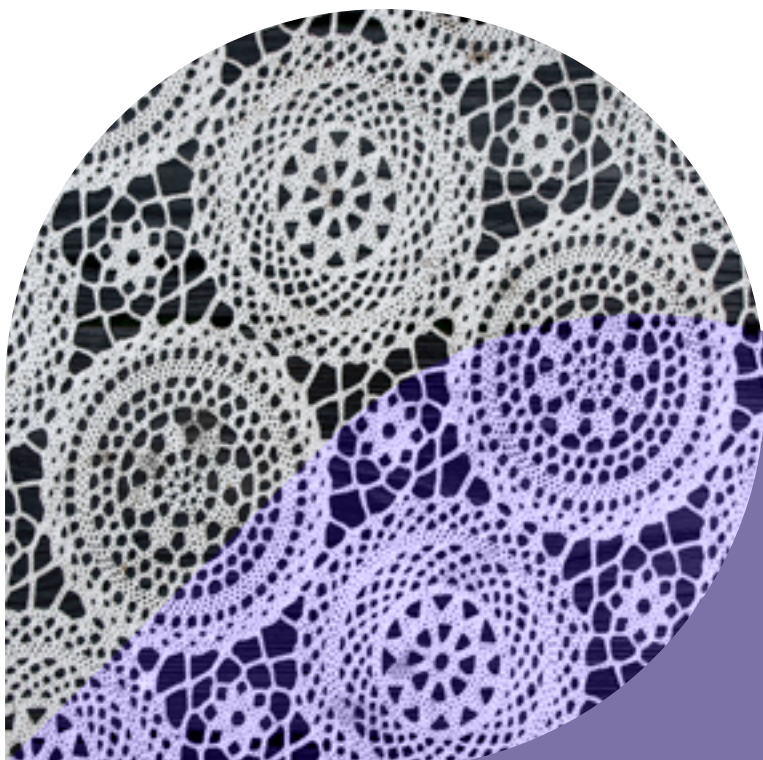
"After seeing so many NGOs pop up trying to get their piece of the pie and help fashion companies to become more sustainable, I was happy to see an initiative coming from the industry itself. The Sustainable Apparel Coalition builds on work done by individual companies such as Nike, aims to share best practices and works together with academic institutions to increase validity of their work. I expect real transformation to happen with these heavy weights at the forefront."

design schools and universities

Universities/design schools are also important partners in sustainability-related teaching and research. As noted by a participant, *"Universities and [their] design schools are in a very strong position to work with fashion companies – to develop good practices, but also to be involved in exploration, research, 'thinking outside of the box.'"* For example, the Sustainable Textile Center (STC) in Argentina has established partnerships with universities in countries such as Chile, Peru, Paraguay, Uruguay and Panama to promote sustainable fashion and share knowledge. Textile Toolbox is a collaborative effort between academics and industry advisors who might usually compete rather than collaborate. Parsons' zero waste course, a collaboration with Loomstate,²⁶ is also highlighted as an example by one of the participants:

"Teaching design students about sustainability and having the opportunity to put designs into production is very important and rewarding. It challenges students to think about design in a new way, and Loomstate is a small company that produces locally and minimizes its environmental impact through innovative design and material choices. It is a small step but a very important one."

■ ■ ■





collaboration with local communities

Sociolog.dx participants mention a number of collaborative projects that have been introduced to benefit vulnerable groups such as immigrants, the disabled, and HIV patients. For instance, the project “in line with the world” (I tråd med verden) is a cross-sector partnership that supports ethnic minority women’s integration into society by making use of their culture specific craft traditions.²⁷ Moreover, several companies have developed special collections in collaboration with local artisans, thereby contributing to local economic development and, perhaps, greater understanding among people across cultures. Usually,

the artisan, or a cooperative of artisans, is skilled within traditional handicraftsmanship, such as knitting or pottery, but is unable to reach markets beyond the local community. A company/artisan partnership allows fashion companies to tap into the competences of local artisans while contributing to the development of local communities. To name a few examples, fashion brands have partnered with the non-governmental organisation COOPA-ROCA to work with local artisans in the Brazilian favela, Rocinha; Finnish design company Mifuko also works with disadvantaged groups in Kenya; and the NGO Solidaridad has used its own brand, Kuyichi, to help cotton farmers in Peru earn a living from producing organic cotton. A few examples of company/artisan projects are provided below.

the emergence of partnerships between fashion brands and local artisans²⁸

The Faroese knitting company **Gudrun & Gudrun** was established in 1999; its mission was to create an exclusive brand with the Faroese knitting tradition as one of its pillars. Founders Gudrun Rogvadottir and Gudrun Ludvig wanted to create modern knitted garments. Since one of the value propositions was that the garments would be hand-knitted, the duo employed 30 female Faroese knitting artisans who work from home. After the appearance of the Icelandic sweater on Sarah Lund in the television series *The Killing*, sales grew; soon, Gudrun & Gudrun had “out-knitted” the knitting capacity at the Faroe Islands and were forced to look elsewhere for knitting artisans. They turned their focus to Jordan, a country with strong knitting traditions much like those of the Faroese. The Jordanian women became part of the Women Empowerment project; by collaborating with them, Gudrun & Gudrun has a stake in the sustainable development of the country while also providing workplaces for the knitting artisans. Today, Gudrun & Gudrun employ approximately 30 knitters on the Faroe Islands and 25 in Jordan.²⁹



partnerships for sustainable fashion



the
emergence
of
partnerships
between
fashion
brands
and
local
artisans (2)

