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**Sustainability in the fashion industry:  
how companies steer the change**

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## INTRODUCTION

Sustainability is today one of the fundamental conditions in which companies should be committed to in order to be able to operate with a long-term perspective. The situation the world is facing today is critical due to the irresponsible actions carried out by past generations which were tabled to only maximize profits, disregarding the impacts that their behaviours could have. Sustainability was not seen as a priority and decisions were made on a short-term orientation. These actions have had a magnitude effect on both natural and human resources, exploiting them and not worrying about what would have remained for the new generations.

Over the last years the business world has demonstrated a steadily growing sensitivity on social and environmental issues, developing a more conscious behaviour to save and support the planet.

This new wave of awareness coming from the external environment, together with a changed perspective in companies' management, pushed companies to incrementally change the way they performed their activities. More and more firms are embracing this new trend understanding the importance of contributing to a better environment. Firms reinvented their strategies and introduced new values and visions in their business models, shifting their position from a passive fulfilment of governments' regulations and standards, to be forefront actors of the change.

The aim of this elaborate is to show the evolution of the concept of sustainability, analyzing the way it has been adopted and modified, transforming itself from a macro and political issue to a concrete necessity that, in order to achieve the objectives, needs to be shared and applied also by companies. Then, the study highlights how the sustainability issue has turned over the years, shifting from a simple sensibility and attention to social and environmental themes to become a concrete and integral part of corporate values and strategies, through the emergence of completely new business models. The main problem that managers had to face has been to find a new way to make the social and environmental sensitivity a real matter and turning it into economical sustainability.

In order to understand how the trend has emerged and evolved over the years, a preliminary bibliographic research has been developed. This helped to understand what has been published, where (in which journals) and how the theme has changed both in business management in general, and then more specifically in the textile sector.

Following the literature emerged from the research, the history of the trend has been traced, taking a multilateral perspective. In fact, the elaborate observes the evolution of the history of sustainability from three different points of view as sustainable innovation took place on the three main dimensions of business history, business models innovation, and marketing innovation. The focus on these three dimensions comes from the desire to combine the most significant aspects learned during the study programme and find a concrete application in the history of sustainability.

The thesis is, therefore, a work that acts as a bridge between the business history and the theory of the enterprise based on the business models evolution; showing the transition from a political problem to a practical issue for managers and practitioners.

The first part of the elaborate focuses on the general aspect of the sustainability concept, analyzing its rise and development over the years, highlighting its importance in the current context and the different forms in which it can manifest. A research on the number of publications of several international journals of management and sustainability is developed, with the purpose of demonstrating how the phenomenon has assumed a growing importance in the academic dimension and has spread over the years.

A particular emphasis is placed on the process of transferring the knowledge from a macro dimension to a micro level, turning the environmental sensibility perceived from companies' external stakeholders into corporate responsiveness and internal acknowledgement.

The second chapter describes the evolution of the fashion and textile industry in terms of sustainability. Also in this part the same method of the first part has been adopted, and a preliminary bibliographic research has been used to guide the understanding of how the sustainability phenomenon emerged and evolved in the sector.

Then, following the outcomes of the research, combining the obtained literature, the evolution of the history of the industry has been traced. The study arrives to the current best practices adopted by fashion and textile firms in order to achieve a more sustainable behaviours and shows the introduction of additional regulations and standards that require companies to find new solutions to remain competitive in the global market. A particular section is dedicated to the traceability tools that support companies through the incorporation of new values and beliefs in their business models.

By summing up, the aim of this elaborate is to provide concrete evidence about the diffusion of the sustainability trend in the business management and in the fashion industry, showing how it emerged as a sensitivity towards social and environmental questions, and then transformed in what is recognized today as "sustainability". The research in the distribution and growth in

publications, discussions, articles and books over the years provided the guidelines to understand the process of transformation of knowledge from a macroeconomic perspective to the concrete integration of these concepts as fundamental values into the corporate strategic management.

# **PART I: SUSTAINABILITY**

## **1.1 Introduction to sustainability**

Sustainability is today one of the major challenges that the world is facing. It is not anymore a choice but a real necessity.

Companies are reviewing their strategies, transforming internal processes, supply chains, organizational structures, management and control systems in order to integrate sustainability in every stage of the production processes improving their value propositions.

Companies' concern and commitment towards sustainability was the result of a long and difficult process still in progress for many companies.

It is undeniable, however, that since the turn of the century, sustainability has progressively become a key component that organizations must consider in order to gain a strategic advantage over the competition.

One of the main problems related with the shift to a more sustainable path for companies is connected with the fact that sustainability is often seen only as a luxury investment: the changes and the actions required to implement sustainable practices require high costs.

Debate among practitioners and scholars about the profitability of sustainability is still very intense although most recent publications seem to support the idea that sustainability has become a "must" for companies to be able to attract investments, customers and make profits.

Bonini and Swartz think that considering sustainability as a luxury is a cynical and increasingly untenable perspective.<sup>1</sup> In fact, from a recent research, they proved that sustainability initiatives help to create profits and business opportunities, having also a positive financial impact. Also Konan and Cohen argue that the need for greater sustainability is an opportunity for organizations by rewarding a competitive advantage to those adopting more sustainable practices.<sup>2</sup> In the opinion of these scholars, organizations need to realize that, in order to maintain their competitive advantage in the market, they do not only need to focus on profits and revenues, but they also need to consider the consequences that their activities have on the environment and on the society.

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<sup>1</sup> Bonini, S. & Swartz S. (2014), Profits with purpose: How organizing for sustainability can benefit the bottom line

<sup>2</sup> Konar S., Cohen M.A., (2001), Does the market value environmental performance? Rev. Econ. Stat. 83, 281–289.



Berrone strongly argues in this direction when claiming that “green credentials are the key to staying competitive and this pressure has pushed firms to try to be more environmentally friendly”.<sup>3</sup>

Behaviours and consumption decisions of people have changed as they realized that the actual way of living is not sustainable and cannot be maintained in the long run. Thanks to this, consumers are today more aware of the problem and are willing to pay higher prices for more sustainable and eco-friendly products. Sustainability has to be seen by companies and managers as a value and as a source of power for the firms who embrace and follow it. In addition, the success in the market is more and more measured by taking into consideration the capability of companies to balance economic interests with social and environmental ones.

Until now, companies have done important steps towards sustainability, but the road in front of them is still long and perilous.

When dealing with sustainability the focus has often been on the macroeconomic aspect, considering the role of single firms and micro-organizations only marginally.

The role of companies is reduced to the passive fulfilment of obligations and standards compliance, not considering their extreme importance at the micro level.

A recent survey by the United Nations Global Compact provides additional argument to this thesis, by showing that the 84 percent of the 1000 CEOs who took part in the survey believed that businesses should define new goals and actions on global priority issues; yet, only a third of them affirmed that their business had an active role to address actual changes: they recognized that in most cases business commitment meant to merely fulfil regulations and follow international policies.<sup>4</sup>

To better understand the conditions that could enable companies to implement their sustainable development, an exploration on the historical origins of the concept of sustainability and on the evolution of its meaning overtime would be necessary. To do that, it would be useful to make a step back into the history of the emergence of the macroeconomic orientation towards sustainability.

During the early seventies the idea of sustainability started to spread due to the arising concerns related with the scarceness of resources.

In 1967, Ehrlich and Holdren began to highlight the problem by making consumption previsions: their data showed that the pace of population growth, together with the rapid

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<sup>3</sup> Berrone P. (2016), How to succeed at sustainability (and why greenwashing doesn't work), Forbes

<sup>4</sup> The UN Global Compact–Accenture CEO Study on Sustainability, (2013), Architects of a Better World, Accenture and United Nations Global Compact, [unglobalcompact.org](http://unglobalcompact.org)

environmental degradation and the rising rate of use and depletion of resources, would have resulted in an unsustainable way of life and in disastrous consequences for future generations.<sup>5</sup> Further concerns about the scarcity of resources emerged in 1972 with the publication of “Limits to Growth” by Meadows. With his work he brought the problem to the attention of world institutions affirming that “the trend of population, resources, energy, pollution and industrial development would have provided a scenario of an increasing shortage of resources that would have brought the world economic system to collapse within the twenty-first century”.<sup>6</sup>

The first definition of sustainability emerged at the United Nations conference in 1972 in Stockholm. During the meeting government leaders addressed the problem of unsustainability of the system, questioning the conviction that the natural resources provided by the planet were illimited and inexhaustible, and hence introducing concerns for the insufficiency of resources for future generations. They stated 26 principles to incentivize the preservation of the environment and the improvement of human quality of life.

It was in this moment that the sustainability issue assumed a macroeconomic perspective, interpreting it as a global scale problem that needed to be solved by introducing new policies and regulations at an international level.

From that moment onwards, sustainability has ranked as a priority and has been integrated into international agendas, promoting a global coordination. However, the micro level actions that could have been implemented by single organizations largely remained in the shadow.

Afterwards, the term has been redefined in the Brundtland Report in 1987 in which the World Commission on Environment and Development (WCED) examined the most critical global issues in a more concrete and realistic way. Moreover, they assessed new policies with the scope of reaching a new sustainable development path.

Sustainability has been outlined as the “meeting the needs of the present without compromising the ability of future generations to meet their own needs”.<sup>7</sup> This concept shows the importance of finding a balance between present and future generations, giving to the current ones the responsibility of caring about the resources for the next ones.

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<sup>5</sup> Ehrlich R.P., Holdren, J. P. (1971), Impact of Population Growth, *Science*, 171(3977), 1212-1217

<sup>6</sup> Meadows D.H, Meadows D.L., Randers J., Behrens W.W. III. (1972), *The Limits to growth: A report for the Club of Rome's. Project on the Predicament of Mankind*. New York, Universe Books

<sup>7</sup> United Nations, Report of the World Commission on Environment and Development. *Our Common Future*, 1987

Today, the data resulting from the United Nations' reports<sup>8</sup> counts 162 countries that are committed to achieve a sustainable development and are searching for new ways to reduce the negative consequences that their actions have on the planet.

Sustainability is thus a global challenge: in 2015, the United Nations subscribed the Agenda 2030, which is a program based on 17 Sustainable Development Goals that all the United Nations' Member States endeavour to achieve by 2030. The UN invites countries to provide reports on how they actually deal with some of the biggest problems the world is facing as climate change, poverty, inequality, peace and justice, environmental degradation, and monitors their engagement.<sup>9</sup>



Figure 1: Sustainable Development Goals

### 1.2 The 3 pillars for a sustainable business: social, economic, environmental and the inevitability of corporate sustainability

The fact that several organizations committed to sustainable development by following the UN goals represents an important starting point. But, the crux of the matter is not the decision to initiate this journey, but the ability to translate the UN goals into tangible corporate objectives and understand what this process requires in terms of resources and values.

This is one of the most important subjects discussed and debated among scholars and practitioners. Over the time, the theme of sustainability seems to have assumed a central role in

<sup>8</sup> United Nations, <https://unsdg.un.org/>

<sup>9</sup> United Nations, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

corporate strategies and several studies recognize its key importance to gain a competitive advantage.

As already stated, the concept of sustainable business develops on the idea that the economy is not only based on the maximization of profits, but is also oriented to protect and sustain the environment in which firms operate and the people involved in the processes. The approach takes into consideration the ecological aspect, the social equity seen as the respect of all human beings, including people, workers, consumers; and the economic aspect.



Figure 2: The three pillars of a sustainable business

As showed in the figure provided by John Elkington a sustainable business relies on three interconnected pillars: social, environmental and financial.

This representation is realised as the balancing of trade-offs between equally desirable goals within the three categorisations, although uses vary.<sup>10</sup>

This approach is called Triple-Bottom-Line or approach of the three P (Profit, Planet, People). It is a framework for reporting and accounting which encourages the balance between the three dimensions.<sup>11</sup> Companies that run their business following this approach integrate together economic, social and environmental objectives.<sup>12</sup> In this perspective the implementation of a sustainable development steps through the necessity of changing the whole view from a macro-

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<sup>10</sup> Purvis B., Mao Y., Robinson D. (2019), Three pillars of sustainability: in search of conceptual origins, Integrated Research System for Sustainability Challenge, Springer

<sup>11</sup> Elkington J., (1997), Cannibals with Forks. The Triple Bottom Line of 21st Century

<sup>12</sup> Charter M., Peattie K., Ottman J. & Polonsky M.J. (2006), Marketing and sustainability, Centre for Business Relationships, Accountability, Sustainability and Society

dimension to a micro-dimension, where all the different aspects have an important impact and affect the orientation of the firm with respect to the sustainability aspect.

Every single individual plays a role in achieving a collective goal because the positive effects of its actions are reflected on the whole society.

The financial, or economical, dimension represents the need to guarantee the economic success of the company to its management and its stakeholders, and is connected with the capability of gaining and maintaining a competitive position in the market.

The social pillar involves benefits that have an impact on both inside and outside the company: from the inside by supporting fair working conditions, assuring safety and wellbeing to its workers and consumers, supporting the development of new skills and capabilities, making investments in future generations and promoting high quality of life; while from the outside by taking advantage of the opportunities coming from the surrounding system.

The environmental aspect is highly related with the preservation of natural resources that the planet offers. It aims at reducing the negative environmental impacts through a more efficient use of materials and resources, the prevention of pollution and the avoidance of wastes.

It is evident how the three pillars are related to each other and their combined development drives to the adoption of sustainable strategies and policies.<sup>13</sup>

The model of the three Ps provides a measurement system of the level of sustainability followed by any organizations, enabling the development of a corporate report based on both economic parameters and social and environmental ones.<sup>14</sup> Accordingly, corporate sustainability is composed on the balancing of these three fundamental dimensions translatable into the already introduced “Triple-Bottom-Line” approach.

Corporate sustainability means using the resources in the most efficient way, eliminating wastes, taking the best strategic choices by reducing or eliminating the impact of the company’s activities on the environment, while, at the same time, meeting the needs of actual stakeholders without compromising the needs of future stakeholders.

Sustainability is strictly related to the concept of Corporate Social Responsibility, that is the creation of value for all stakeholders involved in the entire corporate system.

The European Commission has defined CSR in 2011 as “the responsibility of enterprises for their impact on society and, therefore, it should be company led. Companies can become

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<sup>13</sup> Kaynak H., Montiel I. (2009), The relationship between sustainable supply chain management and sustainable performance: an integrated framework, Academy of Management Proceedings, Academy of Management

<sup>14</sup> Elkington J. (1994), Towards the Sustainable Corporation: Win-Win-win Business Strategies for Sustainable Development, California Management Review, vol. 36, n.2 (Winter)

socially responsible by integrating social, environmental, ethical, consumer, and human rights concerns into their business strategy and operations; and following the law”.<sup>15</sup> Since the publication on 2001 of the Green Paper on CSR, the European Commission has played a pioneering role in the development of public policies and incentives in favour of CSR, acknowledging the active contribution that also individual companies could provide to sustainability.

CSR and corporate sustainability, despite their paradigmatic differences, have similar considerations of economic, social and environmental dimensions, they share the same concerns and are often used separately to conceptualize the other term. Some scholars tend to consider them as complementary topics, others think that despite the presence of shared concepts, they have different purposes.

To better understand which is the fine line that separates these two interrelated notions, a reference to the research findings of Montiel would be useful: “On one hand, corporate sustainability scholars tend to argue that economic, social and environmental pillars are interconnected. In fact, corporate sustainability describes a nested system that recognized that the economy is part of society, which in turn is part of the larger ecological system. On the other hand, most empirical CSR research treats social and economic performance as independent components. The link between economic and social performance remains enigmatic in CSR.”<sup>16</sup>

Therefore, following these scholars, the thought has arrived at the point in which reinventing a business by rethinking it in a sustainable perspective is the new key to success, implementing new practices and policies following the stimulus offered by international institutions.

It is generally agreed that the main purpose of companies is to create and deliver value.<sup>17</sup> Until now the attention has been addressed mainly on the creation of value for shareholders and investors, caring less about customers and other stakeholders.

The concept of value is one of the key drivers for sustainability and for a sustainable development: being sustainable involves aiming at a profitable economic performance while, at the same time, caring about the environmental and social impacts, minimizing or eliminating the negative ones and meeting the needs of all the categories of stakeholders.

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<sup>15</sup> European Commission, [https://ec.europa.eu/growth/industry/sustainability/corporate-social-responsibility\\_nn](https://ec.europa.eu/growth/industry/sustainability/corporate-social-responsibility_nn)

<sup>16</sup> Ivan Montiel (2008), Corporate Social Responsibility and Corporate Sustainability: Separate Pasts, Common Futures, Source: Organization & Environment, September 2008, Vol. 21, No. 3 (September 2008), pp. 245-269, Sage Publications, Inc.

<sup>17</sup> Charter M., Peattie K., Ottman J. & Polonsky M.J. (2006), Marketing and sustainability, Centre for Business Relationships, Accountability, Sustainability and Society

Recent studies shed light on the fact that investors are increasingly interested in putting their money into socially responsible investments. In a recent research conducted in the United States has emerged that in the last three years socially responsible investments has grown by 22 percent and today counts for more than 11 percent of all assets under management (\$ 3.74 trillion). Today more than \$ 13 trillion is invested in assets that include ESG metrics (Environmental, Social and Corporate Governance).<sup>18</sup>

The pressure on companies to develop a clear position on specific sustainability issues in order to attract and retain the support of the corporate management and of shareholders (but also of customers, employees, organizations) has lately become very strong.

Green actions will result in useful outcomes for the corporate image and for the individual motivation of the different stakeholders in the short term, but to achieve a durable and long-term advantages the integration of the sustainability concepts into the company's missions and visions is needed.<sup>19</sup>

So, it is fundamental that firms define their orientation to sustainability issues.

### **1.3 A preliminary research of the business literature**

Over the years, concerns about the environmental and social impacts of business have emerged and flowed. Today sustainability is a continuous research of finding a balance between the actions performed by companies and big businesses; the interests of policy makers and communities caring about the environment and the social welfare; and the regulations and guidelines emitted by legislators and governments concerning the argument.

It is important to clearly understand how the history of sustainability developed over the years, in order to realize which are the evident, but also hidden, reasons that pushed companies to change their perspectives and integrate this new phenomenon into their corporate strategies and orientations. It is interesting to investigate on how the concept of sustainability has evolved over the time, from a simple attention towards social and environmental concerns to become a real and concrete managerial priority.

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<sup>18</sup> 2012 Sustainable Investment Review, Global Sustainable Investment Alliance, 2013, [gsi-alliance.org](http://gsi-alliance.org)

<sup>19</sup> Stocchetti A. (2012), The Sustainable Firm: from Principles to Practice, International Journal of Business and Management, Canadian Center of Science and Education

To have a clear idea about how sustainability has become adaptable to business passing through different meanings over the years, how firms of different countries and different industries reacted in a similar way to this trend and discover which are the common reasons of this change, a preliminary bibliographic research on the existing business literature has been developed. The purpose of this research is to figure out which were the most discussed topics, how they emerged and changed over the years, and which were the most influential historical events that have had a significant impact in the development of sustainability.

To achieve this target, the research included 7 international journals and has analyzed the publications and articles released over the years, in order to see how the trend has risen and transformed in these journals. This study helped to guide the reading of the evolution of the sustainability matter over the years.

The starting point of the study has been the selection of the journals, the intention was not to provide a meaningful sample but to lay the ground for a few first observations on the evolution of the concept of sustainability over the years in management studies.

The selection includes one among the most influential international journals in management studies: “Academy of Management Journal”.

The first publication of “Academy of Management Journal” dates back to the 1957 and today this journal represents a cornerstone in management studies. Its Impact Factor is 7.571 and publishes bimonthly in February, April, June, October and December. The mission of AMJ is to publish empirical research that tests, extends or builds management theory and contributes to management practice. Its publications include all the possible empirical methods: qualitative, quantitative, field, laboratory, meta-analytic and mixed methods. The articles released by AMJ emphasize the strong empirical and theoretical contributions that the research is making, while at the same time, present original, insightful, interesting and important research. Research should highlight and demonstrate the “value-added” contribution to the field’s understanding of an issue or topic.

Then, the research moves to a journal “Organization & Environment” from SAGE Publishing characterised by a specific focus on the environment. Its first issue was published in 1987. “Organization & Environment” aims to publish rigorous and impactful research on organizations’ management, including its implications for the sustainability and flourishing of the social, natural and economic environment in which they act. To this end, it places an emphasis on the debates related to the sustainable development of organizations and ranges from social to natural and life science research, including all business domain subjects of economics, political science, sociology, psychology, history and law.



The methods adopted by the journal includes all research methodologies, as long as they are applied in line with the highest quality standards. Moreover, it encourages not only the exploration and the advancement of already existing theory, but also promotes the study of new phenomena, not completely explainable with extant knowledge, and the consequent launch of novel theoretical and empirical lines of inquiry.

Its Impact Factor is 3.333 and its h5-index corresponds to 31. The h-5 index is a Google Scholar's index that shows both the productivity and citation impact of the publications and is calculated finding the largest number h such that h articles published in the past five years have at least h citations. The h5-median is based on the h5-index, but instead measures the middle value of citations for the h number of citations, and in the case of "Organization & Environment" it measures 58.

In addition, to analyze more deeply the connections with sustainability, other recently founded journals explicitly focusing on sustainability have been included in the research. The first one is the "Journal of Cleaner Production" which was published for the first time in 1993. It is an international, interdisciplinary journal intended to help societies become more sustainable. Its Impact Factor is 7.246 and its h5-index is equal to 7.491, with a cite score of 10.9. The "Journal of Cleaner Production" serves as a platform for addressing and discussing theoretical and practical environmental and sustainability issues, deepening the research on cleaner production to prevent the production of waste, while increasing efficiencies in the uses of energy, resources, water and human capital. Other discussed subjects are the governance, legislation and policies required for a sustainable development and the related concepts of corporate sustainability and CSR.

The second sustainability-focused journal included in the selection is the "Journal of Management and Sustainability", recently founded in 2011. JMS is an international, double-blind peer-reviewed journal for academics and practitioners of sustainable management. It is published by the Canadian Center of Science and Education and has an h-impact of 19, an h5-index of 15, an h5-median of 21 and an i10-index of 47 (it measures the number of publications with at least 10 citations).

The aim of the journal is to provide a guide for high-quality research in environmental sustainability, corporate social responsibility, economic sustainability and any other fields concerning the interaction between management and corporate sustainable development.

Then, to provide to the research a further perspective and analyze the development of the sustainability concept also from the activists' point of view, other two journals have been selected: "Horizon: Journal of International Relations and Sustainable Development"; and

“Greener Management International”. This selection has been made to see with empirical evidence how the public debate has been influenced by the topic over the years. From the analysis of these two journals the observation of when sustainability has become a mainstream discussed topic among policy makers has been possible.

Indeed, both “Horizons” and “Greener Management International” are more policy-oriented journals, mainly addressed to policy makers and stakeholders and not only to corporate managers and practitioners. They have been recently founded with the aim of disclosing information and influence the public opinion, promoting an active participation.

