#UNLOCKING RESPONSIBLE LUXURY

The Manifesto

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CREATE AN INCLUSIVE SOCIAL DIALOGUE WITH DOWNSTREAM AND UPSTREAM PARTNERS

CREATE A SUPPLY CHAIN CULTURE THAT ENSURES WELFARE, HEALTH AND SAFETY AND FAIR WAGES AT ALL STAGES

BE MORE THAN 'LESS UNSUSTAINABLE'

EMPOWER, GUIDE, INSPIRE AND RESPECT EVERYONE IN THE SUPPLY NETWORK

ENGAGE CONSUMERS TO BECOME MORE CONSCIOUS

DESIGN PRODUCTS IN ACCORDANCE WITH CIRCULAR DESIGN PRINCIPLES

UTILISE INNOVATIVE AND SUSTAINABLE MATERIALS TO DESIGN CREATIVE, RESPONSIBLE AND LOVEABLE ITEMS

CREATE VALUE WITH LIMITED RESOURCES

CREATE A SUPPLY CHAIN CULTURE TO MAXIMISE RESOURCE EFFICIENCY

IMPLEMENT CLEANER PRODUCTION STRATEGIES AT SUPPLIER FACILITIES

WELCOME

We created the Sustainable Luxury Academy two years ago because we believe that luxury can be truly sustainable and we also believe that 'sustainability' and 'luxury' are absolutely not contradictory.

This report is the first major tangible output published by the research team behind the Sustainable Luxury Academy while it is reflecting previous contributions made at the intersection of supply chain management, sustainability and luxury goods.

This major result channels the enthusiasm and significant contributions of our advisory board, team members and supporters that jointly aim to spread sustainability, responsibility, kindness and the act of empathy across luxury fashion supply networks.

This manifesto aims to build a profound knowledge bridge to overcome the mismatches surrounding practical and theoretical languages. 7

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UNLOCKING RESPONSIBLE LUXURY

'There is no beauty in the finest cloth if it makes hunger and unhappiness...' Gandhi

ashion empowers individuals. As one of the most influential industries, the fashion and clothing industry accounts for US\$ 1.3 trillion and employs more than 300 million people globally (Ellen MacArthur Foundation, 2017). However, the fashion industry has substantially changed over the years. Today's fashion supply chains contain contradictions and traditional supply chain strategies must be revisited and definitions must be redefined. There is accelerated growth in both the production and consumption of clothing. Clothing production has more than doubled since 2000 and 100 billion garments are manufactured annually. However, 40% of purchased clothes are never used (Fashion Revolution, 2017).

The introduction of new production strategies has resulted in globally dispersed, fragmented and very complex supply networks. Additionally, shortened life cycles, demand unpredictability, rapidly changing behaviour patterns and the insatiable desire for consumption are commonplace in today's fashion industry. Nonetheless, the environmental and social impacts generated by fashion operations are substantial. To illustrate, the global fashion industry is responsible for over 5 % of the 32 billion tons of global carbon emissions in 2015 (Fashion Revolution, 2017); 20% of the global freshwater pollution from textile treatment and dyeing (WRAP, 2017); 93 billion cubic meters of water annually for textile production (Ellen MacArthur Foundation, 2017); and up to 8.000 synthetic chemicals used to turn raw materials into textiles (WRAP, 2017). Furthermore, end-to-end supply chain visibility and lack of transparency prevents a clear understanding of the social cost of fashion in terms of working conditions and human rights. If the industry continues on its current path, by 2050, the industry will use more than 26% of the carbon budget associated with a 2C⁰ pathway (Ellen MacArthur Foundation, 2017).

Systemic changes are therefore urgently needed to unlock responsibility for business transformation and supply chain sustainability.

Today's fashion industry is characterised by complex critical problems and difficult trade-offs. Undoubtedly, up until now, implementing sustainability in fashion supply networks has been chaotic due to multiple economic and socio-political events such as rising labour costs, supply network complexity, market instability, volatile commodity prices, geographical dispersion and economic crisis. However, what is clear is that today's linear business models must change. The global fashion industry needs new definitions that include ideas of transparency, circularity, accountability and inclusivity. It is pivotal to acknowledge that our personal, managerial and academic choices can deliver a material contribution to maximise societal good and minimize environmental harm. Therefore, it is imperative to unlock responsible fashion by embedding sustainability principles into design, production and supply chain operations.

This manifesto invites everyone to act with empathy. The fashion industry can accelerate its transformation if we collaborate, communicate and coordinate our actions through responsibility. inclusivity and kindness.

Responsible companies, managers, designers, and researchers are needed to unlock the change through transparency, circularity and traceability. I invite evervone to join forces to start acknowledging those whom we forget behind the runway, and to spread sustainability, accountability, integrity and kindness across fashion supply networks.

- Dr. Hakan Karaosman. Post-doctoral Researcher at Politecnico di Milano School of Management, Assistant Curator of State of Fashion 2018, Sustainable Fashion Operations Expert



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The Fashion Event State of Fashion 2018: Searching for the New Luxury, curated by Professor Jose Teunissen, took place in the Arnhem Melkfabriek (31 May-23 July 2018). The exhibition explored a new sense of conscious consumerism by embracing state-of-the-art technologies, innovative production methods and fresh business models and by exploring the exciting area where science and fashion design meet. It showcased nearly fifty seductive fashion products and fashion concepts to evoke a better and resilient world we aspire to live in and to feel connected to.

In the last few years it has often been said that the current fashion system is outdated, still operating to a 20th-century model, celebrating the individualism of the 'star designer'. In Vogue UK Sarah Mower stated that for the last twenty years, fashion had been at a cocktail party and had completely lost any connection with the public and daily life. On the one hand, designers and big brands experience the enormous pressure to produce new collections at an ever higher pace, leaving less room for reflection, contemplation and





The need for fashion to become relevant and resilient again, and to take itself seriously has become urgent.

Professor Jose Teunissen, Curator State of Fashion 2018: Searching for the New Luxury, Dean of School of Design and Technology at London College of Fashion (UAL), Senior Research Fellow (ArtEZ)



The first theme that was addressed in the exhibition was the need for new imaginations. The classical luxurious dream of fashion - the world of Hollywood glamour, the elegance of Parisienne and the fashion magazine - are running to an end being replaced by a different visual language that underlines and expresses the values of the Millennium generation, worldwide around 30% of the current work population. Their lifestyle, using a bicycle instead of owning a car, preferring a 'shared economy' over property and possession, their environmental awareness make them conscious consumers. Besides, they work from their pocket which is re-defining the classical functions of a home, an office and café's, making the current boundaries between public and private disappear. These completely fresh lifestyles and values are definitely transforming the representation and visual language of the fashion system, which is for ages recycling the same retro-trends over and over again. Also the straitjacket of young, slim, white and rich ideal men and woman is about to be replaced by a more open and inclusive aesthetic where nature, abstract environments and new ideals of gender and people are celebrated. The campaign that sustainable pioneer Stella McCartney showed at State of Fashion formed such a cornerstone of a new visual identity and concept imagined for Stella McCartney's work in sustainability. The film conveyed the symbiotic nature of humans, nature and animals; it explored the idea that to fully protect and care for ourselves we must also nurture the world we live in, as we are one and the same. The words of the words of Maria Barnas' poem 'To Nurture. To Nature' specially conceived for the project - are recited over the film. Through a abstract visual language. Stella McCartney found a new and exciting way to engage in the conversation, perfectly illustrating this cutting-edge sense and imagination. Next newcomers with a non-western background and therefore not obviously using the conventional values and notions of the



dominant Western Fashion history were able to create new and more responsible, social connected worlds without referencing the conventional glamourous Western Fashion history. Rafael Kouto for example created an upcycled collection where Arabic graphics were added to re-used garments. Lastly the visionary - by new technologies inspired - work of Iris van Herpen, Yuima Nakazato and Threeasfour explored new worlds with poetic images, innovative imaginations, groundbreaking experiences and brand new products.