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In the 1980s, Maria Teresa Leal founded **COOPA-ROCA**, a cooperative for skilled female artisans and craft workers in the Brazilian Favela, Rocinha. Maria Teresa Leal was inspired by the way the women in the Favela were able to produce goods from leftover fabrics she brought them. Consequently, she decided to organize the women into a cooperative. Working for COOPA-ROCA has allowed the women to contribute to their families' budgets without compromising their domestic duties. The Brazilian women are skilled in the northern Brazilian craft tradition, which the work of the cooperative helps sustain. To maintain and improve their crafting skills and integrate them more fully into the cooperative, COOPA-ROCA hosts workshops for the women. One aspect of COOPA-ROCA that differs from most other company/artisan partnerships is that it works with the established fashion industry; over the years, the female artisans have produced pieces for fashion labels such as Osklen, Lacoste, Agent Provocateur, Paul Smith, and C&A.

Another actor engaged in company/artisan partnerships is **Indigenous**³⁰. The California-based company was established in 1994 and has since been engaged in a wide variety of initiatives to be sustainable and socially responsible. Over the last decade, Indigenous has developed a comprehensive artisan network and is currently working with more than 300 artisan cooperatives or knitting groups. The company is very "people and planet"-centric and, consequently, greatly committed to sustainable and socially responsible actions, as they have experienced the positive effects of their commitment firsthand in South America. The clothes Indigenous sells are not only eco-friendly but also make use of organic fibers from South America. Simultaneously, the company is committed to fair trade to give the artisans a fair wage.

new consumer behavior

New initiatives are called for to help translate positive consumer attitudes toward sustainable fashion into everyday purchasing decisions.

Fashion companies have the responsibility to tackle sustainability issues within their sphere of influence.³¹

However, the mainstreaming of sustainable fashion also depends on a change in dominant consumer values, attitudes, and behavior. While consumers often have a positive view of socially- and environmental-friendly products, these attitudes are rarely transformed into concrete buying and consumption behavior. Moreover, due to non-transparent supply chains, consumers often are unaware of the consequences of their buying behavior and, thus, are unwilling to pay a premium for sustainable fashion. Bridging the current knowing-saying-doing gap is necessary in order for sustainable fashion to have a future; this makes it important to discuss potential means for promoting a more sustainable fashion consumer culture.

a call for cyclability

Several Sociolog.dx participants refer to cyclability³² issues — that is, various types of “reuse” (including recycling, upcycling, and repair) that are currently gaining momentum in the fashion industry. As noted by one of the Sociolog.dx participants, “[P]eople have really become much more aware of exchanging, borrowing and re-using clothing as well as upcycling, customizing and repairing what they have. Vintage is clearly also much more popular and accepted than it used to be.” To give a few examples, the recycling initiatives of Marks & Spencer, Patagonia, H&M, Sort Slips Hvidt Slips, and Intimissimi are highlighted as successful promotion of sustainable consumption. As well, repair cafes are noted as an initiative that counteracts the throwaway consumer culture and enhances product lifetimes. Customization is also presented as a potential means of promoting a longer lifespan of clothing, as provided by the brand 3x1, for example. According to a Sociolog.dx participant:

"Having a product that is customized to fit you not only enhances the customer experience but ensures a high quality product with the intention of longevity and durability for wear. It definitely reduces the "disposable fashion" mindset."



new consumer behavior

examples of upcycling and downcycling³³

In recent years, *upcycling* has gained momentum, backed by the disapproval of sending clothes or other useful materials to landfills. Junky Styling in the UK was one of the first to embrace the concept of upcycling and started to work on it in 1997. Initially, they turned outdated men's suits into edgy women's clothing. After a while, they moved away from a focus solely on men's suits; now, they take whatever garment the customers brings into the shops and turn it into a unique piece of clothing. Another example is the Finnish company Globe Hope. Since 2003, founder Seija Lukkala and her team have worked with interesting recycled and discarded materials such as seatbelts, sails, old vinyl, computer keyboards, and advertisement banderols. The materials have been used to design both garments and accessories; for example, sails are made into bags and seatbelts serve as bag handles. The brand has received several awards over the years, such as Amnesty International's Designer of the Year Award and a Finnish award for outstanding performance.

Examples of downcycling are also found in the fashion industry. In 2010, the Italian lingerie label Intimissimi installed recycling bins in their flagship stores and encouraged customers to recycle bras and other underwear garments, regardless of brand, in return for which they received a voucher. The president of Intimissimi, Sandro Veronesi, said, "*There are programs for the scrapping of appliances, but no one thinks about what's involved in the waste management of brassieres.*"³⁴ With the collaboration of Italian engineering firm Ovat Campagnari, the complex mix of materials in bras was subsequently broken down into soundproof insulation board, which could be used in construction. In 2013, Intimissimi again promoted its Recycle your Bras! initiative. This time, they collaborated with Swiss textile and shoe recycling company I:CO to break down the underwear into insulation material.