The first mentioned journal is “Horizons: Journal of International Relations and Sustainable Development”. It was firstly launched in 2014 by the CIRSD (Center for International Relations and Sustainable Development), and it is a quarterly magazine. It is a high-quality platform with the mission of providing informed analysis, offer innovative, practical recommendations and conduct reasoned exchanges on the full range of issues that shape international developments. Among the main objectives of the journal, the most representatives are the desire to encourage a more inclusive and equitable international system and to advocate sustainable development, strengthening the cooperation between States and increasing responsiveness to changing global circumstances.

“Horizons” seeks to contribute to treat economic, social and environmental questions as integral parts of contemporary international relations, presenting the views of influential authors in governments, private sector, media and academic community.

The reason that pushes “Horizons” to follow its mission is the aspiration to achieve an increasing awareness of the necessity of cooperation between States, intergovernmental organizations and influential stakeholders.

The other recent policy-oriented journal included in the research is the “Greener Management International: The Journal of Corporate Environmental Strategy and Practice” (GMI). It has been firstly published in 1993 and has been a leading quarterly management journal addressing strategic environmental and sustainability issues affecting worldwide organizations. Its publication has stopped in 2007 for an editorial decision of the Greenleaf Publishing, but its contribution in the diffusion of policy-makers’ debates in sustainability has been important and should be taken into consideration: its team was in fact composed of over thirty professional and academic experts. The key topics addressed in the articles released concerned corporate sustainability aspects, management and organizational behaviour and sustainability-related issues.

Finally, the research has considered also the most impactful business history journal, to see how scholars in this discipline adapted to the new trends and when sustainability assumed an historical significance being integrated in the historical debate. The results that this journal could provide to the research are substantial as it provides evidence about the moment in which the managerial and academic debate on sustainability becomes so strong and diffused to assume an historical point of view, entering in historian consideration and reflections.

The journal that has been analyzed is “Business History Review”, published by The President and Fellows of Harvard College. “Business History Review” began publication in 1926 as the “Bulletin of the Business Historical Society” and is recognized as a pioneering journal in its field. The articles released in the journal are based on rigorous primary research that address major topics of debate, offer comparative perspectives and broaden consideration of the subject. The aspects that are discussed the most are connected with the history of firms, entrepreneurs and business systems, expanding the range not only in the fields of globalization, regulation and innovation, but also in the business relations between the environment and the political world.

Right after the selection of the journals to be analyzed, the publications of these journals have been browsed, searching for articles and peer-reviewed papers published from 1970 to 2021 which contained in the title the terms “sustainability”, “environment”, “green” and “corporate social responsibility”, yielding a cumulative number of 591 articles.

The results obtained show the relevance of the concept of sustainability for each journal. Not surprisingly a steady increase of articles containing the selected key words in the last decade can be observed, and they can be seen clustered in the journals which have a specific focus on sustainability.

<b>Journal</b>	<b>1970-1990</b>	<b>1990-2010</b>	<b>2010-2021</b>	<b>Total number of articles</b>
Academy of Management (1957 - ongoing)	4	7	13	<b>24</b>
Organization & Environment (1987 - ongoing)	-	68	39	<b>107</b>
Journal of Cleaner Production (1993 - ongoing)	-	93	159	<b>252</b>
Journal of Management and Sustainability (2011 - ongoing)	-	-	75	<b>75</b>
Horizons (2014 - ongoing)	-	-	39	<b>39</b>

Greener Management International (1993 - 2007)	-	74	-	<b>74</b>
Business History Review (1926 - ongoing)	4	9	7	<b>20</b>

Table 1: Total results of the research

After gathering all the data, in order to derive more useful information, a division of the outcomes of the research has been made, according to the different nature of the journals, as the results provide diverse interpretations. In this perspective, data has been divided into three separated tables, the first analysis including the four management scientific journals (“Academy of Management”, “Organization & Environment”, “Journal of Cleaner Production”, “Journal of Management and Sustainability”); the second analyzing data from the two more policy-oriented journals (“Horizons: Journal of International Relations and Sustainable Development”, “Greener Management International”), and lastly the business history journal to provide the historical perspective of the development (“Business History Review”).

At this point, each article has been analyzed and associated to each of them the theme that the most represents it. The main themes that emerged are the ones listed in the tables: environmental issues; society; environment and society; environmental sustainability; social sustainability; business strategy and environment; csr; sustainability; and corporate sustainability.

The study continued by analyzing data coming from the scientific management journals, obtaining the following results.

<b>Theme</b>	<b>1970-1900</b>	<b>1990-2010</b>	<b>2010-2021</b>	<b>Total number of articles</b>
Environmental issues	1	23	8	<b>32</b>
Society	2	6	4	<b>12</b>
Environment and society	-	11	1	<b>12</b>
Environmental sustainability	-	19	26	<b>45</b>
Social sustainability	-	9	29	<b>38</b>
Business strategy and environment	1	28	11	<b>40</b>
Csr	-	1	32	<b>33</b>
Sustainability	-	50	79	<b>129</b>
Corporate sustainability	-	21	96	<b>117</b>

Table 2: Journals included in the analysis: “Academy of Management Journal”, “Organization & Environment”, “Journal of Cleaner Production”, “Journal of Management and Sustainability”

From this first table it is possible to clearly observe how scholars and practitioners began to release articles and publications concerning sustainability linked to management only in the 1990s. This outcome provides an important information about the history: before the 1990s the concept of sustainability still does not exist. The explanation of this result can be found in the presence, between the 1970s and the 1990s of a growing interest and attention to the environmental and social questions, but they were discussed only as sensitive topics for a part of managers, and not as sustainability matters.

So, with empirical evidence it is possible to deduce that management meets and embraces sustainability only after the 1990s, while in the previous years, the main subject of the debate was focused on environmental and social themes.

In order to better understand the findings of the research, the identified themes can be further divided in two big categories: the first one related with the articles facing the problems of environment and society, and the second category connected with the management of sustainability at the corporate level.

Starting from the first category that includes the publications attributed to the first five themes of the table, it is possible to deduce that the initial concerns that scholars decided to face were the environmental damages and the social inequalities (grouped respectively in the category of “environmental issues” and “society”) that were becoming evident in the last part of the century. Through the years the topics assumed a growing importance, being also considered in conjunction as two correlated dimensions. This can be shown by the category of “environment and society” in which all the articles mentioning both environmental and social concerns that were strictly interrelated were grouped together.

This connection between environment and society gained an increasing strength, and changed its meaning using more the “sustainability” term, following the rise of the trend. In fact, from the results obtained, the articles concerning the original terms decline in the first years of the 21<sup>st</sup> century, even if the same concept is still kept in “environmental sustainability” and “social sustainability” themes which, on the contrary, show a rapid rise.

On the other hand, focusing on the second category of the table concerning the development of sustainability from the corporate point of view, other information can be obtained.

Data shows that the first topics addressed from business managers were related with the challenge of finding a balance between environmental problems and the maximization of their profits. As a matter of fact, at the beginning sustainable practices were not seen as a mean to increase corporate value, but they were perceived as a mere cost bore by companies to

implement a strategy and gain a competitive advantage. The focus was thus placed on planning strategies capable of including both aspects.

The situation changed in the new century when scholars started talking less about strategy and giving more voice to “sustainability” and “corporate social responsibility” aspects. These two themes became the protagonists of the debate thanks to the change in managers’ perspective: they started to strongly believe in the power of sustainability to change the future of the world, giving life to new values and beliefs. Research findings provide evidence on this change of perspective showing a growth in the number of publications related with the terms “sustainability” and “corporate social responsibility”.

Moreover, the theme of “corporate sustainability” has been largely diffused during the last years. The integration and coordination of the new values inside the organizations built a new long-term orientation inside small and large companies. The concept of corporate sustainability obtained by the analysis of the articles includes also drastic changes in the corporate governance decisions, the improvement of supply chain systems and the re-invention of sustainability-oriented business models.

Continuing with the observations, the focus shifts on the analysis of the articles distribution of “Horizons: Journal of International Relations and Sustainable Development”, and the “Greener International Management”, that are the two more policy-oriented journals.

<b>Theme</b>	<b>1970-1900</b>	<b>1990-2010</b>	<b>2010-2021</b>	<b>Total number of articles</b>
Environmental issues	-	2	-	<b>2</b>
Environment and society	-	3	1	<b>4</b>
Environmental sustainability	-	9	11	<b>20</b>
Social sustainability	-	3	5	<b>8</b>
Business strategy and environment	-	7	2	<b>9</b>
Csr	-	1	-	<b>1</b>
Sustainability	-	28	19	<b>47</b>
Corporate sustainability	-	21	1	<b>22</b>

Table 3: Journals included in the analysis: “Horizons”, “Greener Management International”

As it is possible to observe from table 3, between the 1970s and the 1990s there are no publications, and this is due to the fact that the emergence of these policy-oriented sustainability specialized journals takes place only during the 1990s, or even later, in the first years of new

century. These journals provide information about when the sustainable theme became a central topic discussed among stakeholders and policy-makers. Indeed, the rise of these journals is mainly aimed at influencing perspectives and behaviours, and spreading awareness to guide strategic and policy decisions.

By the findings the focus on “sustainability” stands out, showing a great attention compared to the other themes, even if the passage through an initial “business strategy” point of view can be noticed. However, also in these journals the reduction of publications centered on “environmental issues” or on “environment and society” can be noticed, to give more space to the consideration of these aspects in a more sustainable way, proved by the growth in the categories of “environmental sustainability” and “social sustainability”.

The major orientation of these two magazines to an audience that is different from corporate managers finds an evidence in the small number of publications concerning “corporate social responsibility” and “corporate sustainability”, although it has still gained a relevant interest in the first years of the century.

So, the emphasis is placed more on the social and environmental sustainability aspects rather than on corporate perspective, with the purpose to increase the sensitivity linked to these themes rather than to find concrete solutions for businesses.

The last category to analyze is the development of the concept from an historical point of view, to see when sustainability assumes a relevant importance to the point that it emerges also as in the historical debate.

<b>Theme</b>	<b>1970-1900</b>	<b>1990-2010</b>	<b>2010-2021</b>	<b>Total number of articles</b>
Environmental issues	3	1	-	<b>4</b>
Environment and society	-	1	-	<b>1</b>
Environmental sustainability	-	-	1	<b>1</b>
Business strategy and environment	1	5	1	<b>7</b>
Sustainability	-	1	3	<b>4</b>
Corporate sustainability	-	1	2	<b>3</b>

Table 4: Journal included in the analysis: “Business History Review”

The table shows how in the history the first issues that entered in the debate are the ones of the environmental degradation and the preservation of the natural resources of the planet (“environmental issues”), however it was a topic still not connected with sustainability.

The integration of environmental concerns in the business strategy began in the 1990s, corresponding to the same years in which the managerial debate among scholars and practitioners had already achieved a great resonance over the years. So, also here there is the confirmation that sustainability emerges only after the 1990s, while the previous years are characterized by an increasing sensitivity in environmental and social concerns. Then, the discussion shifted from the strategic perspective of mere maximization of profits to the integration of also the environmental and social aspects of sustainability to the financial management. This transition can be observed by the small increase in article publications in “sustainability” and “corporate sustainability” dimensions and the decrease in the “business strategy and environment” category.

In conclusion, from the research it is possible to affirm that the diffusion of sustainability in the management field began in the 1990s and required a long process of internalization for companies. Sustainability has changed names and meanings over the years, but the key concept kept being the same. At the beginning the debates were focused on environmental and social themes, talking about the issues and the consequences that business actions had on these aspects.

Sustainability emerges as a new concept in 1990s and became one of the major discussed trends in the academic and scientific debate, however, the core point of the transformation happened when managers realized that they could change their position towards sustainability from a passive role of spectators to become active agents, taking their responsibilities and assuming a leading role in the change.

On the other hand, looking at the specific outcomes provided by two of the most influential and general journals, the “Academy of Management Journal” and the “Business History Review”, further important considerations can be done. Acknowledging the great impact that these journals have, and given the large number of annual publications, it is possible to notice the relatively small number of issues on the sustainability theme. From that it can be deduced that until today there is a part of scholars and practitioners that are willing to pursue the green path and believe in it, while, still the great majority of them, are not involved to the point of changing their perspectives.

In fact, it cannot be said that today sustainability has assumed an historical significance being integrated in the historical debate. Numbers are small and the topic is largely discussed only on the journals that specifically address the theme. There is no certainty that sustainable practices are widespread and shared among managers, but instead, sustainability can be considered as a niche topic, still not diffused among all businesses.



From data collected in the research and taking these outcomes as guidelines, a clear picture of how and when sustainability emerged and diffused over the years has come out. The analysis showed how it changed, transformed and spread; starting from a macroeconomic perspective and arriving to a more micro integration in corporate business plans.

In fact, the research shows that it was only during the 1990s that sustainability began being adapted for the business world and translated into a language that managers were capable to perfectly understand. This transmission of knowledge enabled entrepreneurs who believed in it to be guided in their green development, shifting the environmental and social sensitivity diffused at the time into corporate sensitivity.

This transformation made them realize that sustainability was not anymore a luxury concept but was directly applicable in the micro dimension from everyone, firms included. It required a long and complex process in which sustainability assumed different meanings and shapes, that is still not diffused but has started to acquire greater importance.

Now these results will be used to trace the history of sustainability in a detailed way and finding concrete correspondences of what has been discovered on this study to what history and literature tell.

#### **1.4 How has the idea of sustainability developed over time**

By retracing the history, following the articles and the literature that have been found and analyzed in the research, the development of this phenomenon has been outlined. Now, using the result of the analysis as a guideline, the effective history of sustainability will be traced by combining the existing literature on business history with the thoughts of the authors emerged in the study.

By going back in time, the history describes a panorama in which business enterprises were the central actors in the wealth creation and environmental degradation.<sup>20</sup> These two topics are the ones that today represent the greatest challenge for the entire society.

In 2014, an extensive list of global issues has been published by the International Panel on Climate Change, considering the problems of global warming, the rising sea levels, the arctic ice melting, the deterioration of ecosystems, the air pollution, the ozone depletion, deforestation, loss of biodiversity and other worrying problems.

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<sup>20</sup> Jones G. (2017), Profits and sustainability. A History of Green Entrepreneurship, Oxford University Press

The warnings connected with these issues are not new, in fact they date back to the early 1900s, but for a long time they were not taken into consideration as they had no impact on firms, consumers and policy-makers.

Indeed, the beginning of the issues of environment and social questions, that are the ones that could be recognized today as “sustainability”, are deeply rooted in the age of the Industrial Revolutions. Before them business development and growth were mainly based on the simple animal and human power for mechanical power and on wood.<sup>21</sup>

With the First Industrial Revolution the coal has been introduced in the energy system in substitution of the firewood to the growth of large firms based on fossil fuels.<sup>22</sup>

Then, the expansion of businesses continued thanks to the invention of new technologies during the Second Industrial Revolution, which spread the electricity, the combustion engine and the development of the chemical industry.<sup>23</sup>

This was the very beginning of the creation of the modern capitalism and the starting point of the current environmental crisis: ever growing firms employing large amounts of fossil fuels for different industries such as the oil or the electric one, but also for the realization of railroads, cars, chemicals, transportation systems.

To briefly introduce how the history developed with regard to the emergence of the environmentalism, the trend can be divided in three main waves:

- The first wave occurred around the 1930s with the rise of the first green businesses and green intentions expressed by organizations but also by governments, which started to gain awareness about the situation, calling for conferences and interventions to protect the environment;
- The second wave of environmentalism emerged in 1960s with new mass movements and the expansion of science and knowledge about the environmental catastrophes caused by companies. Institutions introduced new laws and regulations to protect both the environment and the society.<sup>24</sup>
- Then, after these two important waves, the early 1990s see a significant increase in the concerns about the environment. The concept of sustainability arises and becomes more

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<sup>21</sup> Wrigley A., (2010), *Energy and the English Industrial Revolution*, New York, Cambridge University Press

<sup>22</sup> Lopes D. S. T., Lubinski C., Tworek H. J. S. (2020). *The Routledge Companion to Makers of Global Business*, Routledge Companions, Taylor & Francis Group

<sup>23</sup> Chandler A.D., Amatori F., Hikono T. (1997), *Big Business and the Wealth of Nations*, Cambridge, New York, Cambridge University Press

adaptable to businesses, introducing greener practices and behaviours. Furthermore, a new market segment expresses interest on sustainable products, enhancing the attractiveness for firms to follow this path. In the last years governments introduce new regulations and measures which purpose is to address environmental and social problems and force producers to take their responsibilities.<sup>25</sup>

#### **1.4.1 The origins of green businesses in 1930s**

The second half of the 19<sup>th</sup> century has seen an exponential growth of the world population, shifting from 900 million in 1800 to 1.6 billion in 1900.<sup>26</sup> In the same period also the phenomenon of urbanization began to develop: people started to move from rural areas to cities in order to find new business opportunities and networks for their activities.

The majority of individuals used to work in the agricultural industry, which was the most profitable sector as it had to keep up with the rapid population growth and feed the world's cities. New techniques and practices of cultivation were introduced to speed up the production, resulting in reduced rest periods for soil fertility and in an increasing application of chemical products, in particular fertilizers, into crops.<sup>27</sup>

Other two industries that were highly expanding in this period and that enabled a massive growth in the productivity of the energy production, were the oil and the coal ones.

Fossil fuels started being used with an unprecedented scale, laying the foundations for the beginning of the environmental pollution.

The first green intentions emerged in these years and were mainly motivated by this new excessive rate of consumption. Their attempts to reduce the speed of production were most of the times unsuccessful, but introduced a new perspective for a greener entrepreneurial future.

The origins of the first wave of environmentalism started to emerge in 1930s when new green businesses began to diffuse, not only to sustain alternative energies of production, but also to face the food issues that were present in those years. Multiple scandals, deaths and poisoning

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<sup>24-25</sup> Charter M., Peattie K., Ottman J. & Polonsky M.J. (2006), Marketing and sustainability, Centre for Business Relationships, Accountability, Sustainability and Society

<sup>26</sup> Jones G. (2017), Profits and sustainability. A History of Green Entrepreneurship, Oxford University Press

<sup>27</sup> Federico G. (2014), Growth, Specialization, and Organization of World Agriculture, in Larry Neal and Jeffrey G. Williamson "The Cambridge History of Capitalism", vol. 2, Cambridge: Cambridge University Press, pp. 52-60

events were happening, and this led to the clear necessity to introduce food and climate regulations.<sup>28</sup>

Jones, in his book, explicitly describes that the main motivation that pushed these businesses to ask for government interventions were “the concerns that the industrialization of food and the unhealthy urban lifestyles were ruining people’s health, and posed a threat to society”.<sup>29</sup>

These concerns focused more on the social aspect rather than the environmental one: the main purpose of the first green militants was to influence policies to introduce regulations to achieve welfare and safety while, at the same time, to educate consumers about the presence of health risks in the food and energy industries.

The first international conference to address environmental issues was held in 1923 and later in 1928, including in the discussions also the protection of wild fauna and flora.<sup>30</sup> Even if the outcomes of these conferences were insufficient to solve the global problems, the emergence of a new connection between government and ecology can be considered a real important step to the future emergence of sustainability.

For the following decades, until after the World War II, the primary attention remained on socioeconomical concerns, while the environmental dimension kept on having a marginal role. This can be confirmed with the presence, in the United States, of the theory of scientific management of Taylor, that dates back to 1911 with the publication of his monograph. His theory was based on the idea that the work rationalization process happening during the industrial revolutions needed the creation of a new category of worker shaped on the production exigencies. The objective of the scientific management theory was to solve social problems within the factory through the rationalization of the professional tasks. On the other hand, the period was characterized by the presence of social movements that strongly criticized this theory as, from their point of view, the social consideration of the worker was not positive. Indeed, workers were compared to automated machines, eliminating their active participation and reducing the work tasks into standardized manufacturing operations. So, from their perspective the attention to social questions, to work conditions and workers’ health have not received the attention they should have had.

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<sup>28</sup> Atkins P.J., Lummel P., Oddy D.J. (2007), *Food and the City in Europe since 1800*, Aldershot: Ashgate, chapters 7-10

<sup>29</sup> Jones G. (2017), *Profits and sustainability. A History of Green Entrepreneurship*, Oxford University Press

<sup>30</sup> Van Dyke F. (2008), *Conservation Biology: Foundations, Concepts, Applications*, New York: Praeger, p.19

Then, this social consideration of the worker, and the consequence criticisms from socialists, continued until the middle of the century, passing from the Taylorism to the Fordism, in which unskilled employers kept on being seen as a tool to perform simple and repetitive operations. Nevertheless, the post-war period marked an acceleration of the environmental problems when huge amounts of fossil fuels and oil production became the main driver of the world economy.<sup>31</sup> This increase in the energy consumption, together with the exponential growth of the world population and the connected rise in resource utilization, had a massive negative impact on the entire Earth system. It was only when the pollution began being controlled by international institutions that they realized how much data were alarming. Some examples were the industrial chimneys that shown a level of toxic emissions at the limit of the human health; the release of greenhouse gases, such as carbon dioxide, that was incremented by the diffusion of the cars in the cities; and the expansion of oil supplies from large corporations across the Middle East, Africa and Latin America.<sup>32</sup> Moreover, the energy production and the emission of fossil fuels were barely controlled by governments and this represented another critical factor.

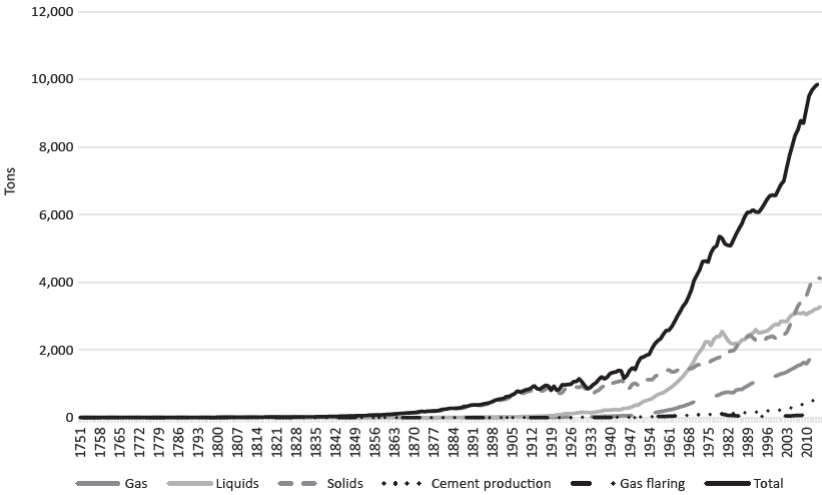


Figure 5: Carbon dioxide emissions from fossil fuels

<sup>31-32</sup> McNeill J.R., Engelke P. (2014), *The Great Acceleration: An Environment History of the Anthropocene since 1945*, Cambridge, MA: Belknap Press of Harvard University Press

From the graph it is evident how the growth of carbon dioxide emissions from fossil fuels become exponential right after the World War II, around 1950s.