New Business models

There are many more levels to change the multi-faceted fashion system. Digitalization for example has linked the world in terms of communications, but also in the field of production the world has become even more 'horizontal' which has led to a second theme in the exhibition: the rise of new business models. Uber and Airbnb are two of the bestknown examples - with by no means only positive consequences - of a 'sharing' economy in which an online platform enables a direct relationship between consumer and supplier, making intermediaries redundant. In the fashion chain, where retail is already under considerable pressure. this kind of platform offers many advantages. Maven women for example, is an online clothing company that designs. manufactures, and releases new products with the help of a worldwide community of members. Members co-design and crowdfund the designs into existence within a matter of weeks. This new system helps the fashion system to transform from a push market (40% is not sold) into a made to measure market, a save up to 30% of the costs. Business models like these are going make the fashion chain far more sustainable, since clothes will be made strictly according to demand and on a much more locally-produced basis. Moreover, every step in the production process - from the drawing board to the end product - will soon be digitally linked to machines and people.

3D allows collections to be made exactly to size and locally produced, where the order was made which encourage new assembly methods. For his label 'Self-Assembly' Matti Liimatainen created ready-to-assemble garment construction

kits by using a custom CAD/CAM system. All the products are made with a special seam that allows them to be assembled by hand, without any tools

or machinery. The products are delivered as loose, packed components, which need to be joined together prior to wearing. Some of the garments can be amended. For instance if certain panels of a new S-A parka are removed, they can be assembled into a rucksack. The most essential aspect about the design process of 'Self-Assembly', and the foundation of the design method, is that products are not ready-to-wear but ready-to-assemble. As Such the design process involves not only the finished product but also the experience of the user. In the near future these new technologies will radically transform the fashion system which is still operating according to a 19th Century industrial model with biannual collections, big investments and a compulsory catwalk shows resulting in many more new business models.

The product and the Maker in the Spotlight

The third theme highlighted the shift from 'star designer' to a focus on the product itself and the craftsman behind it. The Internet has made it possible to make all the layers within the production chain visible. The result is a more direct and transparent relationship between consumer and product and the decline of the power of brands as artificial dream sellers. Honest By, created by award-winning designer Bruno Pieters in 2010, was f.e. the very first to adopt a 100% transparency policy sharing the entire cost breakdown of its products. In order to enable the customers to make the most informed choices, Honest By provides a platform in which design processes are shown and supplier- as well as production process-related information are shared. These inititatives have allowed consumers to consume more consciously and sustainable, and on top it has created a more horizontal relationship between consumers and producers, bringing professionals and craftsmanship into focus. NGO's as Fashion Ethical Initiative and Fashion4Freedom brought worldwide craftsmanship and local heritage into focus by using economic justice and human dignity ast part of the conversation of fashion about fashion. For example, Fashion4Freedom acquired precious metal mined from old technology including discarded phones, computers and tablets, -fifty million tons of electronic waste is produced yearly -, to create the Data Min'd collection with local craftsmans in Vietnam. The Koi fish was chosen as a visualization of the struggle to swim through a massive invasion of human 'stuff' scattered in the environment



Fashion Design for a better World.

The fourth theme in the exhibition underlined the social power of fashion. Fashion is much more than a nice dress. As the Fashion industry is operating worldwide, it is reaching an enormous number of consumers every day. Its scope and reach offer the industry the opportunity to take responsibility and make a difference. Contributing designers such as Vivienne Westwood and Zegna Foundation/LCF showed how fashion is able to contribute directly to a better world, not only by producing in a socially responsible manner, but also by applying its influence to create directly better living environments and communities. Vivienne Westwood is one of the Ethical Fashion Initiative's first partners, with whom she developed her "Handmade with love" collection using recycled canvas, reused roadside banners, unused leather off-cuts, and recycled brass and produced in Kibera slum in Nairobi. For his accessories Oskar Metsavaht, founder of the Brazilian luxury label OSKLEN (1989), uses the skin of the Pirarucu, one of the largest freshwater fish in the world, from the Amazon. The hides are usually thrown away as trash, but Metsavaht started working with farmers to safely grow the fish, protect the Amazon and support the local population.

New interdisciplinary approaches

Finally, collaborations with scientists are prerequisite for creating a more sustainable future. The fifth theme underlined how material experiments can lead to new opportunities, shapes and functions for fashion, challenging the status quo. New materials made from algae, fruit residue, and other celluloses, may still seem as something futuristic to us, but the contributing designers to State of Fashion such as Orange Fiber, AlgaeFibre show how new scientific technologies are already leading to new design applications. They also make us question the skills the designer of the future might need. Do we need to re-think our fashion education system? Will the next 'star-designer' be a couturier, a scientist or a smart hybrid?



In conclusion

ISN'T

WASTE

WASTE

UNTIL WE

For more than a century, fashion was very much about the new, where the new meant that it was in tune with- and demonstrating the zeitgeist. But now the fashion system has sped up the fashion cycle there is an overload of new products; resulting on the one hand in an enormous overproduction and waste, but also leading to the fact that trends have become meaningless. Therefore we will have to move towards a new meaningful fashion system where the product is no longer outdated as soon as it's been launched on a catwalk, but gains more value during it's lifecycle. As such the value of new (as the repetition of the same but different) has to be replaced by the value of innovation materialised in digital innovative products, the value of ethics shown in transparent and traceable products and the value of authenticity embodied in cultural embedded stories.

by Professor Jose Teunissen, Curator State of Fashion 2018: Searching for the New Luxury, Dean of School of Design and Technology at London College of Fashion (UAL), Senior Research Fellow (ArtEZ)



N GENERATION *assembly*

the

he Next Generation Assembly was conceived from asking a simple question three years ago - Can I bring a group of LCF Master's students to the conference and how can they get involved? The rest, as they say, is history.

The opportunity for Postgraduate students not only to attend but actively participate in an international fashion conference was a pioneering initiative. The Next Generation Assembly provides students with a unique forum to engage with leading academics, industry practioner's and other Master's students to discuss, provoke and propose novel, creative, innovative solutions to challenge the fashion system. As an integrated event to the International Workshop on Luxury Retail, Operations and Supply Chain Management, NGA is now jointly developed by Politecnico di Milano, London College of Fashion and Glasgow Caledonian University.

It offers an empowering platform to the next generation of business directors, retailers, brand makers, designers and policy makers to shake up the fashion system, challenge the status quo and suggest new ways of working, operating and doing business, sustainably.

The four pillars on which NGA is founded are: inclusivity, interactivity, equality and transformation. Today, the fashion industry needs change catalysts to actively respond to major global issues of sustainability. Through incorporating all stakeholders in collaborative practice – academics, industry, policy makers and specifically students – we encourage critique and interrogation of fashion via its cultural, business, social, environmental and political aspects, regardless of discipline or status, to illuminate the issues and activate change in the complex global fashion industry. With fashion businesses increasingly focusing on

their environmental and social responsibilities, and students vocalizing their desire to work for responsible companies, higher education institutions are challenged to integrate sustainability into teaching and learning experiences. Through the Next Generation Assembly, we embody cooperative practices, moving beyond mere transmission of facts and instead, empower students to recognize and develop the skills, attitudes, competencies, dispositions and values required to address global sustainability issues.