new consumer behavior

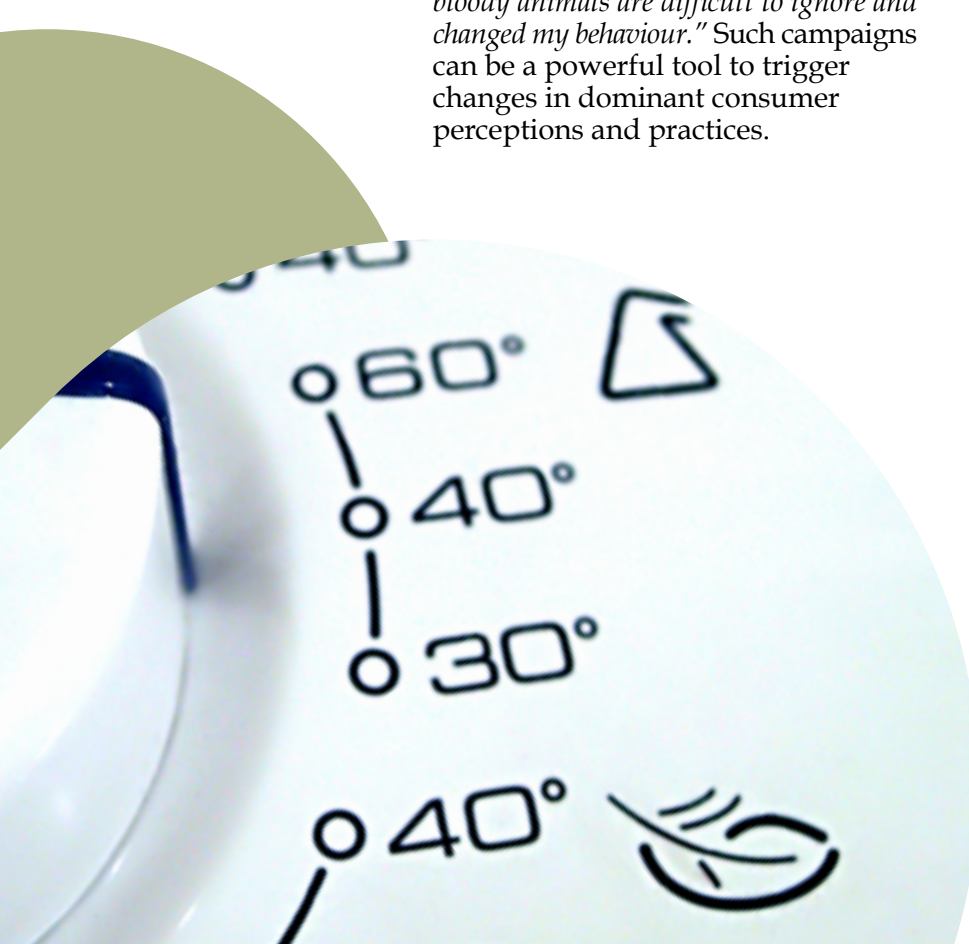


campaigns by activist groups

Successful campaigns can build knowledge and motivate a change in consumer behavior at national and international levels. According to a Sociolog.dx participant: *"It seems to me people have responded to campaigns towards greater transparency and labour rights partially as a result of corporate scandals."* For instance, campaigns such as Greenpeace's DETOX, Labour Behind the Label, and the Clean Clothes Campaign have forced a multitude of brands to change existing behaviors and production policies. The PAN-UK campaign against pesticides in cotton farming is mentioned as an initiative that allegedly inspired pioneers in eco fashion and the establishment of Ethical Fashion Forum. Moreover, PETA and the anti-fur campaign changed the mindset of many consumers. According to a Sociolog.dx expert, *"Images of bloody animals are difficult to ignore and changed my behaviour."* Such campaigns can be a powerful tool to trigger changes in dominant consumer perceptions and practices.

marketing and communication

Companies can also be active in promoting the sustainability agenda in the fashion industry. At present, consumers do not seem to pay much attention to sustainable fashion, compared with other product categories. For instance, one of the Sociolog.dx participants argues the following: *"I am actually surprised by the lack of interest in sustainability in clothing (...) It seems to be lagging behind other areas, especially food. I do think people are very dependent [on] and addicted to fast fashion and a quantity over quality model (...)"* Trustworthy marketing and communication is needed for consumers to understand the sustainability impacts of fashion manufacturing better. Levi's Water<Less™ campaign is highlighted as an initiative that helps raise consumer awareness about fashion manufacturing and water use. "Wash at 30 degrees" campaigns are also mentioned as a successful communication of sustainability issues that goes beyond the individual brand. Another example, Patagonia's "Don't buy this jacket" marketing campaign, is said to be successful in addressing new consumption patterns as it aims to engage stakeholders in all stages of consumption (purchasing, using, and discarding).



the role of policymaking

Governments can promote sustainable fashion through a variety of “soft” and “hard” policies, ranging from media campaigns directed toward the public to taxation of certain products and materials.

It is increasingly acknowledged that corporate sustainability works best in concert with stable and well-functioning regulatory systems.³⁵ As noted by Williamson et al. (2006, p. 327): “(...) *regulation plays an important role: it bridges the gap between the firm’s profit-oriented self-interest and the interests of society.*”³⁶ Therefore, initiatives to promote sustainability need to be coordinated with policymaking at all levels to speed up the transformation of the fashion industry. In general, policymakers can use a variety of tools to influence corporate sustainability policies and practices — awareness-raising, tax incentives, public procurement, etc.³⁷ As an example, regulatory requirements have recently been demonstrated to have a significant impact on the sustainability reporting practices among large corporations.³⁸

getting prices and products right

Sociolog.dx participants were asked to suggest concrete policy instruments that are likely to promote sustainable fashion. In general, most participants seemed to agree that there is a need to tighten regulation of the fashion industry. In particular, a number of participants stressed the importance of addressing the current price structures, which seem to reward unsustainable companies and consumers. According to a Sociolog.dx participant, it is crucial that consumers are introduced to a pricing scheme that represents the actual costs of production. Therefore, policymakers can play an important role in getting prices right in the fashion industry through tax breaks for sustainable fashion manufacturing, subsidies for recycling, and lower VAT on sustainable products.



the role of policymaking

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To quote one Sociolog.dx participant, *"Unethical and polluting processes are what should be taxed, while ethical production should be financially incentivised."*

The mechanisms mentioned above mean that the externalities from fashion manufacturing and consumption (water, pesticides, etc.) would be included in the price of the product, thus providing incentives for companies to begin the sustainability journey. A Sociolog.dx participant makes the following comment:

"Price is a major factor in most consumers' purchasing decision and I think tax rebates on sustainable products could provide a powerful incentive when the consumer has to make a choice. The sustainable tax benefit could also apply to apparel manufacturers and retailers to encourage a larger supply of sustainable products and end-of-life/recycling programs."