The first attempt to face this situation has been taken by the US president in 1952 when he presented a report suggesting the reduction of the use and supply of fossil fuels and strongly supporting the employment of alternative sources of energy.

From the 1930s through the 1950s, the attention to environmental and social global challenges was crucial only for a small number of people who started to worry about these social and environmental issues. The involvement of the general population, organizations, businesses and policy-makers had therefore not emerged yet.

In fact, as the research in the previous chapter has shown, in these years the concept of sustainability was still unknown. The period was marked by an increasing sensitivity and attention to social and environmental issues with the emergence of little movements that tried to push towards an awakening and a resolution of them.

#### **1.4.2 The second wave of environmentalism in 1960s**

The second important wave of environmentalism emerged in the 1960s with several triggering factors.

The first and most impacting explanation is related with the devastating environmental catastrophes that were happening during those years. The principal cause of these serious events was the misconduct and the improper behaviour assumed by companies while running their businesses.

Indeed, the problem of the presence of pesticides in cultivation practices that arose in the earlier years was widely diffused in all the countries, causing the poisoning of the wildlife, of fishes, birds and releasing harmful substances into the air. Moreover, the water pollution problem became even more evident when lakes and rivers across Europe and the United States began being covered by foam issued by the synthetic detergents used in the industries.<sup>33</sup>

Another event that is worth mentioning is the blowout of an oil well in Santa Barbara which spilled more than 200.000 gallons of oil into the Ocean for almost two weeks.

The second influence on the emergence of the second wave of environmentalism has been the diffusion of a new generation of writers that had been able to reach a wider audience about

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<sup>33</sup> Jones G., Lubinski C. (2014), Making 'Green Giants': Environment Sustainability in the German Chemical Industry, 1950s-1980s, *Business History* 56, no.4, pp.623-49

environmental issues. For some historians the publication of “Silent Spring” in 1962 by Rachel Carson is perceived as one of the pioneers of the green movement. Beside Carson, a lot of other authors, writers, professors and biologists started to write a series of influential publications about the environmental threats and the dangers connected to them.

Third, new social movements and new organizations started to develop in significant size questioning existing social and political frameworks.<sup>34</sup>

During the 1960s a lot of new mass movements started to emerge in the United States, encompassing different aspects of the social and political situation: there were movements supporting civil rights, other were protesting against the war in Vietnam, and still others calling for the women’s liberation. Moreover, also Europe was facing a lot of protests from radical students against the national governments and their political ideologies, in particular the most remarkable is the protest of the French May in 1968 in Paris.

So, environmental issues were only one of the multitude of problems that were emerging at the time. It was precisely this situation that allowed the environmental movement to catch on: militants helped each other participating in the protests of the others to reach a higher importance and fight against the entire system.

In addition, the outbreak of new governmental institutions, non-governmental organizations (NGOs), national and international legislations impacted the environmentalism in several and positive ways.<sup>35</sup>

The 1972 represented an important year for the history as for the first time an international conference of the United Nations took place in Stockholm to address global issues, especially the scarcity of resources for future generations and the environmental degradation of the planet. Although the intentions to find the best solutions to achieve an international collaboration within the different nations, the results of the conference were poor and the governmental coordination on greener policies was to prove challenging.<sup>36</sup>

In the same year, a team at the Massachusetts Institute of Technology published a report, entitled “The Limits of Growth”, to show the correlation between the rapid growth of the population and the insufficiency of the natural resources to cover the needs of the world.

The core topic addressed in the report was the possibility that the entire planet could face a collapse unless immediate actions were taken.

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<sup>34</sup> Jones G. (2017), *Profits and sustainability. A History of Green Entrepreneurship*, Oxford University Press

<sup>35</sup> Coglianese C., Anderson R., (2012), *Business and Environmental Law*, in *The Oxford Handbook of Business and the Natural Environment*, Oxford, New York, Oxford University Press, 140–157

<sup>36</sup> Egelston A.E. (2012), *Sustainable Development: A History*, Springer Science & Business Media

It was evident that businesses had to change their strategies in order to help the planet, but, although the increased awareness from conferences, books, articles and movements, the environment did not receive an immediate support from companies: in fact, they did not change their orientation to a green path through the development of new business models, but instead continued to produce on a massive scale to pursue their profitability goals.

The situation sharply changed in the 1980s when institutions, after seeing the absence of cooperation from firms, decided to introduce more legislations and environmental regulations. The aim was to provide guidelines for companies in integrating environmental and social responsibilities and definitely steer a change.

Greener businesses started to rise through the adaptation to the new regulations and standards imposed by governments and followed a more pro-active approach. According to Hoffmann and Bansal this was the beginning of the corporate environmentalism, which “embraced the recognition that corporate environmental issues are a problem that necessitated regulatory control, and business responded with a strategy of regulatory compliance”.<sup>37</sup>

The idea of what is recognized today as sustainability started to emerge softly as something that could connect and find a balance between profits and environmental and social aspects.

Besides the different standards emitted by institutions, another new type of standard diffused into different industries: voluntary standards represented a sort of private certification through which a company could demonstrate the production of certified products, according to some environmental and social sustainability feature.<sup>38</sup>

Another important tool that helped the sharing of the first green intentions were the certifications. They had been fundamental to the creation and expansion of new markets, providing metrics that enabled companies to show publicly their green commitment.

Different mixtures of private and public certifications occurred in the market and crossed different countries all over the world. These standards and regulations help explain the huge expansion of industries in 1980. The legitimation given by the certifications made easier for governments to identify which were the businesses that were following a green development and consequently supporting them with incentives and benefits.

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<sup>37</sup> Hoffman A.J., Bansal P. (2012), Retrospective, Perspective and Prospective: Introduction, in Bansal P., Hoffman A.J., *The Oxford Handbook of Business and the Natural Environment*, Oxford, New York, Oxford University Press, 140–157

<sup>38</sup> Ponte S., Cheyns E. (2013), Voluntary standards, expert knowledge and the governance of sustainability networks, *Global Networks*, Volume 13, Issue 4, pp. 459-477



Green business started to spread and the environmental and social topics became a widely recognized and discussed problem. As previously demonstrated in our research, history gave us the demonstration that to face the challenge of sustainability a macro-economic perspective has been followed: a system based on the simple compliance of standards and obligations from companies has been preferred; ignoring the alternative possible approach of giving to companies an active role at the micro level.

### **1.4.3 Sustainability as a mainstream business**

During the 1990s the greening of corporations started to diffuse across industries and countries driven by a new wave of corporate environmentalism. Specifically, it has been defined by Hilton as the third wave in consumerism including green, socially responsible and fair trade.<sup>39</sup> Small and large companies changed their production processes introducing a sustainable orientation and putting more attention on the impact that their activities had on the environment. The blossoming of corporate environmentalism was largely shared by companies, but also by consumers and governments, who, thanks to the wide resonance that the topic was having, made them fully aware about the environmental and social damages caused by the Industrial Revolutions and the inactions of the following years.

This embrace of sustainability coming from different actors all over the world represented a crucial break from the past and an important starting point for the future. It is in fact in these years that the concept of sustainability arises and becomes concrete. The increasing attention and sensibility to social and environmental issues finally turn into social and environmental sustainability.

Moreover, the emergence of the sustainable topic in these years is strongly confirmed in the preliminary research, where data about articles publication have shown sharp increase starting from the 1990s. It is exactly in these years that scholars and practitioners began to abandon the traditional concepts of social causes and environmental issues, to embrace the new wave of sustainability. This new perspective represented a trigger for the emergence of a significant synergy between large corporations and green entrepreneurial firms.<sup>40</sup>

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<sup>39</sup> Hilton M. (2003), *Consumerism in 20th Century Britain*, Cambridge, Cambridge University Press

<sup>40</sup> Jones G. (2017), *Profits and sustainability. A History of Green Entrepreneurship*, Oxford University Press

The major contribution to sustainability was given by big businesses as they could afford greater investments than smaller companies, to invest in technological innovations needed to fix environmental damages and support the sustainable footprint of their activities.

Furthermore, investing in products and technologies which were more eco-friendly resulted in an opportunity to create value and build a good reputation rather than simply impose costs on firms: sustainability started being viewed as something that was compatible with profits.<sup>41</sup>

During these years, around the 1990s, also Michael Porter, a strategy professor at the Harvard Business School confirmed the relationship between business and environment by stating that “sustainability and profitability are fully compatible”<sup>42</sup>, sustaining the introduction of this new trend in the business management.

Next to the thought of Porter, also Jones highlights the emergence of the new term of sustainability and suggests four main aspects that help to explain how it has become a mainstream topic in business.

First of all, the redefinition of the concept of sustainability by the Brundtland Commission in 1987 joined the social and environmental issues with the economic performance. In fact, the final notion of sustainability emerged defining it as the “meeting the needs of the present without compromising the ability of future generations to meet their own needs”.<sup>43</sup>

The second factor contributing was the development of the capability to make the concept of sustainability more adaptable to the business world through the provision of definitions, arguments, standards, regulations, certifications and metrics to better guide entrepreneurs in their green development.

It is through this adaptation that the emergence of the concept of the Triple-Bottom-Line takes place. Today, it is one of the fundamental features used by companies to develop a high-value corporate strategy and can be considered a cornerstone approach that guides companies to embrace a more acceptable and appropriate behaviour towards sustainability.

Moreover, the spread of the use of certifications gave the possibility to show publicly the green commitment and increase the reputation in the market.

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<sup>41</sup> Jones G., Lubinski C. (2014), Making ‘Green Giants’: Environment Sustainability in the German Chemical Industry, 1950s-1980s, *Business History* 56, no.4, pp.623-49

<sup>42</sup> Porter M.E., van der Linde C. (1995), Toward a New Conception of the Environment - Competitiveness Relationship, *Journal of Economic Perspectives* 9, no. 4, pp.97-118

<sup>43</sup> United Nations, Report of the World Commission on Environment and Development. Our Common Future, 1987

The third factor has to do with the growing market preferences for eco-friendly and sustainable products in the 1990s. The green market became attractive for companies with the rise of a new market segment with strong beliefs in social and environmental protection.

These new types of consumers purchase products and services in which they recognize a sustainable behaviour, choosing the ones that are recyclable and reusable, made following socially responsible actions and showing commitment to the environment preservation.<sup>44</sup>

The last factor contributing to mainstreaming of sustainability was the intervention of governments in the market, introducing new policies and regulatory tools. Moreover, governments and international institutions provided supports and incentives in industries to remove the high financial barriers required to follow a sustainable development, promoting it and motivating small and large organizations to compliance.

So, it is possible to affirm that it is with Porter and Jones that sustainability becomes a common term in which all the concerns connected with the society and the environment, which until the 1990s were considered as two separated trends, started being seen as two interrelated topics.

As the time passed, the relationship between sustainability and business has strengthened. Different models of policies have been introduced in companies to achieve the objectives set, among which the Corporate Social Responsibility stands out. The raise of CSR as a corporate strategy finds empirical evidence in the research, that shows from the 1900s the increasing publications about this new practice in conjunction with the development of sustainability.

The CSR, as previously explained, is a corporate practice that can be considered almost tangent to the concept of sustainability as they share the same beliefs and values. CSR looks at the various impacts that the activities carried out by different organizations have on its stakeholders and on the environment, and therefore the consequent responsibility to societal well-being.<sup>45</sup>

Today consumers pay more attention and place more emphasis on the importance of business' social and ethical responsibilities. For this reason, also business corporations and institutions are careful in following sustainable practices achieving their economic performance in the market through green actions and the compliance of standards and regulations.

The achievement of a collective awareness about the importance of sustainability to support the Earth system in which everybody operates is certainly a positive outcome, but the absolute

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<sup>44</sup> Fraj E., Martines E. (2006), Environmental values and lifestyles as determining factors of ecological consumer behavior: an empirical analysis, *Journal of Consumer Marketing*, Vol. 23 No.3, pp. 133-144

<sup>45</sup> Shen D., Richards J., Liu F. (2013), Consumers' awareness of sustainable fashion, *Marketing Management Journal*, 23(2), 134-147

necessity to satisfy these requirements often pushes companies to operate through unfair business practices.

Sustainability has become a priority for a significant number of businesses as its implementation brings actual benefits to companies, transforming also the way of developing marketing strategies. This has pushed companies to adapt also its communication practices in order to try to communicate its sustainable actions as effectively as possible, to make it clear for consumers: green advertising is, in fact, one of the main strategic strengths for companies to report their commitment to external stakeholders.

Recalling the importance that sustainability has assumed in the last years and the need for companies to be in line with it in order to maintain their competitiveness in the market, there is the possibility that organizations can convey false impressions and use misleading information to remain attractive for consumers even if any green action is undertaken. This unfair business practice is recognized as green washing, a real communication and marketing strategy that is, unfortunately, adopted by a large number of companies.

It becomes evident that, in order to show their real commitment, sustainable businesses have to implement green policies not only inside the organizational structure of the firm itself, but also through the entire network of entities connected with them. This process involves several steps and actors from the first supplier of raw material to the final consumer, including all the intermediate steps. Transforming the supply chain making it sustainable from beginning to end contribute in the value creation, and assure consumers on the realization of products and services with the respect for the environment and for the human rights.

These topics that have just emerged from the analysis of the current context of sustainability will be better discussed in the following chapters.

### **1.5 From Marketing to Green Marketing: how companies reinvented marketing to manage the environmental impact**

To understand how the concept of sustainability has changed the traditional models of marketing, with the consequence adaptation of the communication practices, it is important to analyze which are the steps that have been made in the history that transformed traditional marketing strategies into greener approaches.

The interpretation of traditional marketing as an academic field emerged at the beginning of the twentieth century as a branch of applied economics. The first publications have been released in the 1930s concerning, in the majority of the cases, historical studies.

Over the past years, the growth of literature has been strongly stimulated by associational activities and quantitative social sciences, especially economics and social psychology, leading to a more micro-managerial perspective.<sup>46</sup>

Today, following the thought of Charter, marketing can be defined “both as a business philosophy and a collection of management techniques, orientated towards providing value to consumers, organizations and society”.<sup>47</sup>

One of the most fundamental cornerstones of the marketing activity is the focus on the consumer: the entire process aims at anticipating and satisfying customers’ needs and desires in the most effective way, creating value and giving them a positive purchase experience.

Taking a sustainable point of view, the branch of the marketing connected with the social responsibility assumes a significant importance. This is what John Grant has called the Green Marketing<sup>48</sup>, a management model in which sustainability, ecology and marketing coexist and cooperate to achieve sustainable lifestyles and address current environmental and social global issues.

To make an example, the rapid growth of population that characterized the second half of the 19<sup>th</sup> century influenced the development of markets, resulting in the rise of the economic globalization and of the mass markets. So, to face the increasing number of new companies entering in the markets and the difficulty in keeping market shares, companies started using marketing as a strategic tool to achieve their objectives.

Organizations should see marketing not only as a function to organize companies’ portfolios and communications, but also as a connection tool between production and consumption that enable the entire value chain to take account of environmental issues and CSR in their decision making.<sup>49</sup>

Basically, companies have to meet their social responsibilities and add the environmental dimension into their corporate goals. The precise way in which firms will respond to

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<sup>46</sup> Witkowski T.H., Jones D.G.B. (2016), *Historical Research in Marketing: Literature, Knowledge and Disciplinary Status*, University of Texas Press, *Information & Culture: A Journal of History*, vol. 51, Number 3, pp. 399-418

<sup>47-49</sup> Charter M., Peattie K., Ottman J. & Polonsky M.J. (2006), *Marketing and sustainability*, Centre for Business Relationships, Accountability, Sustainability and Society

<sup>48</sup> Grant J. (2009), *Green Marketing. Il Manifesto*, Francesco Boschi Editore

sustainability issues will depend on several factors such as the industry, the corporate culture, the size, the technology used and the markets in which they operate.

These required changes in the marketing practices are a response to the pressures coming from the external environment. In fact, consumers carry new concerns, doubts and fears about the environmental damages and the social dimension.

Some people are concerned at the point in which they adopted a new lifestyle that has been recently labelled LOHAS. The acronym stands for Lifestyles Of Health And Sustainability and today counts about 41 million people in the United States.<sup>50</sup> This group of consumers strongly believes in the values of social and environmental protection though the purchase of only those products that are organic and natural, produced from energy-efficient appliances and solar panels.

Moreover, an important wave of pressure comes from environmental organizations, NGOs and social media that ask for a sustainable production to have the possibility to follow a green consumption.

On the other hand, governments are trying to lower the barriers and support companies in these change of orientation through the provision of incentives and the introduction of favourable taxation, but this happens just in developed countries in which there are available financial resources.

Green Marketing can be considered a sort of bridge between business and environment that enables companies to get in touch with its consumers and their needs, and to spread the commitment to sustainability. The aim of Green Marketing is not to spread the awareness of being a green business, but to diffuse a completely new corporate culture based on sustainability and on the offer of valuable eco-friendly products and services. There is a concrete change in traditional consumption patterns. As affirmed by Charter today “individuals and businesses do not just buy brands, but also buy company philosophies and policies. Increasingly, individuals will vote on environmental, social and ethical issues with their purchase, investment and employment decisions”.<sup>51</sup>

To bring real changes in the corporate culture of an organization, a review of the internal policies is needed, focusing more carefully on growth goals and modifying the 4Ps included in each marketing strategy: product, price, place and promotion.

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<sup>50</sup> Kotler P. (2011), Reinventing Marketing to Manage the Environmental Imperative, Journal of Marketing

<sup>51</sup> Charter M., Peattie K., Ottman J. & Polonsky M.J. (2006), Marketing and sustainability, Centre for Business Relationships, Accountability, Sustainability and Society

From a marketing point of view, following the thought of Kotler, in the near future there will be a ramping up of two marketing perspectives: the demarketing and the social marketing.<sup>52</sup>

- The strategy of the demarketing consists in the reduction of the demand of products and services through the use of the traditional 4Ps of marketing, but in a reverse way to encourage the conservation or reduction of resources that damage the environment. Energy water, water consumption, overfishing and overeating can be some examples of industries in which this strategy could be implemented;
- The practice of social marketing includes the creation and diffusion of positive awareness and behaviours of a particular marketing idea, cause, or behaviour.<sup>53</sup> Campaigns such as “stop smoking”, “eat healthier”, “no drugs” can be launched to sustain this practice and influence consumers.

Therefore, it is crucial for the development of firms to create new business concepts, that is the creation of a new market focused on sustainability, with a minimized ecological footprint and new business models including green productions and processes with the respect of social conditions.

Green Marketing enables companies to reach new market segments and to achieve large business goals through cutting-edge innovations.

## **1.6 The rise of green advertising in 1987**

The emergence of Green Marketing as a corporate function has been strongly influenced by the environmental concerns expressed by consumers and the consequent interest showed to be helpful and contribute to its protection. This resulted in the rise of green brands in new markets to satisfy consumers' demand, permitting the development of green advertising.

Advertising is an important branch of the communication strategy of an organization and has three main purposes: to inform, to remind and to persuade. In the context of sustainability, the advertising goals adapt to the green challenge and aim at creating awareness and strong beliefs towards brands and companies.

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<sup>52</sup> Kotler P. (2011), Reinventing Marketing to Manage the Environmental Imperative, Journal of Marketing

<sup>53</sup> Kotler P, Zaltman G. (1971), Social Marketing: An Approach to Planned Social Change, Journal of Marketing, 35, July, 3-12

The reason why advertising is so important in the sustainability process is because “consumers form feelings and judgements when exposed to an advertisement which affects their attitude towards the ads and beliefs about the brand”<sup>54</sup>, and organizations recognize in advertising the most effective tool to spread the green value.

Today, awareness regarding social and environmental issues is widely diffused among the population, advertising terms such as recyclable, environmentally friendly, biodegradable have become popular in green advertisements and consumers are willing to support green products. Accordingly, the main role is the one played by stakeholders and consumers as they are the direct recipients of the conveyed messages of green advertising, but also the contribution of authors and media has a relevant impact: thanks to their publications, researches and studies environmental and social issues have become a mainstream topic.

Over the years the demand for green products has increased and companies are required to adapt their advertising strategies to show not only the sustainability of their products and the impacts their activities have on the environment, but also the larger end benefits to meet customers’ changing needs.<sup>55</sup>

The author Rucha Dande has conducted a study to understand the changing trends and the differences between sustainable messages and ads over the years. His purpose was to trace a timeline of the main events that have brought environmental awareness among people and identify the events in the history that could have influenced the rise of green advertising.

The outcome of the study showed the rise of the first ads in 1970s, with a significant increase starting from the 1980s, in correspondence with the publication of sustainable-oriented books and with the occurrence of some environmental tragedies, such as the eruption of Mount St Helens in 1970, the Bhopal gas tragedy in 1984, the subscription of the Montreal protocol in 1987. The latter date is the one that is commonly recognized as the year in which green advertising started being used to spread environmental awareness.

This is mainly related with the publication of the World Commission on Environment and Development final report “Our common future”, the cornerstone for the reflection on environmental issues and to their connections with socio-economic imbalances at a global level. Then, after the 1980s, the study found a continuous steep rise in green ads and in publications and articles on sustainability issues. Another important result of the study has been the change

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<sup>54</sup> Batra R., Ray M.L. (1986), Affective responses mediating acceptance of advertising, *Journal of consumer research* 13, 234-249

<sup>55</sup> Dande R. (2012), The Rise of Green Advertising, *Journal of Mass Communication & Journalism*, Vol. 2, Issue 10



in the content of the ads: while the old green ads (the ones displayed around the 1980s) aimed at creating awareness on environmental and social problems, the current ones are more ambiguous and flashy, mainly targeted to the product sale.

This introduces a new picture in which companies are greening their products and processes to only get attention and public appreciation, risking to mislead the consumers.

It is really important to not lose the goal of green advertising, which is the clear communication of the sustainability of products and processes, while at the same time spreading new eco-solidarity lifestyles to increase the awareness of a new way of consuming among people.<sup>56</sup>

### **1.7 The danger of green washing as an unfair communication strategy**

Green marketing is a strategic proceeding of acting with integrity, assuming a critical and sustainable point of view that goes beyond simple appearances. The achievement of the goals of green marketing can be identified in the employment of sustainable policies measurable through concrete changes in the corporate organization.

Green marketing, and in particular green advertising, need to make the appropriate connections between strategies and marketing operations with a particular focus on environmental and social dimensions. When this emphasis is not clear the problem of greenwashing arises. Green washing is defined as the “misuse of the principles of environmental marketing and means that consumers cannot trust the content of advertisements”.<sup>57</sup>

The practice of green washing results in an unfair communication strategy when companies pretend to be committed in sustainable objectives, using images, green words and environmental codes to mislead consumers. This is a real danger because they communicate a completely wrong and false message, increasing the reputation of a company that only cares about reputation and visibility.