It is a special privilege to be a founding member of the Next Generation Assembly, play an active role in its evolution and reach and witness firsthand, its positive impact on all those involved (see student testimonials). We believe bringing together individuality, creativity, and vision will inspire change. To conclude, where I started, asking the right questions, regardless of how small, can really trigger transformation.

by Bethan Alexander, Course Director MA Fashion Retail Management, London College of Fashion, UAL and Fashion Business Consultant "The NGA experience was really valuable. It was really amazing to share and discuss ideas with other students and academics. The presentation was a great opportunity to have our voices heard as well as to hear feedback from the audience".

Silvia, MA Student at London College of Fashion

"I am so happy to have had the opportunity to join the workshop before I completed my programme. I gained such a great experience and knowledge from the industry experts and students from other universities."

Brenda, MSc Student at Glasgow Caledonian University

"The conference was an amazing opportunity to listen and learn from industry leaders on innovative ideas and challenges in the fashion industry right now. This provides valuable insight for our final master's projects. The opportunity for students to present to industry leaders is unsurpassed and it is unbelievable how amenable the industry is to listen and learn from students. It was also really great to network with students from different universities and backgrounds, not only have we learnt from each other, but we have made great friends".

Munira, MA Student at London College of Fashion

#LUXURY CHANGE AGENTS



ROADMAP FOR RESPONSIBLE LUXURY

 CRCULAR DESIGN FOR CRCULAR ECONOMY

TRANSPARENCY

LUXURY IS RESPONSIBILITY – THE ROADMAP

Luxury fashion symbolizes heritage, exclusivity, quality and individuality. Nonetheless, the democratization of luxury has resulted in growing demand for accessible luxury. As such, luxury that was characterized by success factors such as craftsmanship, country of origin, and premium quality is now characterized by quick cycles of seasonal changes that provoke almost insatiable consumption. As previously indicated, the supply chain revolution of the 1990s led to an increased dependence on outsourced manufacturers and sub-contractors. To this end, the global fashion industry relies on sophisticated information and logistics systems to remain competitive; nonetheless, the majority of sustainability risks are located at lower tiers in supply networks. Raw material production and processing, dyeing, transportation, and use phases generate tremendous environmental impact. Relatedly, there is constant conflict between supply chain responsibility and overarching commercial pressures.

To illustrate, small and medium sized enterprises (SMEs) are pivotal to global supply chains as they represent more than 90% of all businesses and 60% of all employment (Fritz et al., 2017). In Italy, for example, manufacturing areas are mostly characterized by collections of SMEs (Froud et al., 2017). Yet, these enterprises often face challenges in responding to environmental and ethical pressures due to limited technical and relational capabilities. Relatedly, our research indicates that luxury fashion SME suppliers in Italy encounter difficulties in meeting social and environmental requests due to limited availability of skills and finances. Furthermore, buying firms' flexibility requirements negatively affect overall supply chain sustainability performance. That means ethical and environmental supply chain practices become more difficult to implement in the upstream supply chain.

Environmental and social sustainability must be homogenously embedded across design, sourcing, production, distribution, retail and product aftercare stages. Guidance is therefore, needed to show how to embed sustainability into fashion supply chain operations. Four main principles proposed by the manifesto include:

- Circular Design for Circular Economy
- Technological and Materials Innovation
- Cleaner Production and Sustainable Consumption - Transparency

The following sections illustrate why these pillars are pivotal for unlocking responsibility in luxury fashion. Each section begins with a clear depiction of the status quo in terms of facts, numbers and continues with expert opinions to validate why the change is needed in that domain. From a multidisciplinary approach, each section is linked with relevant sustainable development goals (SDGs) to explain how luxury fashion companies can materially accelerate their business transformation toward the full circle of sustainability.

by Dr. Hakan Karaosman, Post-doctoral Researcher at Politecnico di Milano School of Management, Assistant Curator of State of Fashion 2018, Sustainable Fashion Operations Expert



CIRCULAR DESIGN

States and the second

FOR CIRCULAR ECONOMY

Clothing production has more than doubled since 2002 while 40% of clothes purchased are never used An average consumer buy 60% more clothing items and keeps them for half as long as in comparison to 15 years ago

Less than 1% of materials used to produce clothing is recycled into new clothing

SETTING THE SCENE

50%

The established and mainstream models that operate in the fashion apparel sector have remained largely unchanged, hence are not geared totally for addressing circular transformation in the industry. Thus sufficient adaptation of the existing scaling techniques and logics, and creation of new ones, to fit the requirements of circular business models is a necessity. However, from a business model perspective, scaling usually refers to economies of scale for firms. whereas in circular context the concept of scaling requires inclusion of a wider perspective to create more customer value, e.g. by increasing user/customers engagement, and more importantly environmental value. Apart from production economies that can be applied for circular business model scaling, we need to think radically different along the lines of exploring new network externalities, information returns, distributed resourcing models, experiential learning, technological interrelatedness, amongst a plethora of others, to trul lead to a circular transformation of the fashion and apparel industry.

by Rudrajeet Pal, Associate Professor in Textile Management, Swedish School of Textiles, University of Borås

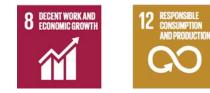


RUDRAJEET PAL Associate Professor in Textile Management, Swedish School of Textiles, University of Borás

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It is crucial that the fashion industry strives to strike the right balance between scalability and sustainability for making circular transformation profitable.

HOW TO REACH CIRCULAR DESIGN FOR CIRCULAR ECONOMY WITH SDGs?



DG8 – Decent work and economic growth

Target 8.4: Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

SDG12 – Responsible consumption and production

- Target 12.1: Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
- Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources
- Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

HOW TO UNLOCK TRANSFORMATIVE CHANGES AT PRODUCT LEVEL?

Visit Page 33 to see some illustrative actions in terms of how circular economy principles could be implemented at product level





SETTING THE SCENE

The textile industry continues to lumber along, with incremental improvements in social and environmental performance. It is becoming obvious that incumbent technologies, i.e., build out factories and supply chains based on industrial revolution technologies, are inhibiting the development and adoption of new approaches to textile productions. Since globalization of the textile supply chain, the textile and apparel industry consider "innovation" as the ability to move supply chains into under governed and regulated regions, driving down costs by evading living wages and environmental regulations. Or as my late friend Ray Andersen used to say, "finding profits by being as bad as the law allows".

If this is innovation, then it only achieves short term profits by exploitation. This behavior is not sustainable. To find the new technologies and have them adopted in a timely manner, requires destruction of existing technology, especially in wet processing. Achieving transformation in an industry that has a history of incremental change, rather than more disruptive change, can only occur if the major retail brands invest and demand it. This mean taking risks and taking ownership of supply chains destroying existing "old" technologies to make room for new, more sustainable production.

Innovators within our industry, universities and entrepreneurs, are bringing on new materials technologies, greener materials and cleaner production, only to hear from the major brands that they are "reducing" their numbers of suppliers and do not have the staff or the desire at the C-Suite level to partner with innovators. This is unacceptable behavior from an industry that controls 5-10% of all global trade and consumes in excess of 10% of common global resources.

by Sam Moore, Manager at Hohenstein Institute America and Principal Scientist at Ouroboros Holdings



SAM MOORE Manager at Hohenstein Institute America and Principal Scientist at Ouroboros Holdings

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Population growth and higher levels of disposable income will drive sales of textilebased goods in the future. What will block and reduce growth, will be the lack of sustainable efficiency due to risk avoidance and not investing in new materials and processing technology. HOW TO REACH TECHNOLOGICAL AND MATERIALS INNOVATION WITH SDGs?