Policymaking could also be used to set minimum requirements for fashion products. In the words of a Sociolog.dx participant: *"(...) [Y]ou can't just dissuade certain purchasing behaviors, without offering some better alternatives. We have to promote sustainable consumer behavior by offering better choices."* Regulatory standards would ensure that fashion companies include more sustainable products in their offerings to consumers; the minimum standards could include, for instance, durability, washability, and the ability of garments to maintain their shape after washing. Moreover, mixed materials could be abandoned for certain types of environmentally friendly products.

These minimum requirements would increase the quality of the products, protect the environment, and ensure the health of workers as well as consumers. According to one Sociolog.dx participant, it is a problem that the legislation: *"(...) does not currently support brands producing ethically and sustainably, and does not hold brands directly accountable for the production of their own goods."*

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transparency, reporting, and labels

There is also a need to increase the transparency of the fashion supply chain. Therefore, it is suggested that companies should be required to have barcodes on labels that enable consumers to see where and how products are made. Mandatory, trustworthy labels (about the product's carbon footprint, for instance) are also mentioned as a potential solution to increase the transparency of the fashion industry and make it easier for consumers to make sustainable buying decisions. According to a participant: *"My sense is that there is a desire, e.g., from a large swathe of consumers, including younger people and teens, to have clear and accurate information about where clothes come from, how they are made, etc."*

CSR reporting requirements are also suggested as a mechanism for promoting transparency in the supply chain. Reporting requirements should include targets and performance data and be harmonised to enable cross-company comparisons/benchmarking.³⁹ To quote a Sociolog.dx expert:

"Reporting requirements would be a great way for companies to maybe become more aware of their own actions. If CSR reporting were mandatory and standardized like financial reports, at least some level of comparability would exist. Right now there is no way to accurately compare how companies are faring with their environmental initiatives. Once a level of action can be determined, proper regulation can be put in place (...)."



the role of policymaking





awareness-raising campaigns

Public awareness-raising campaigns among consumers can also be used to promote sustainable fashion. At present, public awareness of sustainable fashion is perceived as relatively low, which makes it difficult for consumers to make the right choices. However, awareness-campaigns have to be carefully designed in order to avoid letting the information drown amidst all the messages that consumers receive every day. One way to bring the knowledge to the consumers is to include sustainability as a compulsory component in the curricula at all educational institutions. Moreover, communication to consumers has to take into consideration national and cultural differences since knowledge about sustainability varies significantly. Finally, one of the Sociolog.dx participants notes that awareness-raising campaigns have to be entertaining rather than preachy and dogmatic: *"People are eager to learn, but it also needs to be fun; otherwise they will never make a change."*

the role of policymaking

sustainable clothing action plan (SCAP)⁴⁰

Following the increased focus on sustainability in the fashion industry and on resources used by the industry, several initiatives have been established to limit its negative impacts, both social and environmental. One such initiative is the Sustainable Clothing Action Plan (SCAP), which was set up in 2010 by the Waste and Resources Action Programme (WRAP) in the UK. SCAP is a multi-stakeholder initiative (MSI) in the UK, committed to improving the sustainability of garments throughout their lifecycles. The mission of SCAP is to improve the environmental footprint, depicted as emissions of carbon, waste, and water, of the fashion industry. The stakeholders in SCAP are government, leading clothing retailers, and NGOs in the UK. The MSI has four working groups that cover aspects of a garment's lifecycle: design, reuse and recycling, influencing consumer behavior, and metrics. Amongst other things, the groups are committed to creating knowledge hubs for efficient design and buying, reducing the impacts of clothing, improving collection systems, and developing markets for reuse and recycling. They are also working on influencing consumer behavior through communication and, lastly, they are developing practical measuring and reporting tools for the sector. WRAP encourages businesses to become signatories with the SCAP initiative; as of June 2013, more than one third of UK retailers had signed up to the SCAP 2020 Commitments, thereby pledging to measure and report their environmental footprint. Using the numbers from 2012 as baselines, the signatories are committed to improving the numbers by 2020. The companies have signed up to focus on *"lower-impact textile fibers, extending the active life of clothing, recovering material which currently goes in the bin, and providing more information for consumers."*⁴¹ At the production end of the continuum, allowing the companies to measure their impact accurately, WRAP and SCAP have developed a spreadsheet that measures the total use of carbon, water, and waste, based on total sales for a year. At the end-use end of the continuum, when consumers have disposed of their clothes, the charities, NGOs and recycling organisations can report the total weight of collected garments; in this way, the benefit of recycling/reusing can be calculated.

teaching sustainability

Sustainable fashion is not a quick fix and necessitates a thorough organisational transformation of mindset and behavior.