Indeed, an unsustainable organization is greenwashing when declares to be sustainable with the only purpose to get the attention of conscious and green consumers in the market, diverting the focus from their unethical activities.

In this way the company dresses up as a sustainable corporation, hiding its real identity. This process is also known as identity-washing.<sup>58</sup>

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<sup>56</sup> Grant J. (2009), Green Marketing. Il Manifesto, Francesco Boschi Editore

<sup>57</sup> Kärnä J., Juslin H., Ahonen V., Hansen E.N. (2001), Green Advertising: Greenwash or True Reflection of Marketing Strategies?, Greener Management International, Spring 33, 59-70

<sup>58</sup> Siano A. (2014), Management della comunicazione per la sostenibilità, FrancoAngeli, Milano

The practice of greenwashing takes place employing two main communication techniques: the decoupling, which consists in make it look like the company is satisfying stakeholders' needs without actually modifying internal processes; and the attention deflection, which includes to emphasise and highlight the positive actions carried out by the firms in order to hide the unethical ones.

Policy makers started being concerned about these unfair practices and wanted to protect the society: they became aware about the fact that each product could be advertised as green and sustainable by using the right adjustments, so there was the need to train the consumer to distinguish real and false green actions.

It was for this exact reason that the Department of Environmental, Food and Rural Affairs of Great Britain (DEFRA) has been the first organization to publish a guideline with a list of principles to follow to avoid to be fooled by greenwashing practices. Then, the collection has been republished in 2011.<sup>59</sup>

The following year, in 2012, also the US Federal Trade Commission released the "Green Guide" setting out a catalogue of best practices to apply to resist to misleading claims.

There are several actions that a company can undertake to achieve sustainability, such as the implementation of a new production plant, a re-organization of an internal division or a revision along the supply-chain. It is true that the employment of these changes leads to higher costs, but it also contributes to a growth of the corporate reputation and in future benefits.

On the other hand, when organizations claim to be sustainable but the analysis do not agree with the declarations and show the opposite outcome, the damages in terms of image and profits are significantly high.

Therefore, greenwashing represents the opposite side of the concept of sustainability. It is a mere communication strategy to achieve profit objectives and consumers are passive recipients that receive a wrong message. In order to avoid this situation, it is up to the organizations to show their green commitment publishing regular reports describing in detail practices and actions implemented and the adopted accountability rules. Moreover, the communication should include not only the results already obtained, but also the new purposes and those in which it will continue to engage.

Today, consumers, organizations and the society in general are more conscious about greenwashing practices and the way in which companies try to convey misleading messages. They have access to more information and are increasingly mindful on the green topic.

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<sup>59</sup> Lyon T.P., Montgomery A.W. (2015), *The Means and Ends of Greenwashing*, Organization and Environment

The hope is that this acknowledgement will stop corporations to manipulate consumers by sending them a wrong message, and motivate them to undertake real and concrete green actions to contribute to the well-being of the entire society.

## **1.8 How managers address the sustainability challenge**

Once managers acknowledged their important role in steering the change, the process of internalization of sustainability into the corporate dimension can be implemented. The contribution that each firm can provide in the achievement of sustainable goals can have great significance in the system. Indeed, the companies' commitment towards sustainability following a microeconomic perspective can result in benefits for both the corporate performance and the social welfare.

There exist multiple paths that managers can choose to follow in order to implement sustainability, all of them usually requiring considerable investments in efforts and resources. Depending on the nature of their activities and on their core values, they can develop different perspectives and aim at different goals. It is fundamental that they strongly believe in their commitment, not limiting their decisions to the simple pursuit of the trend, but involving in the process also the human factor.

### **1.8.1 The management perspective on sustainability**

Organizations undertake different commitments to social and environmental aspects depending on their values and on the perspective they decide to assume. Corporate decisions can be influenced by different factors such as the corporate culture, the industry sensitivity, the senior management commitment, the company size, the brand and other competitive considerations. However, even if an increasing number of managers are assuming commitments towards the adoption of green practices, there is a lack of contribution of the managerial perspective to sustainability. In fact, to succeed, sustainability efforts need to be an organizational priority with a clear and strong support from leadership.<sup>60</sup>

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<sup>60</sup> Bonini, S. & Swartz S. (2014), Profits with purpose: How organizing for sustainability can benefit the bottom line

According to a research conducted by Bonini and Swartz based on 40 firms from different sectors which had outperformed their industry average across financial and sustainability performance metrics, only less than half of the managers of these firms had a personal conviction on sustainability values even if their companies were considered one of the top performers.<sup>61</sup>

The first attempt to create a connection between institutional economics and management of sustainability was accomplished in 1997 by Elkington, with the introduction of the concept of the Triple-Bottom-Line and the business case for sustainability.

The basic idea concerned the adoption of sustainable values and principles as drivers of a new business orientation towards the innovation of processes, internal organizations and business models.<sup>62</sup>

Indeed, green actions may result in important benefits for both the motivation and the image of the company, but in order to make these benefits become real competitive advantages it is fundamental to encompass them in a bigger framework and translate them in core founding elements of the company's mission and strategic vision.

It is therefore clear how a green production or a single green action is not enough to bring long-lasting advantages and to consider a company as a sustainable one.<sup>63</sup>

The integration of sustainability in the corporate strategy cannot ignore the human factor, the individual motivations and the management values. In fact, these ones, together with the environmental and social sensitivity, represent one of the major impulses to sustainability.

As stated by Parrish, people can have, and usually have, motivations and individual reasons that go beyond the organizational target.<sup>64</sup> The importance of the human factor becomes real and effective even if it can be considered less evident from a business point of view.

Beyond the individual sensitivity, the reasons why the human component has reached an increasing importance are:

- Sustainability is more and more perceived as an ambition towards excellence. It enhances the reputation of the company and of the entrepreneur<sup>65</sup>, improves internal

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<sup>61</sup> Bonini, S. & Swartz S. (2014), Profits with purpose: How organizing for sustainability can benefit the bottom line

<sup>62</sup> Elkington J., (1997), Cannibals with Forks. The Triple Bottom Line of 21st Century

<sup>63</sup> Schaltegger S., Ludeke-Freund F., Hansen E. (2012), Business cases for sustainability: the role of business model innovation for corporate sustainability, International Journal of Innovation and Sustainable Development, 6(2), 95–119

<sup>64</sup> Parrish B.D. (2007), Designing the sustainable enterprise, Futures, 39(7), 846-860

<sup>65</sup> Lee K-H. (2012), Linking stakeholders and corporate reputation towards corporate sustainability, International Journal of Innovation and Sustainable Development, 6(2), 219–235

relationships, attract better human resources and reduces the pressure coming from external stakeholders <sup>66</sup>;

- The re-organization of the firm with a sustainable orientation gives the opportunity to implement new technologies, new tools for the analysis of processes (such as the Life-Cycle Assessment or the Total Quality Environment Management) and new material management criteria. It seems reasonable to mention the fact that the results and the benefits that these innovations bring to the company depend on the corporate's ability to implement them <sup>67</sup>;
- Sustainability represents an important potential channel of communication addressed to conscious consumers that are aware of the environmental and social responsibility, representing the predominant share of demand in the coming future. <sup>68</sup>

Moreover, Dillick and Hockerts provided various criteria to reach a sustainable perspective, specifically following three main recommendations: integrate the social, environmental and financial dimensions in a Triple-Bottom-Line; consume the income and not the capital, and find a balance between short-term and long-term objectives. <sup>69</sup>

Another academic contribution that tried to provide a model which connects the micro and the macro dimensions has been given by Azpagic and Perdan <sup>70</sup> through the identification of some key indicators to be followed in order to implement sustainable actions. Some years later, Azpagic integrated its work with the creation of a framework for linking the Corporate Sustainability Management System of the company to the vision and the strategy, enabling an easier approach to a sustainable path. <sup>71</sup>

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<sup>66</sup> Hardjono T. W., van Marrewijk M. (2001), The Social Dimensions of Business Excellence, *Corporate Environmental Strategy*, 8(3), 223–233

<sup>67</sup> Christmann, P. (2000), Effects of "Best Practices" of Environmental Management on Cost Advantage: The Role of Complementary Assets, *The Academy of Management Journal*, 43(4), 663–680

<sup>68</sup> Barthel P., Ivanaj V. (2006), Is Sustainable Development in Multinational Enterprises a Marketing Issue?, *The Multinational Business Review*, 15(1), 67–87

<sup>69</sup> Dyllick T., Hockerts K. (2002), Beyond The Business Case For Corporate Sustainability, *Business Strategy and the Environment*, 11, 130–141

<sup>70</sup> Azpagic A., Perdan S. (2000), Indicators of Sustainable Development for Industry: A General Framework, *Process Safety and Environmental Protection*, 78(4), 243–261

<sup>71</sup> Azpagic A. (2003), Systems Approach To Corporate Sustainability A General Management Framework, *Trans IChemE*, 81, Part B, September, 303–316

The main challenge remains to build a system that is capable of integrating sustainability goals within the corporate strategic mission and translate them into concrete responses and actions. The coordination of regulations and policies at the macro-level organization and strategies at the micro-level position is the focal point in the development and implementation of sustainability, assuming new reference values that enable the firm to improve the efficiency and the value creation whilst taking into consideration all the possible impacts.

### **1.8.2 Sustainable business: from principles to practice**

As repeatedly stated, being green has become a source of competitive advantage and a long-term strategy that brings multiple benefits to firms.

However, although sustainability is implemented into the corporate mission and in the strategic plans, and the company is strongly committed in pursuing a green agenda, some problems may arise anyway in the execution phase, even in the most committed companies.

These obstacles can emerge for different reasons such as: the difficulty to communicate and spread a common sustainable vision along the organizational system; the increasing pressure coming from NGOs, policymakers and other external stakeholders; the possible unpredicted side effects on economic performances; or the incompatibility of the changes in the business perspective with the actual needs of the targets.

To deliver real strategic opportunities and bring benefits to the corporate performance, managers should follow some procedures to overcome the previously mentioned problems.

According to the literature, there are different steps that should be followed in order to achieve green goals, which can vary depending on the changes that the company wants to implement and on the leaders' preferences.

1. Generally, the procedure starts with the clear definition of what sustainability means for the company. It is a fundamental step in order to create a solid framework that enables the management to have a solid starting point for the process.

Each company is different and have different values of reference. That's why a universal definition of sustainability cannot be imposed: it is crucial that every organization finds the approach that better fits with its structure and perspective.

Another important part in the initial phase consists in defining a Control System of Sustainability to measure the outcome of the different performances of the firm in relation with

a set of Sustainability Variables (SV).<sup>72</sup> Stocchetti, in the development of his point of view, claims that these variables have to be identified in order to have a clear idea of the key processes of the company and how they impact on the different sustainability macro-areas. In fact, the aim of this stage is to “move the organization towards the construction of the CSS to emphasize and spread awareness of the interconnections between operational variables at shop-floor or office level with overall process performances”.<sup>73</sup> A concrete example of how a CSS is structured can be found in his work and is the one shown below:

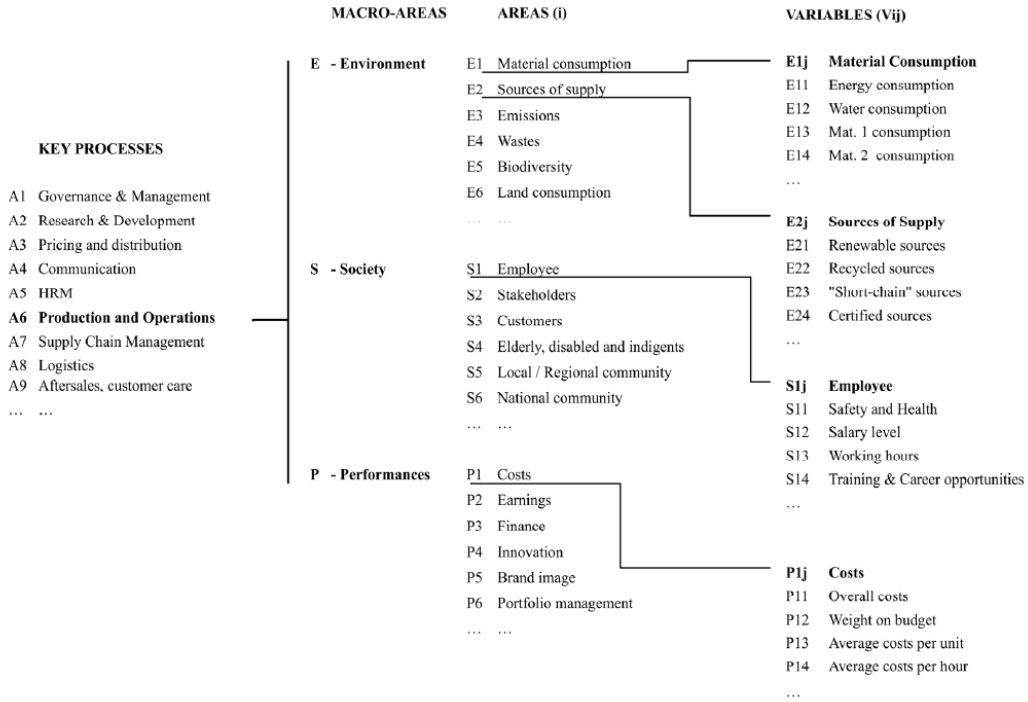


Figure 3: Example of a Control System for Sustainability (CSS)

As the figure shows, after having identified the key processes carried out by the firm, a connection between these processes and the sustainability areas and variables has to be displayed. Usually, the three macro-areas are the ones defined according to the pillars of sustainable development: social, environmental and economic.

<sup>72-73</sup> Stocchetti A. (2012), The Sustainable Firm: from Principles to Practice, International Journal of Business and Management, Canadian Center of Science and Education

It is crucial to ensure to be always updated on the most impacting sustainability aspects, that the CSS is constantly monitored and adjusted in accordance with the changes made in the structure of the company.

2. The second step to make to build a sustainable development is to ensure a company-wide commitment.<sup>74</sup> It is true that the individual motivation of the leader is a fundamental requirement, but without the approval and the shared values from the board of directors and the internal stakeholders of the firm, any effort is wasted. Therefore, managers should inspire its stakeholders and help them to get on board.

3. After being sure to have the internal support of the whole organization and having assessed the main activities that can impact on sustainability issues (through the CSS), the heads of each function should evaluate the consequences that their activities can have on the Sustainability Variables in a detailed manner. The evaluation should highlight both the present impacts and all the possible future rearrangements and innovations aiming at improving the overall sustainability performance.<sup>75</sup>

A matrix that helps to obtain this type of information is the importance-performance approach developed by Martilla and James in 1977. The construction of the matrix is based on the preliminary weighting of each variable of the environmental and social dimensions to its impact on the economic performance.<sup>76</sup>

Then, the matrix is constructed with a ranking of the most impacting sustainability variables (determined taking into consideration their influence on the three dimensions) and combining them with the perceived importance expressed by the company's top management. It gives the weighted impact of each variable calculated as the product of the importance and the weight.

The results obtained by this matrix will give important advices on the main areas that have more chances to enhance the economic performance and, at the same time, the sustainability of the company.

Summing up, the objective of this calculation is to assess the impact of planned actions on sustainability issues and provide an evident outcome on the actual priorities that the company should go through.

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<sup>74</sup> Berrone P. (2016), How to succeed at sustainability (and why greenwashing doesn't work), Forbes

<sup>75</sup> Stocchetti A. (2012), The Sustainable Firm: from Principles to Practice, International Journal of Business and Management, Canadian Center of Science and Education

<sup>76</sup> Martilla J.A., James J.C. (1977), Importance-Performance Analysis, Journal of Marketing, 41(1), 77-79



Another way to identify the sustainability issues that have the priority for a specific organization is the materiality matrix: it is a chart map that helps to recognize the most urgent issues combining the significance of the ESG issues, risks and opportunities for the external stakeholders (as society, customers, governments, NGOs, communities) with the perceived importance attributed by internal stakeholders, in particular from the top management.

The matrix obtained will be graphically represented as following:

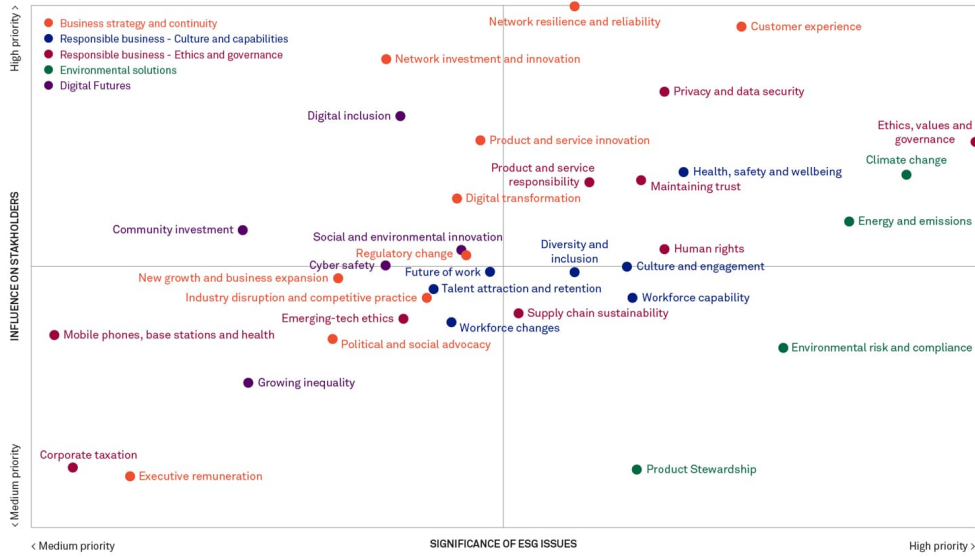


Figure 4: The materiality matrix

Therefore, regardless the chosen type of matrix, it is crucial for the company to have a clear idea on which are the main sustainability issues requiring greater attention.

4. Once all the priorities have been defined, the next step includes the development of a financial forecast intended to make the firm aware of the degree of effort that the implementation of sustainable actions will require.<sup>77</sup>

<sup>77</sup> Bonini, S. & Swartz S. (2014), Profits with purpose: How organizing for sustainability can benefit the bottom line

Stocchetti suggests, to best complete this stage, to build the investment-coordination matrix. It is a tool that enables firms to categorize the planned sustainability actions by taking into consideration two main aspects: <sup>78</sup>

- The degree of coordination that is required to implement the new process or the new technology;
- The intensity of commitment, in terms of financial resources necessary for the investment in the new process or technology.

The outcome of this analysis provides “the highest priority to those sustainability actions that have the highest potential impact with comparatively lowest organizational effort, while investments that present a high effort with relatively low impact should be evaluated carefully”.<sup>79</sup>

5. Now the company is ready to properly set its goals. It is normal that some trade-offs may arise but what is important is that the organizations are conscious about that and are able to set specific, ambitious and measurable goals. <sup>80</sup>

6. Once the goals have been established, the communication of them to the organizational structure of the company becomes the key point to carry out the best performance. In fact, the corporate governance structure has to be aligned with the interests of the top management to motivate the entire organization and promote an efficient allocation of resources.

7. Last but not least phase of the process includes the externalization of the actions implemented to the market. Customers, as well as the other external stakeholders, should be aware about the sustainable commitment of the organization and the recognition of the concerns their customers have about the global issues that are affecting everyone in the planet.

Eventual collaborations or partnerships with NGOs, associations, non-profit organizations will enhance the image and the reputation, showing interest for the future.

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<sup>78-79</sup> Stocchetti A. (2012), The Sustainable Firm: from Principles to Practice, International Journal of Business and Management, Canadian Center of Science and Education

<sup>80</sup> Berrone P. (2016), How to succeed at sustainability (and why greenwashing doesn't work), Forbes

In conclusion, the process explained aims at highlighting the main steps that a firm can follow in its path to build and maintain a sustainable development.

Regardless the type of issue addressed or the extent of the sustainable actions implemented, it is important to be aware and to provide to managers the right tools to cope with the issues in order to be able to accomplish the planned practices.

## **1.9 Transforming the supply chains**

Once the corporate management has implemented all the practices to achieve a sustainable path inside the organization, in order to make them effective and successful, it is important to spread the same values and visions also in the external system in which the company is embedded.

One of the assumptions on which the Corporate Social Responsibility is built is represented by the realization that an individual organization does not perform alone, but is completely involved in the context in which it operates, influencing and being influenced by external stakeholders such as employees, investors, customers, suppliers, governments and other institutions.

Thus, it becomes fundamental to be able to disseminate sustainable values not only internally, but also externally. From this perspective, sustainability can be considered as the result of the combination of multiple actions carried out by different actors, taking into consideration not only the enterprise-customer relationship, but also the ones with the entire supply chain.<sup>81</sup>

Indeed, the supply chain of an enterprise involves multiple actors that cooperate creating a single network of entities whose common goal is the final consumer's satisfaction.

There exist several definitions about the supply chain management. The International Center for Competitive Excellence defines it as “the integration of business processes from end user through original suppliers that provides products, services and information that add value for customers”.<sup>82</sup>

A second and more recent definition, is the one released by the Supply Chain Council in 2013, which defines the supply chain as “the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers,

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<sup>81</sup> Hogevoid N. M., Svensson G. (2012), A business sustainability model: a European case study, *Journal of Business & Industrial marketing*, 27 (2), 142-151

<sup>82</sup> Skjoett-Larsen T. (1999), Supply Chain Management: A New Challenge for Researchers and Managers in Logistics, *The International Journal of Logistics Management*, Vol. 10 No. 2, pp. 41-54

intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies".<sup>83</sup> So, it includes all the activities required in order to connect the first supplier of raw material to the final user of the product.

From this point of view, when companies are able to communicate and promote their green values in a way that they positively influence the surrounding environment to adopt sustainable practices, Green Supply Chains (GSC) emerge. A supply chain can be considered a GSC when sustainability becomes the central topic of interest for the entire supply chain, and all the entities involved in the chain collaborate to achieve green goals considering also the social and environmental dimensions in the decision-making process.

In sustainable supply chains the focal company, which is the central actor in the supply chain, plays an important role in promoting a sustainable orientation to the entire network and a green perspective in the management of the processes of value creation.<sup>84</sup>

The pursuit of revenues and profits remains the main priority for companies as a positive economic performance is fundamental to run the business, but the additional integration of the social and environmental standpoints in the decision-making process help companies to achieve higher long-term benefits and contribute to the social welfare.

Stakeholders play an important role too, as they are the one who exercise the pressure of including sustainable aspects on the companies' objectives, pushing them to adapt their strategies and include green actions.

Sometimes occurs the opposite situation, in which it is the focal company that has to motivate its suppliers to adopt sustainable behaviours and force them to reduce their negative impact. In this case, an alternative for the focal firm could be to select its suppliers among those who are already certified or shows to adopt a sustainable approach.