SDG9 - Industry, Innovation and Infrastructure

Target 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

SDG11 – Sustainable cities and communities

Target 11.10: Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials

DG12 – Responsible consumption and production

Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources

HOW TO UNLOCK TRANSFORMATIVE CHANGES AT PROCESS LEVEL?

Visit Page 34 to see some illustrative actions in terms of how technological and materials innovation could be implemented at process level



CLEANER PRODUCTION AND

SUSTAINABLE CONSUMPTION

The fashion industry annually produces 92 million tons of solid waste, which is 4% of the global solid waste 20% of global freshwater pollution comes . from textile treatment and

SETTING THE SCENE

The prioritization of mass production and consumption in today's industrial systems has led to a human influence on natural processes to a degree that was never seen before. Climate change has become one of the greatest challenges of the 21th century as a consequence of fossil fuel based industrial societies. That is to say, atmospheric concentration of greenhouse gas emissions is expected to reach approximately 685 parts per million (ppm) CO2-equivalents by 2050, which is actually higher than the concentration level of 450 ppm, that is, according to the United Nation's Intergovernmental Panel on Climate Change, what is required to have the chance to avoid global warming above 2°C. Nevertheless, tackling environmental and ethical hazards are becoming more and more problematic due to globally dispersed and fragmented manufacturing networks

Circular economy, in this vein, is emerging as an alternative economic paradigm, which is focusing on innovative technologies, green industrial capacities and environmental policy interventions, which are sustainable and equitable. In accordance with the definition put forward by the Ellen MacArthur Foundation in 2012, circular economies are envisioned to become restorative and regenerative industrial systems by design. The European

Commission estimated that CE based transitions could create 600 billion euros annual gains for the European manufacturing sector

In this context, the utilization of concepts and approaches of circular economy as the conceptual framework may foster the elimination of the use of toxic chemicals while dramatically reducing system-wide wastes through superior product and process design. There is ample evidence that there are many incentives and benefits to be derived from designing and implementing innovative solutions such as cleaner production and sustainable business models to help societies to make urgently needed, radical, systemic changes to support the transition to truly sustainable circular economies. Production and consumption of 'Fashionably designed,' products are growing rapidly. However, wastes of many types have become significant problems; for example, water consumed by the industry is expected to grow by 50% by 2030. Much of the water used in textile production is severely polluted and contaminated with an array of toxic substances, including dyes that have negative human-health effects and widespread, negative ecological impacts.

by Donald Huisingh, Founder and Editor-in-Chief Emeritus, Journal of Cleaner Production. Professor of Sustainable Development at University of Tennessee



DONALD HUISINGH

Founder and Editor-in-Chief Emeritus, Journal of Cleaner Production, Professor of Sustainable Development at University of Tennessee

There are several significant problems associated with fashion operations in terms of environmental and social consequences. which must be reduced or eliminated. The adoption of innovative design and sustainable practices is often limited by an array of systems barriers, which make indepth evaluations and provision of technical, managerial and training support for corporate leaders and their employees to help them shift from generating problems to producing creative, post-fossil carbon societal solutions. It will be beneficial for 'society-at-large' and especially for existing traditional industries in Europe, for example, apparel and textiles industries, to make the transformations in their products, processes, and business models so that they can contribute to making the needed transitions to sustainable circular economies. Research, on-site assessment and training on industrial sector specific support to help companies make progress on becoming solution generators within sustainable circular economies.

HOW TO REACH CLEANER PRODUCTION AND SUSTAINABLE CONSUMPTION WITH SDGs?



and illnesses from hazardous chemicals and air, water and soil pollution and contamination

SDG6 – Clean water and sanitation

- Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated
- Target 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

SDG7 – Affordable and clean energy

- renewable energy in the global energy mix Target 7.3: By 2030, double the global rate of improvement in
- - technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states, and land-locked developing countries, in accordance with their respective

HOW TO UNLOCK TRANSFORMATIVE CHANGES AT PRODUCTION LEVEL?

Visit Page 34 to see some illustrative actions in terms of how cleaner production strategies could be implemented across production stages

SDG8 – Decent work and economic growth

- Target 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labourintensive sectors
- Target 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.
- Target 8.4: Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

SDG9 – Industry, innovation and Infrastructure

- Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
- Target 94. By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resourceuse efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

SDG12 – Responsible consumption and production

- Target 12.1: Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
- Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

Why do we need to 'Accelerate the Transition to Equitable, Liveable, Sustainable, Post-Fossil Carbon Societies'?

Click here to check dramatic temperature anomalies per country

TRANSPARENCY

SETTING THE SCENE

Public disclosure will build trust with a company's many stakeholders and show the public that the brand not only makes fabulous products but that these fabulous products do not extract too-high a price from the planet or from workers. That luxury fashion supply chains work not only effectively and efficiently but fairly and safely and that their practices are so good, there is nothing to hide.

A €25 T-shirt would only be €1.35 more

wages of the worker making it

expensive if the

naking it /ere doubled.

However, transparency is really complicated. Companies have to know their suppliers and their suppliers' suppliers, all the way back to raw materials. This is expensive and difficult to achieve. Companies have to collaborate with experts and each other to find the most effective ways to gather sustainable supply chain information. This cannot be done alone and will take partnership, trust and openness in order to develop the systems necessary to ensure data is gathered that is meaningful and that can affect real change. No company can do this alone, so a luxury fashion ecosystem of brands, suppliers, NGOs, government and key stakeholders have to be involved in developing and implementing information systems. Short-term investments in creating visibility in the supply chain have multiple returns on investment and long-term advantages, not least reputation and brand advantage. When the company can show not just amazing products but amazing suppliers, it is assuring luxury and premium quality across the whole chain. No customer wants to find out a luxury brand has dirty secrets in their supply chain.

mainly employed

to meet consume demands in

by factories manufacturing ore than 1.800

vorkers collapse

by Donna Marshall, Professor at University College Dublin and Head of Research, Innovation and Impact at UCD College of Business

DONNA MARSHALL Professor at University College Dublin and Hood of Research Inneuration and Import of

Professor at University College Dublin and Head of Research, Innovation and Impact at UCD College of Business

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Transparency, particularly public disclosure, is important for luxury fashion companies to show their goals and achievements not only economically but social and environmentally.

HOW TO REACH TRANSPARENCY WITH SDGs?



SDG4 – Quality education

- Target 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

SDG8 – Decent work and economic growt

- Target 8.7: Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms
- Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

SDG10 – Reduced Inequalities

- Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
- Target 10.3: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard
- Target 10.4: Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

SDG12 – Responsible consumption and production

Target 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

HOW TO UNLOCK TRANSFORMATIVE CHANGES AT SUPPLY CHAIN LEVEL?

Visit Page 35 to see some illustrative actions in terms of how environmental and social responsibility could be implemented at supply chain level

Target 16.6: Davelop effective, accountable and transparent institutions at all levels Target 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels Target 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements

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DISCUSSION

The manifesto illustrates a roadmap for luxury fashion companies to unlock responsibility across their supply networks. 60+ illustrative actions are proposed to explain the extent to which ethical and environmental stewardship could be integrated into product, process and supply chain levels. We therefore invite luxury fashion to take action in terms of circular design, material innovation, cleaner production and supply chain transparency in our mass-consuming industry. We can jointly demonstrate that responsibility is the main antecedent to luxury. Luxury fashion is dependent upon raw materials that are very sensitive to climate change hazards.

PRODUCT

Transformative strategies are needed to change the way luxury fashion business is coordinated.