In order to make real progress toward sustainability, organisations must acknowledge the need for change and take concrete steps to reduce social and environmental impact. However, making sustainability operable is not always an easy endeavor. For example, many organisations experience a knowing-doing gap in which they fail to translate knowledge of “good practice” into concrete action.⁴² Therefore, it is important to discuss among organisation members how fashion companies should begin the sustainability journey to integrate social and environmental concerns more effectively into day-to-day operations.

tailor-made training

Overall, the Sociolog.dx participants seem to agree that training and education should be tailor-made to the organisation in question. Fashion companies have different characteristics and needs that, in turn, call for different types of interventions. For instance, small companies are often dominated by owner-managers and have a simple organisational structure, whereas large multinationals are more complex entities with multiple managerial layers and organisational functions. Moreover, sustainability skills and expertise differ tremendously within the fashion industry. Some companies are fairly advanced when it comes to social and environmental management, while others basically have to start from scratch. In the words of one of the participants:

"The process of doing this can take many shapes and forms – in some cases you need an “outside expert” to gain transaction/verification; sometimes you need a lot of bottom-up involvement, sometimes less. So, basically, it depends on the pre-existing organisation and culture and current level of maturity with regards to sustainability."





the role of consultants

The Sociolog.dx discussion shows that the question of whether or not to engage consultants is best answered by looking at the level of internal expertise on the topic. Thus, while all participants agree that collaboration with internal staff is core to the success of teaching sustainability (as they will be responsible for maintaining this change long after any independent consultants have left), they also recognize the potential value of external consultants to help initiate and integrate the process of transformation:

"I think that external consultants can be extremely valuable in re-evaluating corporate current practices, as it often needs a fresh set of eyes to view processes that have become automatic, and evaluate them from a sustainable perspective. That said, consultants do not always take the time to consult and work with existing staff effectively, who quite often are very aware of their shortcomings and poor practices."

the change process

There are different opinions on whom to target in the initial phase of the transformation process. Some Sociolog.dx participants suggest starting with one department, perhaps sourcing and logistics, while others adopt a cross-departmental strategy. For instance, it is suggested that departments attuned to the topic of sustainability should begin the sustainability journey. It will be easier to implement changes in departments favorable to the idea of sustainability, and these early adopters can also serve as internal champions and ambassadors for subsequent dissemination to other parts of the organisation. However, the departmental and cross-departmental change strategies can also be combined – for instance, by using a T-shaped change model, which combines inspiring lectures to employees across departments with more comprehensive interventions among a sub-part of the organisation. However, top management commitment is seen as an essential starting point no matter the approach. According to one participant: *"[W]ithout senior management buy-in, the exercise would be futile."* Moreover, the Sociolog.dx participants agree that, in the long run, all people in the organisation should be engaged across departments and divisions, as well as upstream and downstream in the value chain. As highlighted by one of the participants, people in organisations have to recognise that sustainability is not someone else's problem:

"(...) [I]f you can address the mindset of the people working directly with the product – this is the biggest hurdle. Sustainability has gone from "someone else's problem" to encouraging and educating all that it is something they can deal with and helping them understand they can have a positive impact on our products. What helps is to share sustainable information in small digestible bites so that they can be integrated into our products. Team play is really important."

teaching sustainability



tools to promote sustainability

The choice of tools and methods depends on context and target group – for example, specific departments or cross-departmental efforts. Organisational cultures have to be taken into consideration, but national differences concerning basic awareness on the topic of sustainability are also highlighted as important. However, the participants seem to agree on the premise that sustainability should not be an add-on to everyday business activities. According to a participant: *“(...) [T]hese topics would need to be considered as part of company strategy, not side-lined as a Corporate Responsibility initiative.”*

teaching sustainability

In order to promote integration, tools such as workshops, awareness campaigns, panel discussions and lectures are mentioned as methods for teaching sustainability. Some participants suggested creating an online course, for example, MOOCs (massive open online courses), on the basic principles of sustainability or inspirational films to start the discussion across the organisation, in this way demonstrating a “new culture of learning.” Ultimately, however, the organisations should move to “real” conversations around potential solutions for sustainability. Here, workshops may help inspire these conversations and thereby help integrate sustainability into organisational mindsets and practices, although these events will have to be supplemented with other initiatives throughout the organisation in order to promote changes toward sustainability.⁴³ In the words of one of the SocioLog.dx participants: *“[M]otivation only lasts so long unless there is a major shift in the company’s strategy and core structure.”*



TED's Responsible Living exhibits at VF Corporation FutureWear exhibition, U.S (2012) photography by TED

the future of sustainable fashion

Today, many of the activities in the fashion industry run contrary to the ideals of sustainability, but new innovations within and without the boundaries of the fashion industry hold potential to bring about long-term systemic changes.

Based on the overall discussions, the Sociolog.dx participants were encouraged to reflect on what they think will be the next big trend within the field of sustainable fashion. Will companies invest in social responsibility such as living wages and working conditions, show massive interest in exploring new materials, or something else? Overall, Sociolog.dx participants foresee sustainable fashion as making progress on all fronts: exploration of new materials, downcycling/recycling/upcycling, clothes sharing, slow fashion, and sustainable consumption. These initiatives will, according to participants, be driven by collaborations and partnerships among actors in the value chain, e.g., between artisans and retailers, between brands and NGOs, etc. Some of the topics highlighted by the Sociolog.dx are as follows:

- **Transparency and traceability.** Technologies and systems for transparency and traceability are steadily

becoming more sophisticated, which means they will have an important impact on the fashion supply chain. According to a Sociolog.dx participant: *“Transparency will likely become a big trend, especially with the increase of technologies that can support a broader network of monitors.”* The trend toward transparency is also linked to increasing demand for companies to adhere to standards and certification systems.