In addition, there are several organizational practices that can be considered to integrate sustainability in the corporate strategy. Sarkis in his work suggests actions as the reduction of materials used in the production processes, of waste and pollution; the recycling of materials that can be physically or chemically changed to be part of new products; or the reusing of the product maintaining its original shape.<sup>85</sup>

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<sup>83</sup> Council of Supply Chain Management Professionals, (2013), Supply Chain Management Terms and Glossary, pg. 187

<sup>84</sup> Seuring S., Muller M. (2008), From a literature review to a conceptual framework for sustainable supply chain management, *Journal of cleaner production*, 16 (15), 1699-1710

<sup>85</sup> Sarkis J. (2003), A strategic decision framework for green supply chain management, *Journal of cleaner production*, 11(4), 397-409

In conclusion, the transformation of the supply chain is one of the multiple modifications that an organization can make in order to become sustainable. Promoting a greener path along the entire system in which the company is embedded will contribute to the creation of value, providing benefits both for the involved entities and the planet.

It becomes evident that to face this new trend of sustainability, businesses have to change their business models and integrate green practices in their corporate strategy, implementing concrete actions on both the internal organization and the external system.

Today, the sensibility to this topic is in continuous growth: sustainability is today a determining factor in purchase decisions of consumers, but it is becoming, above all, the key driver for managers to assume their responsibilities, making them willing to play an active role in this struggle and steer the change.

The process to sustainability is a long path that requires commitment, determination and strong beliefs that needs time to be implemented and recognized by all the stakeholders. Today managers are recognizing its importance, but it is still a niche process implemented only by a small part of them.

Over the years, sustainability has spread through all the sectors, including the textile and fashion industry, which is today considered one of the most polluting industries in the world only after the oil sector. Fashion is considered unsustainable in every stage of the production process and in the excessive clothing consumption and disposal.

The issue of sustainability in fashion represents a real challenge for all the companies involved in the industry that have to make drastic changes to be able to assure the environment preservation and the respect of human rights.

## **PART II: SUSTAINABILITY IN THE FASHION INDUSTRY**

### **2.1 Fashion industry since the 1950s: between mass production and slow fashion**

The concept of sustainable development, as seen in the previous chapter, is not a simple process to implement and requires multiple changes in corporate objectives and priorities. It is a long and complex process that cannot be reached immediately.

The fashion and textile industry has a fundamental role in the global economy and represents a valuable sector. According to the European Commission, the fashion industry is defined as a diverse and heterogeneous sector covering a large range of activities and involving multiple actors along the supply chain. Today, the textile industry counts that one of every six people is employed in this sector: fashion is completely embedded in people's lives and impact on their actions and behaviours.

Indeed, fashion is defined by Fletcher as “the way in which our clothes reflect and communicate our individual vision within the society, linking us to time and space”.<sup>86</sup> Clothing is generally perceived as the material thing that gives fashion a contextual vision in the society.<sup>87</sup>

Nowadays sustainability has become a priority for a growing number of fashion organizations, and companies are increasingly committed to sustain the society and the planet changing their strategies. As demonstrated in the previous analysis, sustainability has become a trend topic, but it is still not so much diffused among all industries. The aim of this chapter is to find out if the textile sector has been involved and impacted by this phenomenon, understand how sustainability is today implemented in the industry, and figure out how the sector has responded and reacted.

#### **2.1.1 The spread of mass production**

In order to better define which is the evolution of the fashion sector in its commitment to sustainability over the years, a description of the historical development of the industry would provide a clear general framework.

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<sup>86</sup> Fletcher K. (2008), *Sustainable fashion and textiles: Design journeys*, Routledge, London

<sup>87</sup> Cataldi C., Dickinson M. and Grover C. (2010), *Slow fashion: Tailoring a strategic approach towards sustainability*, In Masters' thesis, Karlskrona, Sweden: School of Engineering, Blekinge Institute of Technology

The concept of fashion emerged for the first time in the 19<sup>th</sup> century, which corresponds to the period of great innovations and inventions for the sector thanks to the occurrence of the Industrial Revolutions. The introduction of new machines in factories increased the production scale of clothes, shifting the thought of fashion from a sartorial production to a new standardized model in which clothes were produced in bulks in different sizes and colours. In fact, the 1886 represented a symbolic year for the fashion industry with the invention of the sewing machine that enabled to lower clothing prices while rising the amount of production.

The period in which fashion has reached the maximum of its development has been during the years at the beginning of the 20<sup>th</sup> century, due to the high demand for functional garments derived by the World War II. This request of huge amounts of standardized clothes, together with the relocation of the production from houses and small workshops to factories, pushed the industry in the direction of a new perspective: the mass production.

Mass production consists in the production of large amounts of standardized and undifferentiated products. This type of production has represented a great transformation for companies in the sector since it is a process that enables an important price reduction in the production. Moreover, its emergence has been well accepted also by society, as people recognized in this new model of production the possibility to change their lifestyles and have access to cheaper and trendy products rather than the usual traditional apparels.

It is during the 1960s that the fast fashion model took shape. Fast fashion provides a strong vertical integration strategy that allows a flexible production and more affordable garments. It took only few years to incorporate the fast fashion phenomenon in consumers' buying behaviours. As a matter of fact, between 1990s and 2000s it was almost completely normalized: being dressed in cheap clothes became not only acceptable, but also desirable.

After the 2000s the global fashion industry had to deal with several drastic changes in the market that led to a reduction of the spending capacity of consumers, resulting in another important driver in favour of the adoption of fast fashion. Moreover, the availability of faster channels of communication, as well as new technologies, pushed the market towards a new perspective.

The spread of fast fashion had important consequences in people's attitudes: they started considering clothes as something with a short life-cycle and easily disposable. As a confirmation of this, data from Greenpeace shows that the duration of clothes in the last 15 years has halved and sales increased from 1 trillion to 1.8 trillion of dollars. <sup>88</sup>

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<sup>88</sup> Greenpeace (2016), Timeout for fast fashion

Consequently, the demand in the market for fashion garments started to speed up but showed unpredictable growth patterns according to the always changing trends. In fact, one of the main distinguishing features of the fashion sector is the dynamism and the constant state of change. As a confirmation of this, the BoF-McKinsey State of Fashion has developed a survey among managers, obtaining that the 34% of the interviewed top executives of textile companies used the word “changing” to describe the fashion industry. Then, the two following words came up to be “digital” and “fast”. The implication that can be derived from this survey confirms that the change is the main priority among industry leaders, with a particular focus on digital and speed-to-market dimensions.<sup>89</sup>

Besides the dynamism, also the ever-growing demand of clothes pushed the costs of raw materials even higher. These conditions led to the difficulty in predicting sales and stock levels, resulting in under or overstocking with frequent financial losses. Plus, the fast fashion condition got worse with the high clothes turnover, the increase of waste, and the pollution caused by the production.

The situation was clearly changing and market dynamics started being influenced by multiple factors related to different dimensions, including not only the economical one, but also the environmental and the social. From the environmental point of view, new worries and concerns started to spread among society, regarding the scarceness of resources, the global warming and the climate issues that became more and more common in the everyday life. From that it is possible to understand that the low-cost template of the fast fashion model become considered highly unsustainable in the long run, not only from an environmental and social perspective, but also economically.

It is true that the fast fashion strategy represents a relevant competitive advantage if managed in the right way, but this capability is limited to only those companies that have huge production factories and can afford to bear the high costs of the model. Small businesses or local enterprises that want to be forefront actors in the change of this manufacturing model cannot afford the fast fashion method, otherwise the outcome would only result in high levels of pollution, waste and costs.

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<sup>89</sup> The Business of Fashion and McKinsey & Company, (2019), The State of Fashion 2019



### 2.1.2 The slow fashion model development

The first important wake-up call on the unsustainability of the fast fashion business model occurred in 2013 in Bangladesh after the Rana Plaza incident, which putted the spotlight on the ethical issues of the fashion industry. The tragedy witnessed more than 1.000 deaths and 2.000 fatal injuries and represented a turning point to the introduction of more security and ethical practices in the fashion world, including more transparency along the supply chains and more responsible behaviours.<sup>90</sup>

Today fashion experts and designers are continuously looking for new alternative ways to give up the approach of rapid clothing consumption and introduce new radical improvements in the fashion system to integrate sustainability.

As reported by Joergens, the United Nations conference in 1972 provided a definition of sustainable fashion, stating that “sustainable fashion can be defined as clothing that incorporate fair trade principles with sweatshop-free labor conditions; that does not harm the environment or workers by using biodegradable and organic cotton, and designed for a longer lifetime use; that is produced in ethical production system; that which causes a little or no environment impact and makes use of eco-labelled or recycled materials”.<sup>91</sup> In other words, it considers all the social, natural and economic prices paid in the fashion production.

From this concept of sustainable fashion, the new movement of slow fashion has risen. It has emerged as a concrete response to fast fashion cycles and to the unsustainable business growths.<sup>92</sup>

The aim of the slow fashion model is to promote an ethical conduct, reduce garment production and purchase quality over quantity clothing. To achieve this goal a change in the system thinking of managers, in the infrastructure organization and in the throughput of goods is required.

According to Fletcher, following a slow fashion approach consists in taking care about all the stakeholders' needs (including buyers, customers, designer, workers, retailers, suppliers) and being conscious of the massive impact that fashion production has on the entire planet and on eco-systems.<sup>93</sup>

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<sup>90</sup> Parveen S. (2014), Rana Plaza factory collapse survivors struggle one year on, BBC News (online)

<sup>91</sup> Joergens C. (2006), Ethical fashion: myth or future trend?, *Journal of Fashion Marketing and Management*, Vol. 10, No. 3, pp.360-371

<sup>92</sup> Henninger C. E., Alevizou P. J., Oates C. J. (2016), What is sustainable fashion? *Journal of Fashion Marketing and Management: An international Journal*

<sup>93</sup> Fletcher K. (2010), Slow fashion: an invitation for systems change, *Fashion Practice: The Journal of Design, Creative Process and the Fashion*, Vol. 2 No. 2, pp. 259-266

One of the main drivers to the affirmation of this model is the social and environmental responsibility that each actor in the fashion system should assume. Indeed, the social benefits that the slow fashion provides are multiple: it encourages labour groups, it strengthens relationships and long-term relations while, at the same time, supports better planning and increased reputation.

Including sustainability in corporate objectives means that company's values must be aligned with consumers' needs, habits and preferences; and business models should be reinvented in order to reflect the social and environmental commitment. The reinvention of business models has to pass through the adaptation of managerial and operational functions sharing a common perspective among the internal organization and along the entire supply-chain. This process, as in the traditional market, implies higher costs in materials, energy and compliance.

Furthermore, implementing a slow approach requires not only the reconsideration of companies' business models as a result of managers' change of perspective, but also adjustments in people's routines that should choose sustainable products and incorporate the concepts of reusing, recycling and re-handling of existing items in their lifestyles.

In fact, assuming a sustainable point of view, the textile sector has been widely affected by the new emerging concerns expressed by its consumers, and in general by society, about social and environmental issues. Today they want that their dressing up reflects their aspirations for a better world, implementing concrete actions and practices to safeguard prosperity and quality of life. Consequently, consumers expect brands to address ethical aspects of garments and to have "convincing answers to questions environmental and social responsibility".<sup>94</sup>

So, the slow fashion business model represents a valuable response of the fashion industry to the emerging global issues. It adopts a long-term perspective that is completely in line with the urgency of the environmental and social concerns that are affecting the entire world.

Fashion companies have to face today a market that is more and more shaped by new needs and desires increasingly connected with social causes, trust issues and technology advancements. Therefore, only those brands that have the courage to "self-disrupt", follow these new trends, and believe in their commitment implementing new practices, will emerge as winners.<sup>95</sup>

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<sup>94-95</sup> Bendell J., Kleanthous A. (2007), *Deeper Luxury: Quality and Style when The World Matters*, London: World Wildlife Fund United Kingdom

## 2.2 The unsustainability of the fashion system: how fashion impacts on global issues

Sustainability is highlighted as a growing concern in the fashion industry because of the involvement of multiple actors in supply chain networks, the high employment provided by the sector and the intensive exploitation of natural resources. Indeed, as previously anticipated, fashion employs 25.6 million people and contributes almost to the 6% of world production.<sup>96</sup> Furthermore, fashion is an industry characterized by variability and temporary trends, but its concept has also deep cultural roots that are an expression of who people are and how they connect to each other.

These continuous changes in trends lead to the idea that fashion has a short-term orientation, which is a concept that seems in contrast with the long-perspective of sustainability. Recently, sustainability has become a priority for many organizations, but the industry continues to show negative behaviours in the exploitation of workforce, social well-being, and natural resources. The exact definition of sustainable development is the one provided by the World Commission on Environment and Development in “Our Common Future”, but although this, it is generally considered a problematic expression.

Despite the difficulties in identifying a correct definition, the backbone function of the term is to indicate the process of reinventing already existing needs through the appropriate technologies, changing objectives and priorities in order to achieve a higher quality of life by long-term maximization of the productive potential of ecosystems.<sup>97</sup>

According to Herthorn and Ulasewicz, fashion is a process expressed and worn by people, and, as a material object, has a close connection to the environment and is embedded in everyday life.<sup>98</sup> So, from their statement it can be deduced that sustainability within fashion means that through the production and development of a garment, there is no harm done to people or to the planet, and that the production process can enhance the well-being of people who participate in the process and of the environment used within.

Another important aspect of the fashion sector is that, thanks to the low capital investments required and the high employability, it contributes, both directly and indirectly, to the social development of many countries, in particular of the ones with a low-income.

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<sup>96</sup> Allwood J.M., Laursen S.E., de Roudriguez C.M., Bocken N. (2006), Well dressed? The present and future sustainability of clothing and textiles in the United Kingdom, Technical annex, Institute for Manufacturing, University of Cambridge

<sup>97</sup> Gardetti M. A., Torres A. L. (2017), Sustainability in Fashion and Textiles: Values, Design, Production and Consumption. A Greenleaf Publishing Book, Routledge

<sup>98</sup> Hethorn J., Ulasewicz C. (2008), Sustainable Fashion: Why Now? A conversation about issues, practices, and possibilities, Fairchild Books

As largely known, the fashion industry today represents one of the highly polluting resource consuming and labour-intensive industries.<sup>99</sup> In particular, it is the second largest polluting industry in the world after the oil industry. Its production processes require an intensive use of water and chemicals that generates a massive environmental impact. Moreover, the industry is one of the main responsible for air pollution and waste generation.

As explained above, the most evident environmental and social negative impacts emerged during the second half of the 19<sup>th</sup> century as a consequence of the introduction of innovations and new machineries in the sector that led to a reduction of costs. The situation got worse during the 20<sup>th</sup> century since innovations led to a provision of cheaper garments to an ever-increasing demand. The chemicals used in the wet processing of clothes and textiles, such as organic solvents, surfactants, phenols and chloride, that were non-biodegradable and with carcinogenic components, were discharged directly into rivers and streams.<sup>100</sup>

Furthermore, the wastewater emissions from the processes of dyeing, finishing and washing, the production of huge amounts of wastes, and the depletion of resources from consumption of water, fossil fuels and raw materials contribute to the deterioration of the environment.<sup>101</sup>

Providing some concrete data, the water consumption from these processes involves around 79 billion of cubic metres of water per year, comparable to “34 million Olympic-size swimming pool”<sup>102</sup>, and the 70% of industrial wastewater is discharged into rivers and streams in developing countries, causing the contamination of drinking water.<sup>103</sup>

The chemical pollution counts over 8 million tons of substances released into the air, while in 2015, as reported by Loetscher in the WWF report *Changing Fashion*, the textile production released 1.7 billion tonnes of carbon emissions. To these, other 120 million tonnes of emissions have to be added due to the washing and drying processes.<sup>104</sup>

Taking as reference the data provided by the Global Fashion Agenda of 2017, it is possible to project the environmental impact that the fashion industry will have over the years according to the current rate of consumption and emissions.

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<sup>99</sup> De Brito M. P., Carbone V., Blanquart C. M. (2008), Towards a sustainable fashion retail supply chain in Europe: organisation and performance, *International Journal of Production Economics*, 114(2), 534–553

<sup>100</sup> DEPA (2003), Survey of chemicals in consumer products, Number 23: Survey of chemical compounds in textile fabrics, Copenhagen, Danish Environmental Protection Agency

<sup>101</sup> Fletcher K. (2008), *Sustainable fashion and textiles: Design journeys*, Routledge, London

<sup>102</sup> Kerr J., Landry J. (2017), *Pulse of fashion Industry*, Global Fashion Agenda & Boston Consulting Group

<sup>103</sup> United Nations, (2002), *International Year of Freshwater 2003*, New York: United Nations

<sup>104</sup> Loetscher S. (2017), *Changing fashion: the clothing and textile industry at the brink of radical transformation*, WWF Switzerland

As it is possible to see from the figure below, by 2030 the levels of water consumption, energy emissions and waste creation are expected to increase of more than 50%, resulting in massive environmental impacts.

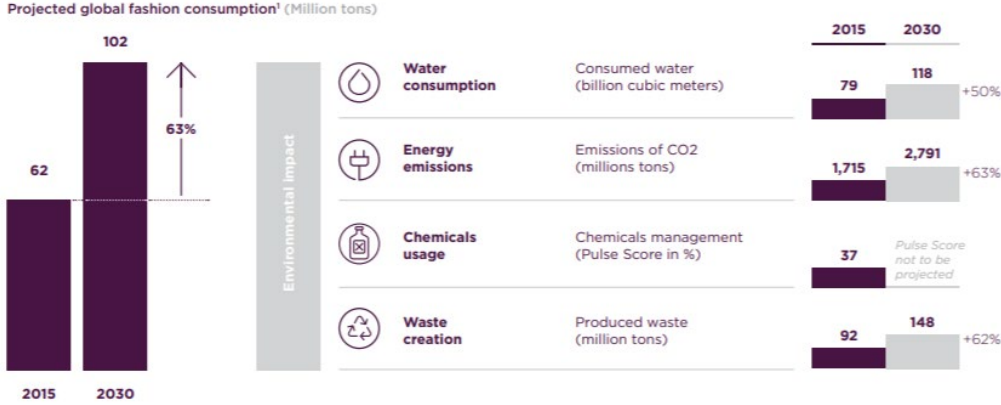


Figure 6: Projections of environmental impact

Another worrying aspect of the fashion sector is connected with the social issues arising from the unsanitary and poor working conditions of employers along the supply chain, including excessive working hours and wages below the minimum. In countries as India and Philippines over the 50% of workers are not paid the minimum wage to ensure a dignified life. It is also reported by Karaosman that “the current minimum wage in Bangladesh only covers 60% of the cost of living in a slum”.<sup>105</sup> Instead, brands should nurture the relationship with the communities and build a long-term and respectful collaboration, taking care of them and recognize their rights.

These unsustainable practices which the fashion industry is responsible for cannot last over time and need an urgent change. Something has to be modified and, from the point of view of different scholars and practitioners, the key to achieve the construction of a completely new sustainable perspective seems to be pushing towards the direct intervention of businesses that acknowledge the problem and take a position. But, in order to achieve this goal, it is necessary to assure that managers, corporate leaders, and practitioners, who are the primarily responsible for the dissemination of information, have already absorbed the sustainability-oriented mindset.

<sup>105</sup> Karaosman H. (2016), Sustainability in fashion. The factbook

### **2.3 A research to figure out how the management in the fashion industry responded to the sustainability trend**

The transmission of knowledge made possible thanks to the growing publications of scholars and practitioners, enabled a part of fashion and textile entrepreneurs to be forefront actors in the change and follow their green development. From the first research it is possible to affirm that the growing debate about sustainability in literature had a reflection also in managerial practices and strategies, that have seen an integration of sustainability values into corporate visions.

Now another research will be developed among the existing literature, with the purpose of studying and demonstrating how the sustainable phenomena has impacted also the textile industry, how it has become adaptable over the years, when textile managers started to consider the sustainability aspect as a core feature and how this concept has changed meanings and shapes in the sector.

This research will help in identifying when sustainability has entered in the historical and managerial debates, providing the tools to set and define which are today the current best practices adopted in the fashion industry.

To do that the same methodology of the first part of the elaborate has been followed. The decision to analyze the same international journals used in the previous research comes from the desire to be able to compare the outcomes as effectively as possible, to have a multilateral perspective on the historical, managerial and more policy-oriented debates and to see the actual evolution of the trend. The research has been a systematic review of the business literature. Sources of data were articles and publications of the following international journals: “Academy of Management”, “Organization & Environment”, “Journal of Cleaner Production”, “Journal of Management and Sustainability”, “Horizons”, “Greener Management International”, “Business History Review”.

After the selection of the journals, the articles and peer-reviewed papers published by these journals from 1970 to 2021 have been researched, selecting those that included the keywords “sustainability”, “environment”, “green” and “corporate social responsibility” (in order to obtain the same results of the previous analysis). Then, these keywords were combined with at least one of the following terms “fashion”, “textile”, “garment”, “apparel”, “cloth”.

In this way the focus of the research has been placed on the fashion and textile industry, allowing a clearer and deeper analysis of the results. The research yielded to a cumulative

number of 283 articles and publications, that provided a satisfactory framework to study the development of sustainability within the fashion industry over the years.

<b>Journal</b>	<b>1970-1990</b>	<b>1990-2010</b>	<b>2010-2021</b>	<b>Total number of articles</b>
Academy of Management (1957 - ongoing)	-	1	5	<b>6</b>
Organization & Environment (1987 - ongoing)	-	17	5	<b>22</b>
Journal of Cleaner Production (1993 - ongoing)	-	14	181	<b>195</b>
Journal of Management and Sustainability (2011 - ongoing)	-	-	7	<b>7</b>
Horizons (2014 - ongoing)	-	1	4	<b>5</b>
Greener Management International (1993 - 2007)	-	14	1	<b>15</b>
Business History Review (1926 - ongoing)	15	16	2	<b>33</b>

Table 5: Total results from the research

From the data obtained it is possible to observe that the consideration of sustainability in the fashion industry begins only after the 1990s. The period corresponds to the years in which managers and operators of the textile sector acknowledged the urgency of changing people behaviours and the market structure, to build and support the new model of slow fashion.

Indeed, in the 1990s the expansion of the textile industry had already reached its maximum and the fast fashion model was almost completely normalized in people behaviours. Following the history, it was after the 2000s that companies and corporate directors have realized the unsustainability of the pace of fashion business growth and started to embrace sustainable actions.

Before moving on to the deeper analysis of the articles, it is possible to see from the total number of the publications that there is still lack of solid literature linked with the fashion and textile industry. An explanation to this can be derived by the actuality of the theme and the presence of still much uncertainty. Moreover, the fact that there not exists a systematic approach to follow in order to accomplish the green transformation slows down the rate of the trend, thus requiring longer time.

Compared to the research conducted in the first part of the elaborate, the total number of articles is evidently lower, due to the specific focus placed on the fashion sector. It is true that the textile

industry can be considered one of the major contributors of the global economy, but it is important to remind that the first doubts and discussions on the model adopted by corporates have arisen only recently, after witnessing the events that have marked the history.