-asting Pieces Engage consumers to enhance product Communicate products' end-of-use streams Encourage consumers to love fashion items Design products in accordance with cradle-to-cradle principles Design lasting pieces to be preserved with **Circular Creativity** Design products that follow the principles of product-life extension (reusing, repairing, upcycling, downcycling, recovering) Design products with multiple functional modules longevity Design products that reduce demand for resource depletion Responsible Packaging Utilise recycled materials for packaging packaging Optimise packaging design and re-utilise endof-life packaging materials



PROCESS

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Natural Processes

Use	alternative	techniq
dvei	na	

Utilise zero waste technologies

Use natural tanning processes

ues such as waterless

Replace chemical dyes with organic alternatives

Track, trace and reduce emissions

Generate renewable energy
Maximise resource efficiency
Reduce energy consumption in manufacturin processes
Recover energy from waste
Advance green chemistry
Reduce waste
Reuse waste
Recover waste
Recycle waste
Foster water stewardship
Harvest rainwater
Reuse treated wastewater
Treat wastewater
Recycle water

SUPPLY CHAIN

Empower female workforce

- Develop multi-stakeholder engagen activities
- Ensure transparency
- Bring suppliers back to spotlight
- Tie product with supply chain stories

Conduct social life cycle assessment

Provide sustainability education to designers and supply chain members

companies and/or industrial actors

upstream partners Use reverse logistic systems

Exchange underutilised goods with other

Develop and bring scalable solutions to

- Maximise efforts that enhance environmer and biodiversity protection
 - Ensure suppliers' health and well-being

Show suppliers how to replace chemicals with safer alternatives

elimination

Ethical Stewardship

Inclusivity

Proactive Leadership

Landscape Analysis

Incentivise suppliers to replace less sustainable materials and processes with safer alternatives

Maximise sustainable production an processing of raw materials

Maximise efforts that help upstream supply chain members reduce their energy, waste and water footprint

Organise supply chain sustainability training programs to the employees

- Have a list of Tier 1 suppliers
- Have a list of Tier 2 suppliers
 - Have a list of Tier 3 suppliers

Disclose supply chain sustainability performance

Determine the level of risks linked with each and every value chain partner



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10 **MASTER KEYS** TO UNLOCK RESPONSIBLE LUXURY

Create an inclusive social dialogue with downstream and upstream partners

Create a supply chain culture that ensures welfare, health and safety and fair wages at all stages

> Be more than 'less unsustainable'

Empower, guide, inspire and respect everyone in the supply network

Engage consumers to become more conscious

Design products in accordance with circular design principles

Utilise innovative and sustainable materials to design creative, responsible and loveable items

Create value with limited resources

Create a supply chain culture to maximize resource efficiency

Implement cleaner production strategies at supplier facilities



EXPERT OPINIONS ON RESPONSIBLE LUXURY

YOUR STEPS TO SUSTAINABLE BRICK-AND-MORTAR RETAIL STORES



Owning responsible stores is a strong trend that is gaining retail companies' attention.

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SAJO is a Canadian based construction services company offering design, procurement, project management and maintenance services in Europe and North America focused primarily on the retail sector. SAJO is committed to applying its 40 years of accumulated knowledge in retail store design, procurement, construction and maintenance to help brands improve the sustainability of their stores.

Different actions will apply to a brand's existing stores compared to stores in the design and construction phases of development.

The key to success is understanding that actions to improve sustainability of a retailer's physical stores needs to be **planned in advance**; not much can be done in the construction phase or once the store is open. This leads us to the first SAJO recommendation – **develop a retail store sustainability strategy**. While developing the strategy, make sure KPIs (Key Performance Indicators) to measure progress and contribution to organizational goals are developed and implemented.

It is understandable that retail stores are not the retailer's core business, but vehicles to sell products. For this reason, SAJO's second recommendation is to appoint a **sustainable store advocate** in your Store Development team and to make sure he/she is involved in the design process and store materials procurement planning process. The goal is to educate and motivate the Store Planning team to **choose partners** in design and construction who understand what a sustainable store means in terms of positive results environmentally and economically.

Fashion is an ever rapidly changing business; it's product and the environment the product is presented for ultimate consumer experience (the store) is also effected by rapid change.

Therefore the design planning should include a strategy to approach a 'white box' design. This strategy will help save enormous amounts of money while being environmentally responsible. It is important to set the white box design requirements with the design team alongside the concept design – meaning, drywall, mechanical, electrical, sprinklers, storefront, flooring (stone, ceramic, wood) and lighting should remain for the life of the lease, and only fixturing (wood & metal millwork), painting and carpets would need to change on 5, 7, or 10, year cycle.

According to the analysis of various store balance sheets, energy is the fourth largest in-store operating cost for retailers after labour, rent and marketing. It is important to set up energy saving expectations when mandating mechanical, electrical and plumbing design. SAJO's third recommendation is to prepare and implement an **Energy savings plan** to be shared with construction and maintenance teams.

For decades, the retail industry followed only one successful growth formula – opening new stores that would contribute to generating more revenue and profit. A major change has occurred since the retail world became multi-channel.

Brick-and-mortar stores along with online stores required traditional ROI focused finance departments to evaluate the way investment returns from brick-and-mortar stores was calculated.

The reassessment of the role of the physical store and thus the new understanding of store economics hasn't taken place in all retail companies and so, Store Development teams are being put under major pressure to reduce costs. Unfortunately, the cost driven approach usually excludes the sustainability goal from the picture. Once the 'responsible store' is in the retailer's picture, SAJO recommends those with a portfolio of high number of brick-andmortar stores to start gradually. The retail store sustainability strategy can be initially implemented on a sample of stores. If the plan functions properly and results into tangible improvement possibility, the strategy and lessons learnt can then be implemented on the remaining portfolio of stores.

In addition to what we stated earlier store construction material sourcing usually factors in a brands' store locations worldwide and if the cost-driven process drives strategy, the environmental damage can be significant. While each store concept is individual and should be addressed as such, here below there are some additional recommendations which can be considered:

 when sourcing wooden furniture or hangers, one of recommendations can be to produce materials with FSC (Forest Stewardship Council) and/or SFI (Sustainable Forestry Initiative) certificates. Nowadays there is much information available on the threat deforestation is causing to our planet (see image above)

 similar attention should be paid to all plastic elements sourced for the store keeping in mind that 100% recyclable plastic hangers and other objects are readily available;
 flooring materials can be low VOC (Volatile Organic

Compounds); • the logistics element is essential as local alternatives for store

 The logistics etermine is essential as local anternatives for store construction and interiors can be found to reduce emissions;
 when closing, relocating or renewing the store interior, ask yourselves how much of the store can be recycled, reused or resold. Some brands resell such items as display tables, lamps etc.. and therefore create even more connection with their customers. Even ask your contractor to check if anything can be donated before demolition starts. Sustainable brick-and-mortar stores provide an opportunity to contribute to the future role of the retail store, improve the relationship with the customer and respect the environment. SAJO is committed to supporting its customers to impact their bottom line in three areas– economic, social and environmental - through fitting out retail stores.