- **Working Conditions and Fair Wages.** The recent Bangladesh tragedy is expected to spark renewed interest in living wages, labor standards, health and safety, etc. However, there are also concerns that the industry’s focus on these issues may slowly disappear once media coverage has ended.

the future of sustainable fashion

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• **Products and Materials.** Sociolog.dx participants predict sustainable materials to be the next big trend within sustainable fashion. For example, we see more and more companies using organic cotton and recycled polyester without making any major changes to their overall business models. However, companies will also slowly start to discover the potential of new materials such as fabrics from bark, cactus, seaweed, and paper.

• **Closed Loop Business Models.** Some of the participants predict that we will see an increasing number of companies explore new business models that focus on circular and closed-loop schemes — for example, take-back systems. The rising prices of raw materials will also give fashion companies an incentive to address cyclability.

• **Collaborative Design, Manufacturing and Consumption.** Some Sociolog.dx participants predict that fashion companies will connect more and more with consumers to promote sustainability. For instance, it is argued that: *"(...) the big trend within the field of sustainable fashion will be 'developing creative ideas' that facilitate sustainable consumption."* This includes sharing, swapping, leasing, reusing, repairing, and reconstructing.

• **Tapping into Local Knowledge.** The Sociolog.dx experts predict that local fashion knowledge can be translated into new, sustainable designs. This trend is seen as a counter-reaction to increased outsourcing to low-income countries.

In conclusion, the results from the Sociolog.dx study clearly show that there are great challenges ahead when it comes to mainstreaming sustainable fashion. Today, consumers, retailers, manufacturers, suppliers and policy-makers are only paying fragmented attention to sustainability, which makes it difficult to transform the industry and make real progress towards sustainability. However, despite disillusionment with the current state of affairs and the challenges to implementing changes, the Sociolog.dx participants also express a great deal of enthusiasm when it comes to some of achievements found at the margins and in the mainstream of the fashion industry.

"Many good things are happening everywhere: the fast, mainstream fashion system is slowly but steadily improving, led by a few leaders. Platforms for interchanging experiences, best practices, and solutions are being created, as well as practical tools to be used by designers to make more informed decisions when choosing materials and processes."

notes

¹ Definition based on DEFRA (2010), Sustainable Clothing Action Plan, Department for Environment, Food and Rural Affairs (DEFRA), February 2010, p. 5.

² Lewins, A. and Silver, C. (2007), *Using Software in Qualitative Research*, Sage Publications Ltd, London.

³ For instance, Park-Poaps (2010, p. 300) argues that “Clothing and footwear producers and retailers, competing within a highly fragmented, global industry, have been the focus of attention by the government, public, media and other institutional sources within special interests regarding allegations of sweat shop conditions and labor exploitation within the industry.” (Park-Poaps, H., (2010). Public pressure against sweat shops as perceived by top-management of apparel and footwear companies, *Journal of Fashion Marketing and Management*, Vol. 14 No. 2, pp. 300-311).

⁴ Dickson, M. A., Waters, Y., and López-Gydosch, D., (2012), Stakeholder Expectations for Environmental Performance within the Apparel Industry: The Urgency of Business Response, *Journal of Corporate Citizenship*, Vol. 45 (Spring 2012), pp. 37-51. Poldner, K., Branzei, O., and Steyaert, C., (2011), "Shecopreneuring: Sticthing Global Ecosystems in the Ethical Fashion Industry", In: Marcus, A., Shrivastava, P., Sharma, S., and Pogutz, S. (Eds), *Cross-Sector Leadership for the Green Economy*, (Pgrave Maxmillan, New York, NY), pp. 157-173.

⁵ Pedersen, E. R. G. and Gwozdz, W., (2013), From Resistance to Opportunity-Seeking: Strategic Responses to Institutional Pressures for Corporate Social Responsibility in the Nordic Fashion Industry, *Journal of Business Ethics* (forthcoming).

⁶ Greenpeace(2011a), *Dirty Laundry*, Greenpeace, Amsterdam. Greenpeace (2011B), *Dirty Laundry 2: Hung Out to Dry*, Greenpeace, Amsterdam.

⁷ Alam, K., Blanch, L., and Smith, A. (2011), *Stitched Up: Women workers in the Bangladeshi garment sector*, War on Want, London. Alam, K., Klier, S., and McRae, S. (2008), *Fashion Victims II: How UK clothing retailers are keeping workers in poverty*, War on Want, London. Connor, T. and Dent, K., (2006). *Offside! Labour rights and sportswear production in Asia*, Oxfam International, Oxford. McMullen, A. and Maher, S. (2009). *Let's Clean Up Fashion*, Labour Behind the Label, Bristol. Riddselius, C. and Maher, S. (2010), *Killer Jeans*, Fair Trade Center/Labour Behind the Label.