Following the same methodology used in the first analysis, after collecting all the data, the outcomes of the research have been divided according to the different nature of the journals, in order to get different perspectives. The division has been the same: the first examination includes the four management scientific journals (“Academy of Management”, “Organization & Environment”, “Journal of Cleaner Production”, “Journal of Management and Sustainability”); the second analysis concerns the two policy-oriented journals (“Horizons: Journal of International Relations and Sustainable Development”, “Greener Management International”), and the third one explores the historical perspective of the development (“Business History Review”).

Then, the most recurrent themes have been identified and each article has been associated to the one that the most suited it. The topics that emerged as the most analyzed and discussed are: the development of the textile industry; corporate sustainability strategies implemented in companies; innovations introduced to pursue a sustainable path, the topics connected with social sustainability; the environmental sustainability; the green transformation of supply chains; and the adoption of sustainable business models.

These themes are the ones that have been used to categorize articles and publications in the following tables.

The analysis started by studying the articles coming from the scientific management journals, obtaining the following results.

<b>Theme</b>	<b>1970-1900</b>	<b>1990-2010</b>	<b>2010-2021</b>	<b>Total number of articles</b>
Development of textile industry	-	8	8	<b>16</b>
Corporate sustainability strategies	-	8	47	<b>55</b>
Social sustainability	-	4	12	<b>16</b>
Environmental sustainability	-	6	54	<b>60</b>
Greening supply chains	-	-	15	<b>15</b>
Innovations to sustainability	-	6	38	<b>44</b>
Sustainable business models	-	-	24	<b>24</b>

Table 6: Journals included in the analysis: “Academy of Management Journal”, “Organization & Environment”, “Journal of Cleaner Production”, “Journal of Management and Sustainability”



The first theme listed in the table, “development of textile industry”, includes all the articles that have been published with the purpose to describe the industry in general terms, such as the structure of the sector, the market dynamics and all the possible related issues. The literature of the fashion and textile industry starts with a focus on the general attributes of the market and its expansion, mentioning the technical changes that have occurred; the introduction of new spinning, weaving and knitting machines to improve the corporate performances; and the development of strategies to increase the efficiency of production.

It is important to remind that these articles discuss not only about the fashion and textile industry development from the managerial point of view, but maintain also a sustainable perspective. The strength of the sustainable topic in these publications is relevant, but not to the point of being considered integrated in the corporate culture: the two topics of sustainability and corporate strategy are still analyzed as two separated subjects.

Differently, in the second theme of “corporate sustainability strategies”, the two topics are considered as closely interlinked arguments. From the outcome, it is possible to see that this connection has been increasingly taken into consideration from scholars and practitioners in their debates. Indeed, publications have shown a consistent growth over the years, with a peak in recent years, especially thanks to the contribution of the “Journal of Cleaner Production”, in which the emphasis on the textile industry has been strongly placed.

Furthermore, it is deductible that managers have increasingly integrated sustainable practices in their corporate visions with great evidence, becoming aware of the urgency of the sustainable topic and implementing concrete actions to safeguard the planet and the health of fashion workers. The most common actions discussed in the articles will be better outlined in the following chapters, as the aim is to trace and describe the evolution of sustainable practices in the industry. Providing some general concepts, they include the adoption of voluntary sustainability-oriented standards, the implementation of measurement techniques of corporate footprint and evaluation of sustainable performance, the adoption of traceability tools, the development of innovative processes of reusing and recycling of materials, and the adoption of eco-labels in fashion products.

The rise in the integration of green actions in corporate strategies can be largely confirmed with data resulting in the categories of “social sustainability” and “environmental sustainability”, that show a significant increase in the years. The social and environmental sustainability in the fashion industry has assumed a growing importance, playing a central role in the managerial debate, shining the spotlight on arguments as fair working conditions, respect of human rights,

but also minimization of chemical and water usage, reduction of environmental pollution caused by garment production, increased textile wastewater treatments, achievement of energy efficiency and so on.

The environmental issue, as it is possible to see with evidence in the table, is the theme that has gained the most attention and received the highest priority among scholars. The reasons that can be inferred from the outcomes can be explained in the great impact the fashion industry has on the environment: in fact, as reported in “The state of fashion 2020” by the McKinsey, the textile industry is the second largest polluting industry in the world.<sup>106</sup> The massive environmental impact caused by its manufacturing processes fuels the continuous debate of the sector. Moreover, the industry is one of the main responsible of air pollution and waste generation with an intensive use of natural resources.

Another theme that emerged from the research is “greening supply chains”, which refers to the process of transformation of supply chains to achieve the alignment and the diffusion of sustainable values. As explained in one of the last chapters of the first part of the elaborate, the transformation of supply chains is one of the most challenging modifications that a company should make in order to become greener. It is a complex process which becomes even more tough if applied in the fashion industry: the textile industry raises barriers and difficulties in the transformation of supply chains because of the high number of actors involved in the system. As it can be noticed from the outcomes, despite the obstacles that the market structure presents, in recent years the intentions to achieve a sustainable supply chain turned out to be more concrete. So, it is possible to deduce that part of textile managers changed their perspectives and started considering sustainability as a necessity, not only from the social and environmental point of view, but also recognizing it as a managerial priority that needs, in order to implement a real change in the paradigm, a collaboration at a system level.

Comparing these results with the first ones, it can be seen that this topic has emerged as one of the most difficult but important steps that each company should include in their objectives to aim to assume a managerial active role in promoting and sustaining sustainability at the micro-economic level.

A new theme that stands out in the research findings is “innovations to sustainability”. It has been considered as one of the most interesting results because it incorporates all the concrete changes that managers and practitioners putted in action to integrate sustainability. In this section both the process and the product innovations have been included.

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<sup>106</sup> McKinsey & Company (2020), The state of fashion 2020

The rapid increase in publications, which is clearly observable from the table, confirms what the literature explained in the first part of the elaborate: companies, and in particular corporate leaders, have acknowledged the need to completely rethink and modify their way of doing business, embracing new ideas and studying sustainable alternatives for their products and processes. It is true that the number of companies that are committed to this thorny path is still low compared to the large number of firms operating in the field, but it is possible to see that the future orientation will work in this direction.

Among the articles published some examples of radical and continuous improvements in the textile came up, such as wet and dry garment manufacturing, cleaning, dyeing, colorization procedures; modification in the sourcing process of raw materials (searching natural sources for fibres); studies of new emerging technologies for energy and water efficiency and pollution reduction; solutions for the reutilization of washing textile wastewater; and reusability of fashion effluent sludge for producing new products.

Finally, the last identified theme is “sustainable business models” and it has been treated as a separated topic from corporate sustainable strategies because of the desire to highlight the rise in the consideration of business models as an efficient and effective tool for the implementation of sustainability in corporate missions and visions. The reconsideration and the rethinking of business models in a sustainable way in the fashion industry has represented a difficult obstacle to overcome, but it is possible to affirm that it has shown a great increase, confirming once again the strong and increasing commitment of fashion and textile companies in the achievement of a sustainable path.

Continuing in the analysis, the attention shifts now on the articles published by the policy-oriented journals: “Horizons: Journal of International Relations and Sustainable Development”, and the “Greener International Management”.

<b>Theme</b>	<b>1970-1900</b>	<b>1990-2010</b>	<b>2010-2021</b>	<b>Total number of articles</b>
Corporate sustainability strategies	-	4	2	<b>6</b>
Greening supply chains	-	7	1	<b>8</b>
Innovations to sustainability	-	1	2	<b>3</b>
Sustainable business models	-	1	2	<b>3</b>

Table 7: Journals included in the analysis: “Horizons”, “Greener Management International”

From the research findings emerges that between the 1970s and the 1990s there are no publications, and this is due to both the fact that the selected journals were born only during the last years of the century, and to the fact that sustainability emerges as a concrete debate only in the 1990s (as previously demonstrated). The total number of publications counts 20 articles, which represents a small sample, but it can still provide important additional information. The first thing that can be noticed is the presence of only four out of seven themes: this could derive from the fact that fashion industry, at the eyes of policy-makers, is an industry that is considered as impactful as the others (and so does not need a particular focus in the debate), or the results can be influenced by the choice of the two journals. Regardless of the real reason and of the small number, other useful information can be derived from data.

The four topics raised in the discussion among policy-makers and stakeholders is mainly focused on the sustainability aspect from the managerial perspective. In fact, “corporate sustainability strategies”, “sustainable business models” and “innovations to sustainability” are all strictly connected with the implementation of sustainability in companies and with the way of thinking of business managers. On the other hand, the topic of “greening supply chain” expands the perspective along the entire supply chain, but still maintaining the focal argument of the policy-maker debate on the behaviours adopted by fashion and textile companies.

Then, the number of publications for all four arguments decreases over time. From this trend it is possible to assume that the main objectives of these journals, which is generally the influence of the public opinion and stakeholders’ behaviours to guide strategic decisions, had an important role in the last years of the 20<sup>th</sup> century and at the beginning of the 21<sup>st</sup>. Then, with the spreading of awareness and the acknowledgement that the most significant change can be done only from managers and companies’ heads, the debate has turned off on policy-oriented journals to maintain the focus on the managerial debate.

Lastly, the development of sustainability in the fashion industry from an historical perspective has been analyzed, in order to understand if the textile sector has gained a particular importance in the historical debate.

<b>Theme</b>	<b>1970-1900</b>	<b>1990-2010</b>	<b>2010-2021</b>	<b>Total number of articles</b>
Development of textile industry	9	4	-	<b>13</b>
Corporate sustainability strategies	-	7	1	<b>8</b>
Social sustainability	6	5	-	<b>11</b>
Innovations to sustainability	-	-	1	<b>1</b>

Table 8: Journal included in the analysis: “Business History Review”

The sustainability issue has entered in the historical debate mainly to address problems related with the structure of the market and of the textile industry (“development of textile industry”), as well as to discuss about the unsustainability aspects of the fashion system.

Between the 1970s and the 1990s, a particular emphasis has been placed on the social aspect of fashion, highlighting the fact that simultaneously with the great diffusion of fast fashion (and so to the quick growth of sales and profits), there was also a large number of people hardly working to guarantee the huge quantities of garments required by the system. Sometimes, in order to achieve the desired quantity in required times, textile workers were subject of unfair working conditions and their human rights were not respected.

The integration of the social issue with the business strategy in the fashion industry began after the 1990s, corresponding to the same years in which the managerial debate on sustainability among scholars and practitioners had already achieved a great resonance over the years.

Then, from the outcomes, can be seen how the theme of “corporate sustainability strategies” and “innovations to sustainability” (even if with a low evidence), started being discussed among historians. From these it can be deduced that the integration of sustainability in the industry has been adopted as a solution to the problems that emerged in the debate during the previous years. The assumption that is possible to make from the distribution of articles and themes is that with the passing of the years, the historical debate, after having expressed the concerns and spreading awareness about the issues on the topic, has completely left the debate to the actors that can effectively make the change: the main debate on the incorporation of sustainability in the fashion and textile industry is held by managers and practitioners.

Summing up all the research findings, it is possible to affirm that concerns about sustainability have largely affected fashion industry, feeding the debates, especially in recent years. All the three fields of debate have contributed to the literature in different manners. On one hand, the historical and policy-oriented debates discussed the unsustainability of the textile system with the common purpose of spreading awareness among people and consumers, but, at the same time, supporting companies in the adoption of new practices and models. Then, the discussions have become more and more reduced, doing to the fact that, besides the change in people behaviours and the diffusion of green knowledge, the transition to a completely new fashion paradigm is in the hands of businesses in the field, managers and practitioners.

So, on the other hand, the most influential and relevant debate turned out to be the managerial and scientific one. In fact, it is the one that has provided a strong empirical evidence on the growth in publications and articles, showing an ever-increasing interest. As a result, the micro-economic perspective is assuming a central role in textile industry, even if it can sometimes require rethink of values, self-disruptions and redesign of processes. Managers are becoming committed to their green path and are showing it with concrete actions in their business operations, implementing traceability tools, restructuring business models in a sustainable way, transforming supply chains and aligning corporate visions to new principles.

## **2.4 The current best practices in fashion to pursue sustainability goals: How to make the fashion industry sustainable?**

Now that an idea about the history of the evolution of sustainability in the fashion industry has been developed, it is possible to combine the literature emerged from the research to describe the most common practices adopted in fashion to achieve sustainable purposes.

So, today there exist several ways and initiatives that corporate managers, to demonstrate the assimilation of sustainability principles into their mindsets, have accessed to in order to integrate sustainability objectives into their corporate vision. These alternative ways of seeing the world and taking actions have turned out being indispensable to nurture the process of sustainability.

According to Fletcher, the fostering of alternatives to the status quo in the fashion industry are fundamental aspects within the process of sustainability, and organizations that decide to follow this path should respond with resilience, collaboration and cooperation.<sup>107</sup>

These actions implicate the detriment of environmental and social factors, and, as previously explained, a deep engagement.

One of the first solutions adopted to make the fashion industry sustainable is the spread of knowledge and awareness. Keeping the management and the society informed and guiding them through the possible alternative choices is one of the keys to achieve a change in mindsets. People, that are the final actors in the production chain, have to realize the relevance of the theme and change their consumption behaviours.

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<sup>107</sup> Fletcher K. (2008), *Sustainable fashion and textiles: Design journeys*, Routledge, London

Through this perspective, fashion is seen as something more than just a mass mechanism to sell garments to people, but instead, represents a guide to shape the society with new ideals and visions towards a sustainable approach.

The role played by leaders, executive managers and influential people is a virtuous model for people that become more incentivized to take more sustainable choices. Also designers make a valuable contribution in the fashion industry as they are the first connection point with customers: the more they are able to provide the necessary information and spread the knowledge about sustainable themes, the more customers will be educated to make better purchase decisions. This function covered by designers turns them into real entrepreneurs as their task is not only to diffuse the information they possess to their audience, but is also to be able to recognize and comprehend what can be changed in the organizational structures to make the company more sustainable.

However, a proper communication and flow of information are not enough. Customers, and more in general the entire society, feel the need to be involved in bigger and newer projects and feel part of a community who share the same motivations and beliefs. In addition, the latest introduction of new media channels has helped this process by giving the possibility to make data more accessible and transparent.

Another practice that has been introduced in the system to foster a more responsible and ethical production and consumption of apparel products is the traceability. In fact, through traceability initiatives, companies are able to build awareness and influence customers' purchase intentions. According to Zhang and Kraisintu traceability "can be considered as an integral component for sustainable supply chains".<sup>108</sup>

Traceability is used to convey information not only about the environmental sustainability of the product, but also other product characteristics considered important from society, such as the origins of raw material used in production, the product footprint in the supply chain or the history of the products' individual components.<sup>109</sup> Besides the origins and provenience, also simple information concerning the mode of disposals of products can bring benefits to the preservation of the environment. Furthermore, to promote the reuse of materials, products should be designed at the beginning to provide nourishment for something new at the end of their life.

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<sup>108</sup> Zhang T., Kraisintu K. (2011), The role of traceability in sustainable supply chain management, Master Thesis, available at: <http://publications.lib.chalmers.se/records/fulltext/146242.pdf>

<sup>109</sup> Kumar V., Agrawal T. K., Wang L., Chen Y. (2017), Contribution of traceability towards attaining sustainability in the textile sector, *Text Cloth Sustain* 3,5

Among the most influencing practices that help to support sustainability in the fashion industry, we can notice the great contribution provided by international organizations and associations. During the 1960s the attention to social and environmental themes has started to be spread all over the world, and one of the trigger events that pushed the development of these topics has been the emergence of mass movements. Standing out among them there is the non-governmental organization of Greenpeace which has been founded in 1971 from a group of environmental activists with the aim to protect the planet, promote peace and encourage people to change their habits. Today it can count on the collaboration of 55 countries and 26 national organizations all over the world and is in the front line to defend the planet from the excessive exploitation of its resources.<sup>110</sup> Regarding the aspects of the fashion industry, Greenpeace cooperate with big brands, from high fashion to fast fashion, to implement a process of re-thinking and re-organization of the apparel production from a more responsible perspective. Greenpeace is not the only association that fight against unsustainable practices in the fashion industry, as a matter of fact, other organizations aim at the same objective. An example is the Fashion Service Association (FSA), an association promoted by the Ministry of the Environment and Protection of the Territory and the Sea and the UNFCCC (United Nations Framework Convention on Climate Change) which supports the Green Fashion Week, a fashion show event focused on the theme of sustainability.<sup>111</sup>

The Eco Fashion Week (EFW) is a similar initiative born in 2009 in Vancouver that organizes exhibitions to guide designers and professionals in the fashion sector towards a greener production.

Besides these organizations, an event that has a worldwide resonance in fashion sustainability is the Copenhagen Fashion Summit where the representatives of the most important brands of the fashion system meet to discuss about new and alternative ways to achieve an ethical production. All the activities involved in the apparel production are deeply analysed to allow a future recycling of clothes and the reuse of materials. The core concept of the event is to transform garments that have to be disposed in new raw materials for the next production, incentivizing the research and innovation to achieve efficiency and waste-cutting.

Moreover, in 2009, a code of conduct for the fashion industry has been published by the collaboration between the Nordic Fashion Association and the Nordic Initiative Clean and Ethical (NICE). The NICE Manual displays 13 principles through which the two organizations provide companies ethical, responsible and sustainable guidelines to implement to face the great

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<sup>110</sup> Greenpeace, <https://www.greenpeace.org/italy/chi-siamo/>

<sup>111</sup> <https://www.greenfashionweek.org/>



challenges of the industry. <sup>112</sup> The core purpose of this manual is to support the alignment of business strategies with sustainable objectives in an international context, to achieve a global and inclusive economy.

This code has been the trigger element for the first joint initiative between the United Nations Development Programme, the Economic Commission for Latin America and the Caribbean, and the International Labour Organisation. The initiative is named Global Compact and has risen to foster the Corporate Social Responsibility among organizations, to promote the protection of human rights and labour standards, and to incentivize the environmental preservation.

Thanks to all these initiatives and actions carried out by organizations, companies and associations, sustainability has assumed a growing importance in the industry, helping in supporting and spreading the sustainable perspective.

#### **2.4.1 Barriers and obstacles to mobilising sustainable fashion**

Although the intensive efforts implemented by these initiatives and organizations to make fashion sustainable, companies have to take into consideration also the possible obstacles they can encounter in following these practices, in order to be prepared to face them in the best possible way.

It is possible to recognize three main barriers that emerge in mobilising sustainable fashion: first, the presence of a gap between customers' values and actual behaviours due to a lack of correct communication; second, the difficulty in guaranteeing the complete transparency and traceability along the entire supply chain; and third, the requirement of compliance of regulations and standards settled by governments and international organizations.

The first barrier is represented by a discrepancy between the consumers' awareness of the importance of sustainability and their actual purchase behaviours. In fact, even if consumers are aware about the situation that the society and the planet are facing today, a part of them continue to not associate fashion with these issues: they do not see the intensive production of garments or the disposability of fast fashion as a threat to the environment and to the human rights of workers.

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<sup>112</sup> Gardetti M. A., Torres A. L. (2017), Sustainability in Fashion and Textiles: Values, Design, Production and Consumption. A Greenleaf Publishing Book, Routledge

Moreover, accordingly to a research conducted by Henninger, the perception that some consumers have is that sustainability is a “high-end phenomenon linked to aspects of exclusivity and luxury, which may not be affordable for the everyday consumer”.<sup>113</sup> Today ethical clothes are bought only by a niche of consumers that have comfortable lifestyles and are not sensitive to the higher prices that green markets require. So, both the perception of exclusivity and the affordability aspect of sustainable clothes are real matters.

To support this statement, the results obtained in the research developed in the first part of the elaborate showed with evidence how the sustainable theme is still considered a niche problem, still not diffused as it should.

To overcome these issues, it is important to adopt effective communication strategies in order to communicate the benefits of sustainable fashion, to build a more mainstream fashion concept and make people willing to bear higher costs for a better world.

On the other hand, if consumers have to buy garments at higher prices, also companies have to face increasing costs to produce greener and affordable clothes and to use environmentally friendly materials. The mismatch between the demand and the supply curve result in a market deficit that pushes companies to raise prices even further.

Small organizations could not dispose of the financial resources required to implement a sustainable production: the relevance of bigger corporations plays a crucial role in disseminating the message of sustainability, enabling also smaller companies to access to the market without making massive investments in communication campaigns to spread awareness, but can concentrate in the sale of clothes.

Communication has to be done in the right way and has to change the perception of sustainable fashion, creating the idea of a perfectly accessible and mainstream market.

A further theme that can obstacle businesses in the change towards sustainability is the transparency, usually considered together with traceability. Indeed, these two concepts are seen as core aspects to identify sustainable fashion products.<sup>114</sup> The society today asks more and more transparency to check the actual environmental and social commitment of companies.

Transparency looks at both the origins of raw materials, dyes, chemicals and processes used in the manufacturing process, and the respect for the human rights and fair working conditions. Conversely, traceability is the capability to track and verify the history of a product through a documented and reported path.

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<sup>113-114</sup> Henninger C. E., Alevizou P. J., Oates C. J. (2016), What is sustainable fashion? *Journal of Fashion Marketing and Management: An international Journal*

This theme represents a barrier to sustainability because a large number of organizations claims the difficulty in tracing the materials from their sources through all the processes. It is undoubted that fashion industry involves a high number of actors along the supply chains, and following all the steps is a real challenge. Moreover, these organizations complain also the fact that tracing the origins of raw material of a recycled or upcycled apparel is impossible due to the several processes it is subject to; in fact, for example, tags are removed from one production to the other.

Introducing another barrier, the presence of regulations on the production of garments can create difficulties for firms as well. Indeed, they have to adapt their products to the required standards to be able to sell them. In many cases regulations are settled by national governments and they differ from country to country, so the single firm has to fulfil the obligations of both the manufacturing and the selling country. These requirements consist in basic information about the origins and the composition of clothes, thus, details that can be included on the garment labels.

In Europe textile fibre names and related labelling and marking of the fibre composition, is regulated by Regulation 1007/2011. Labels must report the name of fibres used in the manufacturing phase in order of importance and the weight in percentage. Moreover, to guarantee the maximum transparency and comprehension to the final consumer, they have to be “easily legible, durable, visible, accessible and securely attached to the cloth”<sup>115</sup>. The name of the fibres has to be always written in the extended and complete form, with the only exception in the cases in which fibres are indicated in the mechanised processing code.

Regarding the “Made in” indication in the label, it has to include not only the name of the country, but also the name of the producer or of the retailer. Finally, it is fundamental that the information reported in the label correspond to what is indicated in the commercial documents of the garment.