The 'white box' is a term used for a type of finish in commercial real estate with an unfinished interior and does not include: interior walls, wall coverings, paint, flooring, plumbing fixtures, etc. A white box is ready for tenant improvements.

by Anna Zhitnikova, Director Europe, SAJO SAJO DESIGN CONSTRUCTION PROCUREMENT MAINTENANCE





Sustainability either goes in line

with your luxury brand identity

at all.

or should not be communicated

Lisa Niepelt, Luxury Fashion Marketing and Sustainability Professional, MA Strategic Fashion Marketing at London College of Fashion (UAL)

SUSTAINABILITY WHO? — THE INTEGRATION OF RESPONSIBLE INITIATIVES IN LUXURY FASHION MARKETING AND COMMUNICATIONS

In the context of luxury fashion, marketing and sustainability are not the best of friends (yel). Not many brands have decided to openly disclose their approaches on corporate social responsibility as there are perceived organisational and reputational risks such as the fear of losing credibility if a minor aspect, which is not sustainable within the brand's operations is found or the fear of being accused for "greenwashing". Hence, most of the luxury fashion houses of the world are currently playing it safe and communicate their engagement with responsible actions silently, for instance, through sustainability reports, downloadable on the very corners of their websites. In contrast, a transparent, open and disclosed luxury brand being is, unfortunately, still a rare find nowadays.

However, the next generation of luxury consumers, millennials and Generation Z, are increasingly considering sustainable aspects within their purchase decisions and are demanding brands to care about the environment and society. Consumers expect brands to align with their personal beliefs and values, hence it is now time to acknowledge the tremendous importance of sustainability in luxury fashion marketing.

From a foundational point of view, sustainability and luxury fashion are not that different as both encompass certain similarities in terms of their overarching visions: High quality, longevity and the support and showcasing of craftsmanship are values which underpin both. The integration of sustainability in luxury fashion marketing will not only manifest the brand concept based on these values but will also draw attention towards a creatively-manifested approach embedding sustainability from the ground up in the luxury business.

"

When considering open communication, it is absolutely crucial that the specific pillar communicated (e.g. water stewardship, animal welfare, community support etc.) fits seamlessly with the brand's identity. This connection must be made clear to avoid loss of competitive advantage, positioning and credibility, not only of the marketed responsible activity but also of the brand tiself. Hence, marketers should select communication approaches carefully and build on the linkage between the social and environmental engagement and the commitment of the brand which requires rigorous internal investigation and evaluation of the brand value is found and adequately communicated, there is little doubt of future success – Let's pioneer sustainability marketing in luxury fashion!

by Lisa Niepelt, Luxury Fashion Marketing and Sustainability Professional, MA Strategic Fashion Marketing at London College of Fashion (UAL)





46 THE FINANCIALS WILL BENEFIT FROM THE SUSTAINABLE REVOLUTION

Business sustainability is an all-encompassing business strategy, vital for all businesses, with costs which are tailored to any budget and objective.

Business sustainability represents resiliency over time. Businesses that can survive turbulent times are ones which are intimately connected to healthy economic, social and environmental systems.

These businesses create economic value and contribute to healthy ecosystems and strong communities. Business sustainability requires businesses to adhere to the principles of sustainable development. According to the World Council of Economic Development (WCED), sustainable development is development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs.' So for business development to be sustainable, it must address important issues at the macro level, such as: economic efficiency (innovation, prosperity, productivity), social equity (poverty, community, health and wellness, human rights) and environmental accountability (climate change, land use, biodiversity). We are sure that all the companies that will go through the Sustainability Business Model will face in a maturity model the following advantages:

- Build and maintain trust with stakeholders;
- Competitive edge Point differentiation from competitors;
- Attract and retain employees;
- Improved processes and systems Leaner and smarter with less waste;

M M A Z A R S

- Mitigate or reverse negative social, governance and environmental impact;
- Enable external stakeholders to understand the organization's true value;
- Reduce future compliance costs for example carbon tax; Improve access to capital;
- Improve access to international markets:
- Improve reputation and Brand Loyalty

We remark that the Business Case for investing in sustainability is positive even without considering the impact of brand building risk management.

Authoritative literature and current studies on financial and business trends, confirm that we are facing a fundamental and unique "sustainable revolution". The financial results of fashion companies that actively include environmental and social performance within their wider business strategy will see enhanced profitability over the medium to longer term. On the other hand, companies that do not react and listen to the needs of the "2" generation will soon face a potential risk to their market share and financial results.

The Investments in Capex are also supported by specific tax benefits that allows companies to allow their investments.

by Alessandro Motta, Senior Manager at Mazars Italy -Transaction Service Department

Big corporations and financial institutions must support small-and medium-sized suppliers.



WILL REAL LUXURY EVER EMBRACE ECO-MATERIALS?

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A question I have been asked multiple times: how the concept of Luxury Good (typically associated with a high price-tag) can co-exist with the choice of cheap raw materials.

The error is focusing on the **retail price** of a luxury good, rather than on the **value** of the same. True luxury cannot be understood if the focus is not shifted to the value for the customer. It is an unprecedented change in perspective, which challenges the old adagio according to which luxury has to be expensive. Value (not price!) of a luxury good, is the result of several components. Undeniably, quality of raw materials and components is one of these components; yet one should not overlook artisanal craftsmanship, country of origin, design, product uniqueness or exclusivity, top notch service level – both in-store and after sales, and so on... The fact that – by acquiring a luxury good – the customer could make a responsible deed, is yet another of said components.

By studying a dozen luxury brands and companies, we reached the conclusion that there is no such a thing as a Cookbook Approach to Luxury Strategy. Rather, every single company decided to combine the various components in a very specific way, to create a Unique Selling Proposition (USP).

The USP of the Michelin Starred restaurant D'O, by the chef Davide Oldani, is "pop cuisine". Innovative cuisine based on balancing contrasting tastes, paying due attention to design (Oldani also designs dishes and cutlery), respecting the request for healthy food, at a fair price (thus justifying the choice of cheap ingredients, as well as the location at the outskirts of Milano, where rents are cheaper). In the Pop Cuisine philosophy, "every ingredient, from the most expensive to the cheapest, deserves the same respect and attention".

Freitag created a totally revolutionary business model, by producing "messenger bags" out of trunk covers, used air tubes and safety belts. The result – besides being rugged and waterproof – is also unique.

Some other luxury brands are partnering with Aquafil, an Italian company producing nylon from unused fishing nets. After long experimentations, results seemed really promising as Aquafil is pioneer of Circular Economy. They developed ECONYL, a oneof-a-kind industrial system, allowing to produce a fibre material employing industrial waste and end-of-life products including rugs and fishnets.

We studied many similar case histories, and I can safely conclude that the research for innovative materials (albeit cheap) and the attention dedicated to the manufacturing process are demanding lots of dedicated resources which, in most of the cases, are offsetting the (economic) benefits of employing cheaper materials.

If it ain't sustainable, it ain't luxury!

by Alessandro Brun, Director of Master in Global Luxury Management (MGLuxM) at MIP Politecnico di Milano, Associate Professor at Politecnico di Milano





Raffaella Cagliano Deputy Director of the School of Management and Full Professor, POLIMI SoM

SUSTAINABILITY FOR POLITECNICO DI MILANO SCHOOL OF MANAGEMENT

"I believe sustainability is to care about future generations. As a consequence, as a School this is our responsibility. And we can achieve this not only by building a culture of sustainable development throughout our programmes, but also by facilitating the collaboration between universities, industries, social and non-profit organizations and governments to accelerate sustainability and to move forward the Sustainable Development Goals."

SUSTAINABILITY FOR SUPPLY CHAIN MANAGEMENT

"Sustainability is strongly intertwined with Supply Chain Management: a business can be sustainable only as much as its supply chain is sustainable. Sustainability has been high in our research agenda on Supply Chain Management since before it became a mainstream topic and today the challenge is how to make supply chains not only truly sustainable, but also creating sustainable value."