⁸ <http://www.adelaidenow.com.au/womens-wardrobes-bulk-up-on-fast-fashion/story-e6frea6u-1226061451226>

⁹ For instance, Kirkland & Thompson (1999, p. 133) list no fewer than 25 barriers that may impede the planning, implementation and maintenance/development of EMSs, including issues such as perceived high costs, resistance to change, lack of human resources, and lack of environmental awareness. Moreover, Biondi et al. (2000, p. 59) concluded that lack of time along with limited human and technical resources are important barriers for SMEs implementing EMS, whereas Brío et al. (2001, p. 24) found that lack of training and organizational inertia were the most important factors in the failure of EMS adoption. (Biondi, V., Frey, M., and Iraldo, F., (2000), *Environmental Management Systems and SMEs: Motivations, Opportunities and Barriers Related to EMAS and ISO 14001 Implementation*, Greener Management International, Vol. 29 No. 29, pp. 55-68. del Brío, J. Á., Fernández, E., Junquera, B., and Vázquez, C. J., (2001), *Motivations for Adopting the ISO 14001 Standard: A Study of Spanish Industrial Companies*, *Environmental Quality Management*, Vol. 10 No. 4, pp. 13-28. Kirkland, L. H. and Thompson, D., (1999), “Challenges in Designing, Implementing and Operating an Environmental Management System,” *Business Strategy and the Environment*, Vol. 8 No. 2, pp. 128-143.)

notes (2)

¹⁰ For instance, de Brito et al. (2008, p. 538) argue that the “fashion SC [Supply chain] is particularly sensitive to sustainability due to its inherent characteristics and some specific trends. The production process makes intense use of chemical products and natural resources (land and water), generating a high environmental impact. Furthermore, the search for lower cost production has led to a dramatic relocation of production sites towards the Far East (...)” (de Brito et al. 2008, p. 538). Laudal (2010, p. 67) also identifies six features within the international clothing industry that are relevant in order to understand CSR: “Labour-intensive production and traditional technology; Large differences in general costs levels between source regions and recipient regions; A buyers’ market; Short deadlines and low predictability in ordering procedures; Low transparency; Communication barriers.” (de Brito, M. P., Carbone, V., and Blanquart, C. M., (2008), Towards a sustainable fashion retail supply chain in Europe: Organisation and performance, International Journal of Production Economics, Vol. 114 No. 2, pp. 534-553. Laudal, T., (2010), An Attempt to Determine the CSR Potential of the International Clothing Business, Journal of Business Ethics, Vol. 96 No. 63-77).

¹¹ Birkin, F., Polesie, T., and Lewis, L., (2009), A New Business Model for Sustainable Development: An Exploratory Study Using the Theory of Constraints in Nordic Organizations,” Business Strategy and the Environment, Vol. 18 No. 277-290. Busch, T., Stinchfield, B. T., and Wood, M. S., (2011), Rethinking Sustainability, Innovation, and Financial Performance, In: Marcus, A., Shrivastava, P., Sharma, S., and Pogutz, S. (Eds), Cross-Sector Leadership for the Green Economy, (Palgrave Macmillan, New York, NY), pp. 81-105.

¹² <http://www.divinecaroline.com/life-etc/culture-causes/ready-waste-ugly-side-fast-fashion>

¹³ <http://www.trigema.de/shop/page/searchresult/detail.jsf?cacheID=1336385146028>

¹⁴ Kozlowski, A., Bardecki, M., and Searcy, C., (2012), "Environmental Impacts in the Fashion Industry: A Life-cycle and Stakeholder Framework", Journal of Corporate Citizenship, Vol. 45 (Spring 2012), pp. 17-36.

¹⁵ Ironically, however, some of these sustainability efforts may have some unintended and undesirable side effects. For instance, one of the participants argues that the clothes we give to the secondhand industry end up destroying the textile industry in the countries that receive the garments.

¹⁶ <http://about.hm.com/AboutSection/en/About/Sustainability/Commitments/Reduce-Reuse-Recycle/Garment-Collecting.html>

¹⁷ http://www.speedo.com/speedo_brand/swimming_news/newsroom/swimming_news_3328.html

¹⁸ References: <http://www.handfulofsalt.com/the-big-picture-iou-projectkavita-parmar/>, <http://inhabitat.com/interview-summer-rayne-oakes-talks-to-kavita-parmar-about-the-iou-project/>, <http://thebeautifulthink.com.au/m/20/eco-fashion-about-designers-iou-project>, <http://iouproject.com/>, <http://unreasonableatsea.com/the-iou-project/>, <http://iouproject.com/>

¹⁹ <http://www.treehugger.com/sustainable-fashion/ecochic-competition-brings-sustainable-fashion-shanghai-fashion-week.html>

²⁰ See, for example, <http://www.youtube.com/watch?v=ScvdFeh1aOw> and <http://www.newscientist.com/article/dn19462>

²¹ <http://www.theguardian.com/artanddesign/architecture-design-blog/2013/jan/23/textile-futures-living-shoe-strawberry-lace>

²² <http://www.nikeresponsibility.com/infographics/materials/index.html>

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²³ <http://www.apparelcoalition.org/higgindex>

²⁴ <http://www.refashioner.com/>, <http://www.collaborativeconsumption.com/about/>

²⁵ Gladwell, M. (2001), *The Tipping Point: How Little Things Can Make a Big Difference*, Little, Brown & Company.

²⁶ <http://www.loomstate.org/special-projects/zero-waste>

²⁷ <http://www.itmv.dk/index.php?id=94>

²⁸ Sources: <http://www.kreanord.org/langsom-strik-og-b-redygtig-v-kst>, <http://shop.gudrungudrun.com/Profile.aspx>, <http://www.cko.dk/langsom-strik-og-b-redygtig-v-kst>, <http://www.coopa-roca.org.br/>, <http://www.culturalexchange-br.nl/mapping-brazil/fashion/ecology-and-sustainability/osklen-case>, <http://handeyemagazine.com/content/force-coopa-roca-0>, <http://www.ecofashiontalk.com/2012/02/gudrun-and-gudrun/#sthash.xtL6I8LM.dpbs>, <http://www.gudrungudrun.com/>, <http://troyalexanderproject.com/2013/03/04/my-interview-with-gudrun-gudrun-handmade-knitwear/>, <http://www.indigenous.com/>.