Apart from the labelling regulation, clothes are subject to other directives, such as the Directive 2001/95/CE regarding the general safety of products, in which it is established that garments can be considered safe when the risk of their utilization is minimum.<sup>116</sup>

Focusing more on the textile industry, companies have to be compliant with the REACH regulation (Registration, Evaluation, Authorisation and Restriction of Chemicals). It is a regulation introduced in 2007 to “improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the EU

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<sup>115</sup> European Union law (2011), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32011R1007>

<sup>116</sup> European Union law (2001), <https://eur-lex.europa.eu/legal-content/IT/ALL/?uri=CELEX%3A32001L0095>

chemical industry and promoting alternative methods for the hazard assessment of substances”.<sup>117</sup>

Other laws regarding the fashion sector are the regulations about chemical substances, that are difficult to deteriorate and represent a danger for the human health. These chemical substances are toxic, so the European Union decided to intervene to protect the health of its citizens through the introduction of two additional regulations: the first concerning the persistent organic pollutants (Regulation 2019/1021)<sup>118</sup> and the second one regarding the biocidal products (Regulation 528/2012)<sup>119</sup>.

Finally, an additional standard that is not mandatory in the European Union but that is widely diffused (since it is compulsory in other countries such as in USA and Japan), is the conservation and cleaning label, that gives information about the treatment and washing process of the garment in order to maintain its best shape. This help provided by producers to keep the apparel in the best possible way to last for years is a further step that governments make to promote slow fashion rather than fast fashion.

## **2.5 The measurement of the corporate performance: life cycle assessment, higg index, carbon footprint, water footprint, b impact assessment**

In the fashion industry, the measurement of the corporate performance towards sustainability is an important step to understand which are the impacts generated by the company's activities on social and environmental dimensions, in order to facilitate the implementation of improvement plans. The process of measurement is not simple and quick, in contrast, it is complex and not easy to understand. It is time consuming and requires relevant financial resources.

For these reasons the framework of corporate measurement is based on common references and calculation processes: to enable a proper comparison between different organizations. The purpose of analysing and understanding the different impacts is not limited to the internal acknowledgement of the firm, but it also aims at providing information to external stakeholders

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<sup>117</sup> European Union law (2007), European Chemicals Agency (ECHA), <https://echa.europa.eu/regulations/reach/understanding-reach>

<sup>118</sup> European Union law (2019), <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32019R1021>

<sup>119</sup> European Union law (2012), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02012R0528-20210329>

that are more and more interested to the consequences generated by the economic activity of companies.

There exist different indexes that organizations can use to track their performances, from general and inclusive ones to more specific and detailed.

One of the most used tools used to measure the environmental impacts and resources of a product, activity or process throughout all stages of its life cycle (from raw material acquisition, via production and use phases, to waste management) is the Life Cycle Assessment (LCA).<sup>120</sup> In its calculation two main information are taken into consideration: all the resources deployed throughout the life cycle, such as water, energy and raw materials; and the emissions released into the environment.

The approach is disciplined in the ISO regulation 14040-14043 that identifies 4 phases:

1. The goal and scope definition phase (ISO 14041) is the first phase in which the functional unit and all its possible alternatives are established. The element that has to be analyzed can be a product, a service or a corporate function. After that, when data are gathered, the methods available and the time frame of reference are fixed.
2. The inventory analysis phase (ISO 14042) measures the input and output flows of energy and materials throughout the entire life cycle of the product, the service or the function. The final result of this phase will provide a table in which deployed resources, generated emissions, chemical substances used and other flows are displayed.
3. The third phase is the impact assessment phase (ISO 14043) in which the flows identified in the previous step are analyzed in order to quantify their impacts and effects on the environment. Generally, the most common aspects taken into considerations are the global warming, the toxicity for humans, the use of land and the water acidification.
4. The interpretation phase is the conclusive one. All the data and the outcomes are interpreted, analyzed and evaluated in terms of their completeness, consistency and sensitivity.

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<sup>120</sup> Finnveden G., Hauschild M.Z., Ekvall T., Guinée J., Heijungs R., Hellweg S., Koehler A., Pennington D., Suh S. (2009), Recent developments in Life Cycle Assessment, *Journal of Environmental Management* 91, 1–21

Another widely used tool in the measurement of corporate performances is represented by the Higg Index. It has been introduced in 2012 by the Sustainable Apparel Coalition, a non-profit organization composed by a group of international fashion companies, with the support of the United States Government Environmental Protection Agency and other non-profit organizations.

This index enables companies in the fashion industry to measure their impact on environmental and social dimensions and aims to identify new opportunities for improvement in terms of reduction of negative consequences and enhancement of the long-term perspective of sustainability. The measured impacts can refer both to the entire final product and its individual components.

This tool is strongly used as it incentivizes the communication between companies to find new innovations to improve the processes and provide useful information to guide consumers in their decision process. It is divided in three different indexes referring to three different categories: product, facilities and brand.

- The Higg Product Tools measures the impacts of the tools used during the design process of the product to optimize sustainable choices in materials and design. The purpose is to guide companies in the decision process along each phase of the product development.
- The Higg Facility Tools focuses on the environmental and social performances implemented in all the organizations' facilities in order to improve the impacts generated by the production process.
- The Higg Brand & Retail Module (Higg BRM) measures the impacts produced by corporate operations involving the collaboration with external stakeholders. It facilitates the information sharing, in particular along the supply chain.

A further common measurement used worldwide is the Carbon footprint which measures the greenhouse gas emissions directly or indirectly associated with a product, a service or an organization from the procurement of raw materials to the final disposal.<sup>121</sup> The footprint is expressed in kilograms of CO<sub>2</sub> and the methods of quantification, reporting and communication

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<sup>121</sup> Ministero della Transizione Ecologica (2015), Carbon footprint, available at: <https://www.minambiente.it/pagina/cose-la-carbon-footprint>

are regulated by the ISO certification ISO/TS 14067 issued in 2013. It is an index that is highly considered from green consumers, so, companies that follow a sustainable business growth project cannot avoid to communicate this parameter.

Moreover, a research conducted in 2016 from the European Footwear Confederation showed that the process releasing the highest amount of CO<sub>2</sub> emissions, precisely the 58%, is the manufacturing one, followed by the packaging process (16%), the assembling and finishing phases (11%), the distribution system (6%) and the final phase of the lifecycle of the product (9%).<sup>122</sup>

Similar to the previous index there is the Water Footprint, measuring the total volume of fresh water that a specific organization has consumed and polluted in a fixed period of time. This benchmark provides information regarding three different phases of the usage of water: starting from the water footprint quantification and localization; passing through the sustainability assessment of the footprint; arriving at the identification of improvement plans.

In the analysis a distinction is made between different types of water: Green, Blue and Gray water. The Green Water refers to the consumption of water contained in soil and absorbed by plants, without being part of any surface or body of groundwater.<sup>123</sup> Blue Water is the surface or underground water used for agricultural, industrial and domestic purposes. It is the volume of water used after the evaporation or incorporated into other products. Ultimately, Gray Water refers to the contaminated water containing polluting substances.

By changing the perspective, from a specific product point of view to a more general framework, another index is worth be mentioned. It is the B Impact Assessment (BIA) and is one of the most diffused tools to measure corporate impacts exactly for its ability to assume a broader vision and include an evaluation of the business governance.

The BIA is adopted by more than 50.000 companies in over 50 countries and measures, evaluates and makes comparisons to improve the corporate performances on economic, social and environmental dimensions. The impact evaluation provides as outcome a classification of organizations in:

- Ordinary Businesses. This category includes companies whose main objective is to obtain positive economic results. They are interested in the social and environmental

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<sup>122</sup> European Footprint Confederation, <http://cec-footwearindustry.eu/>

<sup>123</sup> Adinolfi F., Di Pasquale J. (2014), The Water footprint. What is the Green, Blue and Gray Water Footprint?, ExpoNet, online article available at: <http://www.expo2015.org/magazine/en/sustainability/the-water-footprint-2.html>

protection but they do not represent a priority, in fact, they do not adopt any practice to improve these aspects.

- Sustainable Businesses. These are all the organizations that aim at gaining profits but, at the same time, implement strategies to reduce the environmental and social impacts of their activities.
- B Corporations. This group of firms have as primary objective to find a solution to environmental and social issues of their business, but without scarifying the maximization of profits. B corporations involve in their decision process all the possible stakeholders, aligning their businesses to current sustainable programs.

In conclusion, following the articles and the literature that have been analyzed, these are the most used tools to measure the sustainable performance of corporates. Through their measurement, analysis and control companies can fully understand if their commitment towards the green path is being implemented in the right way and is providing results. In the fashion industry it is important to maintain full control of the products' steps along the production system, to contain the negative impacts of the company's activities.

## **2.6 Traceability to enhance transparency in the market: eco-labels and certifications**

Businesses have a wide range of options to choose from to maximize their contribution in greening the market. One of the most impactful tools introduced in the last years that have emerged from our research and highly supported by the European Union is the traceability. The implementation of traceability in the fashion industry has always been a real challenge: the textile sector is in fact characterized by the collaboration of several networks of actors carrying different operations and employing a variety of materials and processes.

The achievement of the market transparency is a fundamental requirement for sustainability, and the role of traceability is to assist the different stakeholders in the integration of sustainability along the supply chain. As affirmed by Kumar, and then shared by other scholars, traceability, in the context of fashion industry, is a mean to extend the informational barriers of



stakeholders beyond their economical scope, helping in the dissemination of knowledge and information about sustainability practices, and integrating the whole supply chain.<sup>124</sup>

From the statements of scholars, it is possible to identify three main benefits that companies derive from traceability: the guarantee of transparency, the improvement of visibility and the development of accountability in the supply chain. Moreover, the term has been specifically defined in 2006 by the GS1 (which is a non-profit organization that develops and maintains global standards for communications between businesses) as the “ability to verify the history, location, or application of an item by means of documented recorded identification”<sup>125</sup>.

Going more deeply, traceability topic concerns not only the sustainability of products’ materials and the correct management of the manufacturing process, but also the informative feature, guaranteeing the garment origins. Indeed, the communication of the cloth features and the compliance with environmental and social rules is concretized in the use of labels, that enable the consumer to recognize the real value of the apparel and its relationship with the environment in which it has been produced.

Traceability aims at multiple purposes, but the two of them that stands out in the adoption of this tool are the streamlining of the logistic and productive functions and the reduction of the counterfeiting risk; allowing an increase in the value creation of the firm.

So, the contribution that traceability brings to sustainability is significant. In fact, more in detail, the support that is provided in the achievement of sustainable objectives towards each pillar of sustainability has a relevant impact.

Starting from the environmental dimension of the textile product, the process of traceability can improve the tracing trial of the utilisation of raw materials, chemicals, water consumption, and depletion of energy resources during the sourcing and manufacturing phase. Then, information can be completed with the addition of data about the energy employed during the further processes, such as washing, dyeing and ironing phases. The fact that information is transparent and communicated to the consumer in an unveiled manner, give them the possibility to trace back each product to the origin and follow it through all the processes, resulting in an increase in the trust they place in companies.

Through traceability companies have also the possibility to assess their environmental footprint. For instance, as previously seen, the product life-cycle assessment relies on traceability

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<sup>124</sup> Kumar V., Agrawal T. K., Wang L., Chen Y. (2017), Contribution of traceability towards attaining sustainability in the textile sector, *Text Cloth Sustain* 3,5

<sup>125</sup> GS1 (2006), The GS1 Traceability Standard: What you need to know, available at: [https://www.gs1.org/docs/traceability/GS1\\_traceability\\_what\\_you\\_need\\_to\\_know.pdf](https://www.gs1.org/docs/traceability/GS1_traceability_what_you_need_to_know.pdf)

information about the location, the product and the processes. Therefore, the environmental sustainability of a textile product is not limited to provide information about the stages of the manufacturing phase, but can be also a valuable point of reflection for customers to become more aware about the environmental issues and start to evaluate products relying on their green characteristics.

Shifting the focus to the societal pillar, the main challenge that traceability aims at solving lies in the structure and in the opaque supply chain network of the textile sector.<sup>126</sup> Recalling all the actors of the network and monitor their activities is an arduous task for businesses.

Traceability emerges as a practical solution to create social transparency through the introduction of the traceability number. It is an identification number that allows the unique recognition of a product, containing all its provenience, composition and processes information. Moreover, the health and security of people are fundamental requirements for societal sustainability, and through the tool of traceability they are well supported and proved.

Lastly, the economic sustainability is an essential prerequisite to face global competition. Following the research conducted by Zhang and Kraisintu, the economic aspect of traceability results in both positive and negative outcomes: the positive aspects are related with the positive economic gains, the benefits of a better inventory management, reduced stock levels, more visibility and demand-production balance; while the negative ones refer to the costs and expenses required to its adoption.<sup>127</sup> By summing up the results, the positive achievements are in majority in comparison to the negative ones: this is the main reason why companies should consider traceability as a powerful tool in the implementation of corporate sustainability.

Traceability has been defined and supported by different international institutions, but the most significant contribution has been achieved by the European Union. The European Union has in fact strongly encouraged the implementation of traceability in companies. The first reinforcement concerning the market transparency was released in the article 153 in the EC Treaty. Its objective was the direct protection of consumers, of their health and security.

Specifically, in the fashion and textile industry the reference legislation is represented by the Regulation 1007/2011, in which all the required rules to respect during the labelling process are described in detail. Later, in 2013 the EU Commission presented an integrative report on labelling requirements of textile products, including a further study on the allergic substances

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<sup>126</sup> Kumar V., Agrawal T. K., Wang L., Chen Y. (2017), Contribution of traceability towards attaining sustainability in the textile sector, *Text Cloth Sustain* 3,5

<sup>127</sup> Zhang T., Kraisintu K. (2011), The role of traceability in sustainable supply chain management, Master Thesis, available at: <http://publications.lib.chalmers.se/records/fulltext/146242.pdf>

contained in garments.<sup>128</sup> After consulting with the authorities of the Member States, consumers, stakeholders and main users of the regulation, the investigation of the Commission ended by declaring the non-compulsory nature of the revised rules concerning labels, therefore considering the already existing ones adequate.

Nevertheless, the majority of Member States has never stopped the research to improve the labelling processes and has voluntarily complied with the standards. This represents a positive signal of the increasing sensibility on the theme.

### **2.6.1 Eco-labels as a mean to increase awareness or a confusing tool for customers?**

The corporate voluntary compliance to labelling regulations shows how important is the new phenomenon of sustainability for fashion companies and their desire to make the difference in the change. One way to recognize sustainable fashion is by utilising eco-labels. Eco-labels are a powerful tool that has gained increasing significance in the role of spreading sustainability within the marketplace, indeed, when firms participate in the eco-label system, they can choose to focus in the area that is most meaningful to them, and acquire the label that better fits to them, thereby promoting sustainability.<sup>129</sup>

When talking about eco-labels, also the concepts of labels, standards and certifications are included. Their main purpose is to show the environmental commitment of the company and the presence of environmentally friendly components of the cloth. Another positive aspect of the eco-label scheme is that it encourages organizations to invest in eco-innovation, keeping up to the standards of their products and services, while at the same time, exploiting its promotional function.

The International Organization for Standardization (ISO) has provided a categorisation of the different type of labels that can be present in the market. According to the ISO, the three main groups in which labels can be divided are:

- Type I: are voluntary and multi-sectorial labels that assess the product's lifecycle on a pass or fail criteria. These criteria normally define the environmental performance that

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<sup>128</sup> European Commission (2014), Relazione della Commissione al Parlamento Europeo e al Consiglio, COM (2014) 633 final, Bruxelles, available at: <https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:52014DC0633&from=DE>

<sup>129</sup> Case S. (2015), Eco-Labels: Making Environmental Purchasing Easier?, available at: <http://americancityandcounty.com/green/eco-labels-making-environmental-purchasing-easier>

the product must reach and may also set standards. These labels are commonly released by third party organizations, including both private non-commercial entities and government supported institutions.<sup>130</sup>

- Type II: are all the labels based on claims made by manufacturers, importers or distributors regarding the environmental information. This implies that the declaration is self-made by the company.<sup>131</sup>
- Type III: consists on “quantified product information based on lifestyle impacts” which can be compared within individual product categories.<sup>132</sup> The label is best suited to purchases by businesses or public bodies and the information is usually displayed in form of an environmental performance declaration or non-selective report.

The label system was originally conceived to facilitate commercial practices and free flow of exchange of products, assuming an ever-growing value also in the field of the respect of consumers rights. As a matter of fact, the correctness and clearness of information of components indicated in labels are the first indicators of the reliability of the producer and therefore, of the purchased product.

Despite the multiple advantages and benefits that the use of labels brings to businesses, sometimes they are perceived as a complex and confusing tool. Customers are not as much informed as corporates in the theme, and the presence of numerous labels in the market arise confusion and distrust. In fact, more and more company adopt eco-labels with the only purpose to gain a strategic advantage, resulting in greenwashing and incorrect behaviours.

Moreover, the presence of a large number of type of labels worsens the situation. The Ecolabel Index, which is the largest global directory of eco-labels, affirms that the number of eco-labels that are currently circulating within 199 countries is 445.<sup>133</sup>

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<sup>130</sup> European Commission (2011), Green Public Procurement and the European Ecolabel, available at: [http://ec.europa.eu/environment/gpp/pdf/toolkit/module1\\_factsheet ecolabels.pdf](http://ec.europa.eu/environment/gpp/pdf/toolkit/module1_factsheet ecolabels.pdf)

<sup>131</sup> European Commission (2011), Study on different types of Environmental Labelling (ISO Type II and III Labels): Proposal for an Environmental Labelling Strategy, available at: [http://ec.europa.eu/environment/ecolabel/about\\_ecolabel/reports/erm.pdf](http://ec.europa.eu/environment/ecolabel/about_ecolabel/reports/erm.pdf)

<sup>132</sup> Pedersen, E.R.; Neergaard, P. Caveat Emptor (2006), Let the Buyer Beware! Environmental Labelling and the Limitations of ‘Green’ Consumerism. *Bus. Strat. Environ.* 2006, 15, 15–29

<sup>133</sup> Ecolabel Index (2014), About Us, available at: <http://www.ecolabelindex.com/>

Indeed, the regulation leaves companies to decide which is the certification that most fits with their activity. They have a large choice and this gives them the possibility to combine several labels and cover a wide range of aspects, enhancing even more the confusion.

It is exactly for this reason that it is really important to raise awareness for sustainability among consumers and educate them on current regulations on labels and, more in general, on sustainable development. On the other hand, to solve the risk of being perceived as a greenwashing company, Henninger suggests to businesses to try to identify and develop the “perfect mix” of labels that signifies not only that the fashion product has lesser impact than its counterparts, but also does not fall into greenwashing, choosing a not excessive number of labels.<sup>134</sup> In his research, Henninger has also confirmed that consumers are willing to purchase environmentally friendly garments, however, it becomes really challenging for them to distinguish the real green clothes as they are neither aware of labels, nor they understand their meanings.<sup>135</sup>

In order to provide a solution to this problem, besides the implementation of proper communication strategies, the mapping of certifications that are circulating in the market and the explanation of their significance in the fashion industry could be an option. It might result in a long and complex process but that would be able to reduce the confusion in the marketplace.

## **2.7 Sustainable changes within the fashion system: the alignment of business operations and strategies with ethical objectives**

It is true that fashion industry and customers are becoming more aware of the negative impact of this system, but the already implemented changes are focusing especially on making the current system more sustainable. From the literature that has been analyzed, emerged that the real revolution would be changing the entire system through the introduction of completely new values and beliefs into corporate visions.

To reach these business objectives and keep the production of clothes, fabric and fibres at their highest level for longer periods with a minimal environmental and social impacts, investments and changes have been done by a still small number of companies.

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<sup>134</sup> Henninger C. E., (2015), Traceability the New Eco-label in the Slow-Fashion Industry? Consumer perceptions and micro-organizations responses

<sup>135</sup> Harbaugh R., Maxwell J.W., Roussillon B. (2011), Label confusion: The Groucho Effect of uncertain standards, *Manag, Sci*, 57, 1512–1527

These pioneering fashion and textile companies have then reinforced their corporate sustainability values and spread awareness redesigning their operations and strategies in alignment with the new objectives. Sustainability has been the new key driver for business innovation.

To shift the position of fashion managers from the passive compliance of standards and regulations to active actors of the change, a renewal in corporate business models towards a more sustainable approach is required. Managers who understood this have reorganized the way they do business and have reinvented more sustainable business models.

To succeed, sustainability efforts need to be seen as an organizational priority, and, as affirmed by Bonini and Swartz, it needs “the clear support from leadership”.<sup>136</sup> This is the main challenge: the implementation of a sustainability philosophy in the corporate management that penetrates the day-to-day operations and the manufacturing processes.

The need for new and innovative business models that consider sustainability the crucial element, and not a simple afterthought, is concrete. Moreover, the emergence of several cultural and socioeconomic macro trends that challenge the mass production paradigm, has made this necessity even more urgent. It is in fact through innovation that the manufacturing processes of garments, as well as the composition of the materials, can change and overcome barriers imposed by fast fashion, enabling the model of slow fashion to be more adoptable.

Thanks to these arising movements, there has been a growing interest in the integration of corporate sustainability into conventional business model thinking.<sup>137</sup> All the terminologies coined in the business field in the recent years, have all been introduced to indicate the different aspects of this new business logics. To provide some examples of concepts, it is possible to mention the concept of Yanus, Moingeon, and Lehmann-Ortega on social business models<sup>138</sup>, the green business models of Sommer<sup>139</sup>, the Michelin and Fiorentino’s inclusive business

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<sup>136</sup> Bonini S. & Swartz S. (2014), Profits with purpose: How organizing for sustainability can benefit the bottom line. McKinsey on Sustainability & Resource Productivity

<sup>137</sup> Schaltegger S., Hansen E.G., Ludeke-Freund F. (2016), Business models for sustainability: Origins, present research, and future avenues, *Organization & Environment*, 29(1), 3–10

<sup>138</sup> Yunus M., Moingeon B., Lehmann-Ortega L. (2010), Building social business models: Lessons from the grameen experience, *Long Range Planning*, 43(2–3), 308–325

<sup>139</sup> Sommer A. (2012), *Managing green business model transformations*, Berlin: Springer

models<sup>140</sup>, and the most common concept of Stubbs and Cocklin<sup>141</sup>, then deepened by Birkin<sup>142</sup>, of sustainability business models.

Furthermore, the relevance of the topic can be proved by the growing number publications of academic and scientific journals addressing corporate sustainability, on sustainable business models. This affirmation can be demonstrated also by the data analysis developed in the previous chapter of the elaborate. In addition, besides the regular journal publications, special issues of some academic journals have been released focusing only on business models: an example is the special issue of the *Journal of Cleaner Production* in 2013 or the special issue of *Organization & Environment* in 2016.