Federico Caniato Full Professor, Politecnico di Milano School of Management

SUSTAINABILITY AT POLITECNICO DI MILANO SCHOOL OF MANAGEMENT



Alessandro Brun Associate Professor, Politecnico di Milano School of Management

SUSTAINABILITY FOR LUXURY

"I am convinced that luxury goods are inherently positive things; luxury is not evil per se (even though some specific cases could be). For this reason, I reckon the concept of Sustainable Luxury will be receiving soaring attention over the next few years. I am profoundly convinced that the process of increasing awareness versus sustainability is one-way, it cannot be reverted. One day, we will all say "fif it ain't sustainable, it ain't luxury".



PEOPLE BEHIND THE MANIFESTO

TEAM





Lisa Niepelt

Hakan Karaosman



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Ida Ferrero

#UNLOCKINGRESPONSIBLELUXURY #SUSTAINABLELUXURYACADEMY #LUXURYCHANGEAGENTS



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Further information is available at www.som.polimi.it/en/research/research-lines/sustainability-in-luxury-and-fashion-supply-chains/#section01

REFERENCES

Unlocking Responsible Luxury – p.9

References

Ellen MacArthur Foundation. (2017). A new textiles economy: Redesigning fashion's future. Retrieved from https://www.ellenmacarthurfoundation.org/publications/a-new-textiles-economy-redesigning-fashions-future. Fashion Revolution. (2017). Loved clothes last.

Fritz, M. M. C., Schöggl, J. P., & Baumgartner, R. J. (2017). Selected sustainability aspects for supply chain data exchange: Towards a supply chain-wide sustainability assessment. Journal of Cleaner Production, 141, 587–

607. https://doi.org/10.1016/j.jclepro.2016.09.080

Froud, J., Hayes, S., Wei, H., & Williams, K. (2017). COMING BACK? Capability and Precarity in UK Textiles and Apparel. WRAP. (2017). Valuing Our Cothes: the cost of UK fashion. Retrieved from http://www.wrap.org.uk/sites/files/wrap/valuing-ourcothes-the-cost-of-uk-fashion_WRAP.pdf

State of Fashion – p.10-13

Online References in order of appearance: https://www.visioncritical.com/millennial-infographics/ https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ p 128 Teunissen, Van Zijverden, Fashion Data, 2015 HNI Rotterdam: https://issuu.com/maschavanzijverden/docs/fashion/data_hetnieuweinstituut_teun Achim Berg and others, McKinsey the Apparel sourcing caravan's next stop Digitation. 2017, MC Kinsey https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ https://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ Ntdps://issuu.com/stateoffashion/docs/stof_07_2018_catalogus_interactive_ Ntdps://issuu.com/stateoffashion/stor_stof_07_2018_catalogus_interactive_ Ntdps://issuu.com/stateoffashion/stor_stof_07_2

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Roadmap for Responsible Luxury – p.16-17

Images

all derived from Pexels (royalty-free and pictures free for con-commercial and commercial use) - https://www.pexels.com

Circular Design for Circular Economy - p.18-19

References in order of appearance:

Fashion Revolution. (2017), Fanzine #001 "Money fashion power", (Ditty, S.,Ed.), Fashion Revolution. Greenpeace. (2014), A little story about a fashionable lie, Amsterdam. Ellen MacArthur Foundation. (2017), A new textiles economy: Redesigning fashion's future, available at: https://www.ellenmacarthurfoundation.org/publications/a-new-textiles-economy-redesigning-fashions-future. UN Sustainable Development Goals. (2018) https://www.un.org/sustainabledevelopment/sustainable-development-goals/

Images

derived from Pexels (royalty-free and pictures free for con-commercial and commercial use) – <u>https://www.pexels.com</u> https://www.un.org/sustainabledevelopment/sustainable-development-goals/ Personal credentials of Rudrajeet Pal

Technological and Materials Innovation – p.18-19

References in order of appearance: UN Sustainable Development Goals. (2018) <u>https://www.un.org/sustainabledevelopment/sustainable-development-goals/</u> Ellen MacArthur Foundation. (2017), A new textiles economy: Redesigning fashion's future, available at: https://www.ellenmacarthurfoundation.org/publications/a-new-textiles-economy-redesigning-fashions-future. WRAP. (2012), Valuing our clothes: The true cost of how we design, use and dipose of clothing in the UK, Valuing our clothes, available at: http://www.wrap.org.uk/sites/files/wrap/VoC FINAL online 2012 07 11.pdf. UN Sustainable Development Goals. (2018) <u>https://www.un.org/sustainabledevelopment/sustainable-development-goals/</u>

Images:

derived from Pexels (royalty-free and pictures free for con-commercial and commercial use) – <u>https://www.pexels.com</u> https://www.un.org/sustainabledevelopment/sustainable-development-goals/ Sam Moore LinkedIn Profile

Cleaner Production and Sustainable Consumption - p.20-21

References in order of appearance:

Global Fashion Agenda and Boston Consulting Group. (2017), Pulse of the fashion industry. WRAP, (2017). Valuing Our Clothes: the cost of UK fashion. Retrieved from http://www.wrap.org.uk/sites/files/wrap/valuing-ourclothes-the-cost-of-uk-fashion_WRAP.pdf UN Sustainable Development Goals. (2018) https://www.un.org/sustainabledevelopment/sustainable-development-goals/

Images:

derived from Pexels (royalty-free and pictures free for con-commercial and commercial use) – <u>https://www.pexels.com</u> https://www.un.org/sustainabledevelopment/sustainable-development-goals/ Donald Huisingh – Google results

Transparency - p.22-25

References in order of appearance: Leach, A. (2017) 12 Mind-Blowing Facts That'll (Hopefully) Change the Way You Think About Fashion, available at: https://www.highsnobiety.com/2017/05/23/fashion-environment-facts/ Moulds, J. (2015), "Child labour in the fashion supply chain", The Guardian, available at: http://labs.theguardian.com/unicef-childlabour/ (accessed 19 January 2016). Clean Clothes Campaign. (2015), "Global brands leave Cambodian workers fainting over fashion", available at: http://www.cleanclothes.org/news/press-releases/2015/12/10/global-brands-leave-cambodian-workers-fainting-over-fashion (accessed 2 January 2016).

Images:

derived from Pexels (royalty-free and pictures free for con-commercial and commercial use) – <u>https://www.pexels.com</u> https://www.un.org/sustainabledevelopment/sustainable-development-goals/ Donna Marshall – Google results

Expert Opinions on Responsible Luxury - p.38-39

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derived from Pexels (royalty-free and pictures free for con-commercial and commercial use) - https://www.pexels.com

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Eco-Materials in Luxury? - p.46-47

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derived from Pexels (royalty-free and pictures free for con-commercial and commercial use) - https://www.pexels.com

Sustainability at Politecnico di Milano School of Management - p.48-49

Image: Politecnico di Milano School of Management

SUGGESTED READING

Agus Harjoto, M. and Salas, J. (2017) 'Strategic and institutional sustainability: corporate social responsibility, brand value, and Interbrand listing', Journal of Product & Brand Management, 26(6), pp. 545–558. doi: 10.1108/JPBM-07-2016-1277.

Aiama, D., Carbone, G., Cator, D. and Challender, D. (2016), Biodiversity Risks and Opportunities in the Apparel Sector, Gland, available at: https://portals.iucn.org/library/sites/library/files/documents/Rep-2016-001.pdf.

Bain, J., Beton, A., Schultze, A. and Mudgal, S. (2009), Reducing the environmental impact of clothes cleaning, BIO Intelligence Service in collaboration with Giraffe and Intertek, available at: http://www.2.wrap.org.uk/downloads/Reducing the environmental impact of clothes cleaning.2c3aecb1.10844.pdf.