²⁹ <http://www.cko.dk/langsom-strik-og-b-redygtig-v-kst>

³⁰ <http://www.indigenous.com/>

³¹ To quote one of the Sociolog.dx participants: *"I agree that there should be a large portion of the responsibility placed on consumers, but I also believe it is the mandate of brands, designers and the media to educate consumers about the truths of sustainable design and the economic, social and environmental risks of the fast fashion industry."*

³² Inspired by: <http://www.textiletoolbox.com/strategies-recycling-upcycling/overview/>

³³ Sources: <http://source.ethicalfashionforum.com/>, <http://www.globehope.com/en/>, <http://www.lingerieinsight.com/article-3405-intimissimi-goes-green-with-recycling-initiative>, <http://graciouslygoinggreen.wordpress.com/2011/01/06/a-new-kind-of-cup-recycling>, <http://www.millionlooks.com/our-vision/recycle-your-old-bra-with-intimissimi>, <http://www.mppublic.com/news/intimissimi-recycling-2013>, <http://www.vogue.co.uk/blogs/the-green-style-blog/2013/intimissimi-recycling-initiative>, <http://www.drapersonline.com/news/multiples/lingerie/intimissimi-launches-underwear-recycling-scheme/5046998.article>, <http://green.blogs.nytimes.com/2010/11/22/a-second-life-for-italian-lingerie/?r=0>, <http://www.triplepundit.com/2010/12/recycle-bras-intimissimi>

³⁴ <http://green.blogs.nytimes.com/2010/11/22/a-second-life-for-italian-lingerie/?r=1>

³⁵ See, for example, Blowfield, M. and Frynas, J. G., (2005), "Setting new agendas: critical perspectives on Corporate Social Responsibility in the developing world," *International Affairs*, Vol. 81 No. 3, pp. 499-513. Jenkins, R., (2005), *Globalization, Corporate Social Responsibility and Poverty*, *International Affairs*, Vol. 81 No. 3, pp. 525-540.

³⁶ Williamson, D., Lynch-Wood, G., and Ramsey, J., (2006), "Drivers of Environmental Behaviour in Manufacturing SMEs and the Implications for CSR", *Journal of Business Ethics*, Vol. 67 No. 3, pp. 317-330.

³⁷ For instance, Kolk (2000, p. 33) concluded that home legislation is the most important factor for changing company-wide environmental programs – in Europe, Asia and North America (Kolk A. (2000), *Economics of Environmental Management*, Financial Times/Prentice Hall, Harlow, Essex.

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England).

³⁸ See, for example, Pedersen, E. R. G., Neergaard, P., Pedersen, J. T., and Gwozdz, W., (2013), Conformance and Deviance: Company Responses to Institutional Pressures for Corporate Social Responsibility Reporting, *Business Strategy and the Environment*, Vol. 22 No. 6, pp. 357-373. Peters, A. and Röß, A., (2010), *The Role of Governments in Promoting Corporate Responsibility and Private Sector Engagement in Development*, UN Global Compact/Bertelsmann Stiftung, New York/Güterloh.

³⁹ However, it is also acknowledged by a Sociolog.dx participant that reporting requirements come with a cost for businesses: "Reporting requirements would increase transparency of operations but they would be onerous on business and add another layer of bureaucracy."

⁴⁰ <http://www.wrap.org.uk/content/sustainable-clothing-action-plan-1>

⁴¹ <http://www.wrap.org.uk/content/clothing-sector-leaders-commit-reducing-water-carbon-and-waste>

⁴² Pfeffer, J. and Sutton, R. I., (1999), Knowing "What" to Do Is Not Enough, *California Management Review*, Vol. 42 No. 1, pp. 83-108.

⁴³ The participants' suggestions on how to teach sustainability can be divided into three stages (Carol & Gale; 2005): (i) Education about the environment ("the purpose is to make them understand that they are part of a bigger system, and that every action or decision taken in the workplace is actually impacting the life of animals, plants and people, even if far away from their sight"), (ii) Education in the environment ("First of all, we should ALL go and see for ourselves. See the blue creeks, see the miserable working conditions, see the cancer from cotton pesticide patients, etc. This would motivate for real."), and (iii) Education for the environment ("Students work on a 'live' project [...] developing a business model integrating sustainability in ethos"). According to Carol & Gale (2005), inspirational lectures and the like play an important role in the establishment of basic knowledge and motivation, but it is through education about the environment, i.e., workshops and learning by doing, that the individual and organization move towards a long-term sustainable change of mindset and practices (Karol, J. and Gale, T. (2004), *Bourdieu's Social Theory and Sustainability: What is 'Environmental Capital'?*, AARE Conference Paper, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.133.1133&rep=rep1&type=pdf>).

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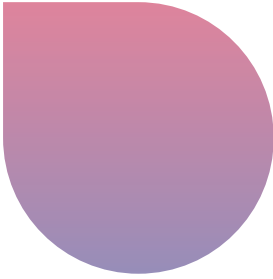
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about Mistra Future Fashion



**mistra
future
fashion**

The purpose of the Mistra Future Fashion Program is to deliver knowledge and solutions that the Swedish fashion industry and its stakeholders can use to significantly improve the fashion sector's environmental performance and strengthen its global competitiveness. The program is structured so that it leverages the expertise and networks of leading Swedish and international research institutes and universities. Stakeholders engaged in the program include governmental agencies, voluntary organisations, and companies within the entire textile value chain: forestry, pulp-
ing, textile manufacturing and recycling. To find out more please visit www.mistrafuturefashion.com.



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