Balch, O. and Idle, T. (2016), How brands can improve apparel value chains, Management Briefing: Sustainable Apparel, London, available at: http://innovation-forum.co.uk/perch/resources/if-management-briefing-apparel.pdf.

Brundtland, G. H. (1987) 'Our Common Future: Report of the World Commission on Environment and Development', United Nations Commission, 4(1), p. 300. doi: 10.1080/07488008808408783.

Business of Fashion and McKinsey&Company (2017) The State of Fashion 2018. Available at: https://cdn.businessoffashion.com/reports/The_State_of_Fashion_2018_v2.pdf.

Carbon Trust. (2011a), International Carbon Flows: Cotton, London, available at: http://www.carbontrust.co.uk/policy-legislation/international-carbon-flows/global-flows/pages/uk.aspx.

Carbon Trust. (2011b), International carbon flows: Clothing, London, available at: https://www.carbontrust.com/media/38358/ctc793international-carbon-flows-clothing.pdf.

CDP. (2015a), Accelerating action: CDP Global Water Report 2015, London, available at: https://www.cdp.net/CDPResults/CDP-Global-Water-Report-2015.pdf.

CDP. (2015b), CDP Global 500 Climate Change Report 2015, London, available at: https://www.cdp.net/CDPResults/CDP-globalclimate-change-report-2015.pdf.

Clean Clothes Campaign. (2015a), "Global brands leave Cambodian workers fainting over fashion", available at: http://www.cleanclothes.org/news/press-releases/2015/12/10/global-brands-leave-cambodian-workers-fainting-overfashion (accessed 2 January 2016).

Clean Clothes Campaign. (2015b), "Global Wage Forum confirms living wage as core human right", available at: http://www.cleanclothes.org/news/2015/10/12/global-wage-forum-confirms-living-wage-as-core-human-right (accessed 12 December 2015).

Clean Clothes Campaign. (2015c), "Italian factory conditions deteriorate", available at: http://www.cleanclothes.org/news/pressreleases/2015/01/23/italian-factory-conditions-deteriorate (accessed 23 December 2015).

Clean Clothes Campaign. (2016), "European garment workers face forced overtime and poverty wages", available at: http://www.cleanclothes.org/news/press-releases/2016/02/02/european-garment-workers-face-forced-overtime-and-povertywages(accessed 3 February 2016).

Changing Markets Foundation. (2018), Dirty fashion: Spotlight on a polluting viscose giant, doi:10.1080/17508061.2015.1082746.

Cline, E. (2014), "Where does discarded clothing go?", The Atlantic, available at: http://www.theatlantic.com/business/archive/2014/07/where-does-discarded-clothing-go/374613/ (accessed 25 February 2016).

Ditty, S. (2015), It's time for a fashion revolution, Dec 2015, The United Kingdom, available at: http://fashionrevolution.org/wpcontent/uploads/2015/11/FashRev_Whitepaper_Dec2015_screen.pdf.

Ellen MacArthur Foundation. (2017), A new textiles economy: Redesigning fashion's future, available at: https://www.ellenmacarthurfoundation.org/publications/a-new-textiles-economy-redesigning-fashions-future.

Fashion Revolution. (2017a), Loved clothes last., available at: https://www.fashionrevolution.org/resources/fanzine2/.

Global Fashion Agenda and Boston Consulting Group. (2017), Pulse of the fashion industry, available at: http://globalfashionagenda.com/wp-content/uploads/2017/05/Pulse-of-the-Fashion-Industry_2017.pdf.

Global Fashion Agenda and Boston Consulting Group. (2017), Pulse of the fashion industry, available at: http://www.globalfashionagenda.com/pulse/.

Greenpeace. (2012), Toxic threads: The big fashion stitch-up, How big brands are making consumers unwitting accomplices in the toxic water cycle, Amsterdam.

Greenpeace. (2016), Timeout for fast fashion, available at: http://www.greenpeace.org/international/Global/international/briefings/toxics/2016/Fact-Sheet-Timeout-for-fast-fashion.pdf.

Greenpeace. (2018), Destination Zero: Seven years of detoxing the clothing industry, available at: https://storage.googleapis.com/p4production-content/international/wp-content/uploads/2018/07/Toxic v14.pdf.

Henninger, C. E., Alevizou, P. J. and Oates, C. J. (2016) 'What is sustainable fashion?', Journal of Fashion Marketing and Management: An International Journal, 20(4), pp. 400–416. doi: 10.1108/JFMM-07-2015-0052.

Hill, J. and Lee, H.-H. (2012) 'Young Generation Y consumers' perceptions of sustainability in the apparel industry', Journal of Fashion Marketing and Management, 16(4), pp. 477–491. doi:10.1108/13612021211265863.

ILO. (2013), Making progress against child labour - Global estimates and trends 2000-2012, Geneva, available at: http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---ipec/documents/publication/wcms_221513.pdf.

ILO. (2016), "Textiles, clothing, leather and footwear sector", Textiles; clothing; leather; footwear, available at: http://www.ilo.org/global/industries-and-sectors/textiles-clothing-leather-footwear/lang--en/index.htm (accessed 4 January 2016).

Kapferer, J. N. and Michaut-Denizeau, A. (2014) 'Is luxury compatible with sustainability Luxury consumers' viewpoint', Journal of Brand Management, 21(1), pp. 1–22. doi: 10.1057/bm.2013.19.

Karaosman, H., Morales-Alonso, G. and Brun, A. (2016), "From a Systematic Literature Review to a Classification Framework: Sustainability Integration in Fashion Operations", Sustainability, Vol. 9 No. 1, p. 30.

Kotler, P. and Lee, N. (2005) 'Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause', Academy of Management Perspectives. doi: 10.5465/AMP.2006.20591016.

Moulds, J. (2015), "Child labour in the fashion supply chain", The Guardian, available at: http://labs.theguardian.com/unicef-childlabour/(accessed 19 January 2016).

Neslen, A. (2016), "Carbon dioxide levels in atmosphere forecast to shatter milestone", The Guardian.

Organic Cotton. (2015), "Environmental risks", The risks of cotton farming, available at: http://www.organiccotton.org/oc/Cottongeneral/Impact-of-cotton/Risk-of-cotton-farming.php.

Parsa, H. G. et al. (2015) 'Corporate social and environmental responsibility in services: Will consumers pay for it?', Journal of Retailing and Consumer Services. Elsevier, 22, pp. 250–260. doi:10.1016/j.jretconser.2014.08.006.

Pedersen, E. R. G. and Andersen, K. R. (2015) 'Sustainability innovators and anchor draggers: a global expert study on sustainable fashion', Journal of Fashion Marketing and Management: An International Journal, 19(3), pp. 315–327. doi: 10.1108/JFMM-08-2014-0059.

Quantis and Climate Works Foundation. (2018), Measuring fashion: Insights from the environmental impact of the global apparel and footwear industries study, Quantis and Climate Works Foundation, available at: https://quantis-intl.com/wpcontent/uploads/2018/02/measuring fashion report quantis.pdf.

WRAP. (2012), Valuing our clothes: The true cost of how we design, use and dipose of clothing in the UK, Valuing our clothes, available at: http://www.wrap.org.uk/sites/files/wrap/VoC FINAL online 2012 07 11.pdf.

WRAP. (2017), Valuing Our Clothes: the cost of UK fashion, available at: http://www.wrap.org.uk/sites/files/wrap/valuing-our-clothesthe-cost-of-uk-fashion WRAP.pdf.

WWF. (2014), "Cotton", Sustainable Agriculture, available at: http://www.worldwildlife.org/industries/cotton.

Greenpeace. (2014), A little story about a fashionable lie, Amsterdam

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