## **2.8 Business models for a sustainable innovation**

The diffusion of knowledge, made possible thanks to scholars and practitioners, has confirmed the actuality of the theme. As sustained by the majority of them, sustainability has to be perfectly integrated not only with the corporate vision and mission, but also with the strategic objectives and with the research of continuous improvements on financial performances. In fact, following the research findings of a study conducted by Pedersen, he states that financial performance, business model innovation and corporate sustainability, bonded together, are associated with “more deeply rooted values in the organisation”.<sup>143</sup>

By acknowledging these results, it is possible to deduce that, from a managerial perspective, the development of business model innovation and of corporate sustainability strategies require the need to rethink the values within the organisation: substantial changes in the management thinking structure are needed in order to create a climate which facilitates the transformation. Without these arrangements, it would be difficult to bring the organization beyond a compliance-based approach.

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<sup>140</sup> Michelini L., Fiorentino D. (2012), New business models for creating shared value, *Social Responsibility Journal*, 8(4), 561–577

<sup>141</sup> Stubbs W., Cocklin C. (2008), Conceptualizing a “sustainability business model”, *Organization & Environment*, 21(2), 103–127

<sup>142</sup> Birkin F., Polesie T., 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*, 18(5), 277–290

<sup>143</sup> Pedersen E.R.G., Gwozdz W., Hvass K.K. (2018), Exploring the Relationship Between Business Model Innovation, Corporate Sustainability, and Organisational Values within the Fashion Industry. *J Bus Ethics* 149, 267–284

Business models are considered powerful means of creating value through sustainable innovations. Business models and sustainable innovation are strictly related, to such an extent that business models are seen as mediators for innovation that link production and consumption, with the additional capability of embracing stakeholders' expectations.

In this context, business models can be described as the plan that managers develop in order to be profitable and, at the same time, a market device to intermediate between different innovation networks and actors.

In one of his works Boons and Lüdeke-Freund reviewed the dominant literature on business models taking as reference about 50 articles that were dealing with “business model innovation”, and more than 20 with “business models” and “innovation”. The outcome suggested that the roles covered by business models can be grouped in two major functions, the first one as strategic marketing supporter of innovative processes, products and services; and the second one as an opportunity to provide a competitive advantage, only after the appropriate corrections have been made.<sup>144</sup>

These required changes to develop new ways to capture, create and deliver value can follow an incremental or radical improvement. When the improvement concerns a minor efficiency advancement of already existing business models it consists in incremental innovation; when it includes more radical advances that challenge predominant business models within the industry, there is a radical innovation.<sup>145</sup> An incremental innovation can be considered when there is an introduction of new green product lines, while the most drastically forms of radical innovations include fundamental changes in both the business model and at the wider system level.<sup>146</sup>

### **2.8.1 A broader perspective through the stakeholders' involvement**

For this to be possible, an intense work of restructuring and training is needed. This process needs to engage all the actors and stakeholders with which the company cooperates, in order to allow the broadest possible dissemination of a sustainable culture. The concept of sustainable

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<sup>144</sup> Boons, Lüdeke-Freund (2013), Business model for sustainable innovation: state-of-the-art and steps toward a research agenda, *Journal of Cleaning Production*

<sup>145</sup> Schaltegger S., Lüdeke-Freund F., Hansen E. G. (2011), Business cases for sustainability and the role of business model innovation, developing a conceptual framework, centre for sustainability management, Leuphana Universität Lüneburg

<sup>146</sup> Luqmani A., Leach M., Jesson D. (2016), Factors behind sustainable business innovation: The case of a global carpet manufacturing company, *Environmental Innovation and Societal Transitions* 24 (2017) 94-105



business model innovation reflects, in fact, this view by considering a greater set of stakeholders in the business model thinking and development.

In order to create truly collaborative relationships and build the stakeholders' commitments in sharing knowledge, resources and abilities, it is important to be able to align the values along the entire supply networks. The implementation of sustainability within fashion supply networks involves the re-commercialization process (for example by selling products from past collections or second-hand items). In the case of past collections, in order to make it possible, a system which includes a reverse supply chain is required, to guarantee the move of the garment backward from the final consumer to the manufacturer, and displace it to alternative sales channels, such as outlets or factory stores. In the case of the resale of second-hand clothes a new consumer segment is taken into consideration, and so, different values in the supply networks are required.

However, in both situations, beyond nurturing technical competences in logistics, commercialization and other corporate functions, stakeholders and actors involved in the system are required to exchange knowledge about consumers, marketing strategies and channel operations.

It is perfectly understandable now how important is the support for a sustainable approach from the entire system: the sharing of values facilitates the establishment of collaborative relationships, fosters the transformation of business models and promotes the resource sharing. Providing some concrete examples, some fashion brands have already experimented the implementation of sustainable business models adopting, beyond the classic channels and sales methods, also new ways to realize the recycling, reusing and reselling of clothes. A good example of the reselling approach is Patagonia, which is a outdoor fashion company strongly committed in social and environmental sustainability, that has developed an online platform in collaboration with eBay in order to allow consumers to buy second-hand garments.

## **2.8.2 How a business model should change in order to become sustainable**

Up to this point, it has been acknowledged that corporates have to include deep values and principles in their value propositions, identifying new opportunities to innovate and create sustainable value through the reinvention of business models.

Now, the elaborate wants to analyze more deeply which are the concrete changes that a part of business managers has implemented in order to achieve sustainability objectives and

sustainable innovations. Here, business models needed a significant change in order to be able to reduce the corporate footprints and to decouple production and consumption from social and environmental negative impacts.<sup>147</sup>

To address this challenge, companies reinvented their business starting from the outlining of the innovative sustainable model they wanted to obtain after the transformation, including the impacts that their socio-economic dynamics had at a global level. These arrangements have required a significant shift in the current managerial paradigm, recognizing the innovation of business models as the most powerful tool to guarantee the achievement of a sustainable culture. The common consumer model had to be substituted to allow the achievement of incremental and radical innovations in business models.

In concrete, the key challenge for fashion companies has been the rethinking of the initial phase, of sustainable garments, which corresponds to the design phase. Indeed, the majority of decisions regarding quality, components, material, manufacturing and dyeing processes are taken during the design phase. As such, design choices impact the whole business model, but also have a particular influence on the translation of sustainability values to the corporate value proposition.

Concrete changes that usually sustainable fashion companies include in the innovation of their business models regard the adoption of more environmentally-friendly materials in the production of clothes, for instance adopting sustainable fibres or recycled materials. Another technique is the greening of manufacturing processes through the use of natural dyeing technique or zero waste mechanisms. In addition, the inclusion of these practices into the corporate actions pushes firms towards the adoption of the slow fashion approach, moving away from the fast fashion model.

From this example, it can be observed how sustainability offers to companies two main interesting ways to scope out innovations: the product and the process innovation, that, in the preliminary research developed previously, were both categorized under the theme of “innovations to sustainability”. Product innovation includes the redesign of products (in this case of garments) around sustainability through the use of fewer resources that meet some specific social needs. The opportunities related with process innovations can be shown in the cross-functional nature of sustainability, which brings together different corporate divisions to provide a solution in a common process. A business process innovation is fundamental for the firm to reduce the negative externalities generated and the ecological footprint.

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<sup>147</sup> Boons, Lüdeke-Freund (2013), Business model for sustainable innovation: state-of-the-art and steps toward a research agenda, *Journal of Cleaning Production*

The first action to be taken in process innovation is the identification of the processes that have major impacts on the environment and introduce in them new strategies and innovations able to mitigate the consequences. One of the first mitigation techniques that started being adopted in the fashion industry is the introduction of an innovation in the packaging of clothes, using materials from waste.

Generally speaking, the main levels within which any organization can act are three: the technological level, the social level and the organizational level.

- Technological innovation can be described as the process adopted by a company that recognizes technology as a source of innovation. Technological innovation focuses on the technological features of a product and perceives business models as the means of connection between technology of production and technology of consumption, affecting stakeholders' perceptions of these features.

As largely affirmed by scholars, technological innovation can be recognized firstly in the modification of existing business models to take up new technologies (products are offered new ways through new strategies), secondly, in the integration of new innovative production processes or products with the already existing business models, and thirdly, in the development of new business models triggered by new technologies. Thus, technological innovation in business models can be summed up as the market device that permits the company to overcome internal and external barriers of marketing clean technologies. Moreover, it places an emphasis in the ability of business models to create a functional fit between technological aspects and production and consumption approaches.<sup>148</sup>

- Innovations at the social level take place when business models are strictly related with social value creation. Social innovation, as sustained by Lovins, is the key to create and transform markets towards sustainable development.<sup>149</sup> In this type of innovation, two different currents of interpretation among scholars can be recognized: one view focuses on the social purpose of the product innovation; while the second one sees social innovation as the scope of managerial practices. Following these concepts, the common

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<sup>148</sup> Boons, Lüdeke-Freund (2013), Business model for sustainable innovation: state-of-the-art and steps toward a research agenda, *Journal of Cleaning Production*

<sup>149</sup> Lovins A.B., Lovins L.H., Hawken P. (1999), A Road Map for Natural Capitalism (HBR Paperback Reprint 2000), *Harvard Business Review*, 1–14

challenge for managers is to change the logic of value creation through business models' modifications in order to create social value and maximize social benefits.

- The organizational level of innovation is about the change of business models through the “implementation of alternative paradigms other than the neoclassical economic worldview that shape the culture, structure and routines of organizations and thus change the way of doing business towards sustainable development”.<sup>150</sup> One of the main supporters of this kind of innovations is Birkin, that recognized the necessity to institutionalize social and natural needs as real societal and cultural demands, resulting in a consequent reinvention of business models.<sup>151</sup> The core concept, shared also by Stubbs and Cocklin, relies on the assumption that sustainable business models are developed by sustainability aspects coming from the non-economic environment that are then transferred to the corporate organizational level.

In conclusion, the concrete changes in business models to fully integrate the corporate commitment to sustainability is the most challenging implication for management. Companies with novelty-centered business models under some conditions have demonstrated to provide higher returns and higher performances.<sup>152</sup>

Even when firms are apparently committed in the right direction, there may not be concrete long-term results unless investments in sustainability are seen as core values in business models. It is true that today there is still much uncertainty about innovative and sustainable fashion business models and how they should be structured, indeed there still not exist a systematic approach to identify the drivers of success.

Acknowledging this limit, the work has traced how fashion and textile managers have responded to the sustainability call implementing these changes in their business models, even if it is a long process that is still incomplete and not shared by all managers. The path that fashion and textile companies have to follow is still uncertain, but a concrete reaction and intervention in these realities can be definitely considered in place.

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<sup>150</sup> Boons, Lüdeke-Freund (2013), Business model for sustainable innovation: state-of-the-art and steps toward a research agenda, *Journal of Cleaning Production*

<sup>151</sup> Birkin F., Polesie T., 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*, 18, 277–290

<sup>152</sup> Pedersen E.R.G., Gwozdz W., Hvass K.K. (2018), Exploring the Relationship Between Business Model Innovation, Corporate Sustainability, and Organisational Values within the Fashion Industry. *J Bus Ethics* 149, 267–284

## CONCLUSIONS

Sustainability can be considered today one of the most discussed topics both in public and managerial debate. The main purpose of this concept is to enable companies to operate in their markets with a long-term perspective, aiming at profits but, at the same time, respecting the environment and contributing to the social welfare.

In this elaborate the evolution of the concept of sustainability has been studied, firstly in the general business management, and then, more specifically, in the textile and fashion industry. The work can be considered a connection between the fields of business history and the theory of the enterprise based on the business model innovation, as the aim was to provide a complete observation of the phenomenon from a multilateral perspective.

In order to understand how the history has developed and which were the themes that have influenced the evolution of the trend, two preliminary researches have been developed, analyzing the distribution of the articles and publications over the years. The outcomes that have been obtained by combining the results of the analysis, together with the retracement of the business history, have demonstrated a steadily growing interest on social and environmental issues starting from the 1970s, when people started being concern about the future of next generation. So, it is possible to affirm that at the beginning the topic emerged as a simple sensitivity and attention to social and environmental themes.

Then, this new wave of awareness has led to the emergence of the new concept of sustainability during the 1990s, shifting from an attention to social and environmental issues to become a concrete part of corporate strategies, through the emergence of completely new business models.

As the work shows, in the first years, due to the introduction of new standards and regulations from different institutions, the problem has assumed a macroeconomic perspective, considering the role of single firms and micro-organizations only marginally: companies' role was reduced to the passive fulfilment of these obligations and standards compliance.

More and more firms started to embrace sustainability acknowledging the importance of contributing to a better environment, but in order to remain competitive in their market, a concrete change in the management perspective was required. The issue shifted from a political problem to a practical necessity for managers and practitioners exactly when companies started being forefront actors of the change.

Firms incrementally reinvented their strategies and introduced new values in their business models, and this has emerged with a significant evidence in the process of data analysis.

The elaborate shows how the sustainability concept has evolved through the years and has gained an increasing importance in the global landscape, a great number of companies has started to commit to sustainability, but from the numbers obtained from the two studies it is possible to undoubtedly recognize that it is still a niche problem.

From the results of the research, it can be deduced that the theme is not discussed among all managers and practitioners, but maintain a focus only in those fields that specifically address the problem. In fact, the journals that have showed a significant number of articles discussing the theme are the ones that are specialized and that were born with this main purpose. On the other hand, the most general and influential journals have shown an increasing attention, but still low to be considered significant.

These results have found confirmation in the second research concerning the fashion and textile industry, where also here, the discussion turned out to be focused on the specialized journals. Acknowledging the important contribution that the textile sector has on the global economy and the high levels of unsustainability of the industry, the research has demonstrated a growing interest from fashion management in finding new alternative practices to address the unsustainability problem.

After having developed the second analysis, the green evolution of the industry has been traced. Following the literature of the fashion and textile industry that emerged, it is possible to affirm with certainty that the discussion on environmental and social themes emerged only in the 2000s. Before, the debate was focused on the general structure of the market, on the improvement the corporate performances, and on the development of strategies to increase the efficiency of production.

It was during the first years of the 2000s that part of textile managers decided to align its business operations and strategies with sustainable objectives and ethical values. The desire to shift the position from passive compliance of regulations to active actors is highly visible also in the fashion sector. So, managers that decided to commit to sustainability, reorganized their way of doing business and renewed their business models. As described in the last chapters of the elaborate, business models are considered powerful means of creating value through sustainable innovations and this represents a possible path for business managers to steer a concrete change.

Furthermore, from the literature emerged the important role that traceability and the different corporate performance measurements tools have in supporting fashion companies through the achievement of sustainable objectives and in the implementation of improvement plans.

In conclusion, it has been understood that sustainability, in order to succeed, needs to be seen as an organizational priority.

Today there is still much uncertainty about innovative and sustainable business models as there still not exist a systematic approach to identify the drivers of success. The path to sustainability is a long and complex process that is still part of a niche and not shared by all managers.

Debate among practitioners and scholars about sustainability is becoming more intense in the last years, many firms have reacted to the trend and have started its implementation in their corporates. The theme is assuming an increasing relevance but the process is still in a development phase.

## REFERENCES

Adinolfi F., Di Pasquale J. (2014), The Water footprint. What is the Green, Blue and Gray Water Footprint?, ExpoNet, online article available at: <http://www.expo2015.org/magazine/en/sustainability/the-water-footprint-2.html>

Atkins P.J., Lummel P., Oddy D.J. (2007), Food and the City in Europe since 1800, Aldershot: Ashgate, chapters 7-10

Azapagic A., Perdan S. (2000), Indicators of Sustainable Development for Industry: A General Framework, Process Safety and Environmental Protection, 78(4), 243–261

Azapagic A. (2003), Systems Approach To Corporate Sustainability A General Management Framework, Trans IChemE, 81, Part B, September, 303–316

Barthel P., Ivanaj V. (2006), Is Sustainable Development in Multinational Enterprises a Marketing Issue?, The Multinational Business Review, 15(1), 67-87

Batra R., Ray M.L. (1986), Affective responses mediating acceptance of advertising, Journal of consumer research 13, 234-249

Bendell J., Kleanthous A. (2007), Deeper Luxury: Quality and Style when The World Matters, London: World Wildlife Fund United Kingdom

Berrone P. (2016), How to succeed at sustainability (and why greenwashing doesn't work), Forbes

Birkin F., Polesie T., 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, 18(5), 277–290

Bonini S. & Swartz S. (2014), Profits with purpose: How organizing for sustainability can benefit the bottom line. McKinsey on Sustainability & Resource Productivity



Boons, Lüdeke-Freund (2013), Business model for sustainable innovation: state-of-the-art and steps toward a research agenda, *Journal of Cleaning Production*

Case S. (2015), *Eco-Labels: Making Environmental Purchasing Easier?*, available at:  
<http://americacityandcounty.com/green/eco-labels-making-environmental-purchasing-easier>

Cataldi C., Dickinson M. and Grover C. (2010), *Slow fashion: Tailoring a strategic approach towards sustainability*, In Masters' thesis, Karlskrona, Sweden: School of Engineering, Blekinge Institute of Technology

Chandler A.D., Amatori F., Hikono T. (1997), *Big Business and the Wealth of Nations*, Cambridge, New York, Cambridge University Press

Charter M., Peattie K., Ottman J. & Polonsky M.J. (2006), *Marketing and sustainability*, Centre for Business Relationships, Accountability, Sustainability and Society

Chevalier M., Mazzalovo G. (2012), *Luxury Brand Management: A World of Privilege*, II edition, Hoboken, New Jersey: John Wiley & Sons

Christmann, P. (2000), Effects of "Best Practices" of Environmental Management on Cost Advantage: The Role of Complementary Assets, *The Academy of Management Journal*, 43(4), 663-680

Coglianesi C., Anderson R., (2012), *Business and Environmental Law*, in Bansal P., Hoffman, A.J., *The Oxford Handbook of Business and the Natural Environment*, Oxford, New York, Oxford University Press, 140–157

Council of Supply Chain Management Professionals, (2013), *Supply Chain Management Terms and Glossary*, pg. 187

Dande R. (2012), *The Rise of Green Advertising*, *Journal of Mass Communication & Journalism*, Vol. 2, Issue 10

De Brito M. P., Carbone V., Blanquart C. M. (2008), Towards a sustainable fashion retail supply chain in Europe: organisation and performance, *International Journal of Production Economics*, 114(2), 534–553

Dyllick T., Hockerts K. (2002), Beyond The Business Case For Corporate Sustainability, *Business Strategy and the Environment*, 11, 130–141

Ecolabel Index (2014), About Us, available at: <http://www.ecolabelindex.com/>

Egelston A.E. (2012), *Sustainable Development: A History*, Springer Science & Business Media

Ehrlich R.P., Holdren, J. P. (1971), Impact of Population Growth, *Science*, 171(3977), 1212-1217

Elkington J. (1994), Towards the Sustainable Corporation: Win-Win-win Business Strategies for Sustainable Development, *California Management Review*, vol. 36, n.2 (Winter)

Elkington J., (1997), *Cannibals with Forks. The Triple Bottom Line of 21st Century*

European Commission (2011), *Green Public Procurement and the European Ecolabel*, available at: [http://ec.europa.eu/environment/gpp/pdf/toolkit/module1\\_factsheet\\_ecolabels.pdf](http://ec.europa.eu/environment/gpp/pdf/toolkit/module1_factsheet_ecolabels.pdf)

European Commission (2014), *Relazione della Commissione al Parlamento Europeo e al Consiglio, COM (2014) 633 final*, Bruxelles, available at: <https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=CELEX:52014DC0633&from=DE>

European Commission (2011), *Study on different types of Environmental Labelling (ISO Type II and III Labels): Proposal for an Environmental Labelling Strategy*, available at: [http://ec.europa.eu/environment/ecolabel/about\\_ecolabel/reports/erm.pdf](http://ec.europa.eu/environment/ecolabel/about_ecolabel/reports/erm.pdf)

European Footprint Confederation, <http://cec-footwearindustry.eu/>

European Union law (2011), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32011R1007>

European Union law (2001), <https://eur-lex.europa.eu/legal-content/IT/ALL/?uri=CELEX%3A32001L0095>

European Union law (2007), European Chemicals Agency (ECHA), <https://echa.europa.eu/regulations/reach/understanding-reach>

European Union law (2019), <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32019R1021>

European Union law (2012), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02012R0528-20210329>

Federico G. (2014), Growth, Specialization, and Organization of World Agriculture, in Larry Neal and Jeffrey G. Williamson “The Cambridge History of Capitalism”, vol. 2, Cambridge: Cambridge University Press, pp. 52-60

Finnveden G., Hauschild M.Z., Ekvall T., Guinée J., Heijungs R., Hellweg S., Koehler A., Pennington D., Suh S. (2009), Recent developments in Life Cycle Assessment, *Journal of Environmental Management* 91, 1–21

Fletcher K. (2008), *Sustainable fashion and textiles: Design journeys*, Routledge, London

Fletcher K. (2010), Slow fashion: an invitation for systems change, *Fashion Practice: The Journal of Design, Creative Process and the Fashion*, Vol. 2 No. 2, pp. 259-266

Fraj E., Martines E. (2006), Environmental values and lifestyles as determining factors of ecological consumer behavior: an empirical analysis, *Journal of Consumer Marketing*, Vol. 23 No.3, pp. 133-144

Gardetti M. A., Torres A. L. (2017), *Sustainability in Fashion and Textiles: Values, Design, Production and Consumption*. A Greenleaf Publishing Book, Routledge

Grant J. (2009), *Green Marketing. Il Manifesto*, Francesco Boschi Editore

Greenpeace (2016), *Timeout for fast fashion*

Greenpeace, <https://www.greenpeace.org/italy/chi-siamo/>

GS1 (2006), *The GS1 Traceability Standard: What you need to know*, available at: [https://www.gs1.org/docs/traceability/GS1\\_traceability\\_what\\_you\\_need\\_to\\_know.pdf](https://www.gs1.org/docs/traceability/GS1_traceability_what_you_need_to_know.pdf)

Harbaugh R., Maxwell J.W., Roussillon B. (2011), *Label confusion: The Groucho Effect of uncertain standards*, *Manag, Sci*, 57, 1512–1527

Hardjono T. W., van Marrewijk M. (2001), *The Social Dimensions of Business Excellence, Corporate Environmental Strategy*, 8(3), 223–233

Henninger C. E., (2015), *Traceability the New Eco-label in the Slow-Fashion Industry? Consumer perceptions and micro-organizations responses*

Henninger C. E., Alevizou P. J., Oates C. J. (2016), *What is sustainable fashion? Journal of Fashion Marketing and Management: An international Journal*

Henninger C. E., Alevizou P., Goworek H., Ryding D. (2017), *Sustainability in fashion: a cradle to upcycle approach*

Hethorn J., Ulasewicz C. (2008), *Sustainable Fashion: Why Now? A conversation about issues, practices, and possibilities*, Fairchild Books

Hilton M. (2003), *Consumerism in 20th Century Britain*, Cambridge, Cambridge University Press

Hoffman A.J., Bansal P. (2012), *Retrospective, Perspective and Prospective: Introduction*, in Bansal P., Hoffman A.J., *The Oxford Handbook of Business and the Natural Environment*, Oxford, New York, Oxford University Press, 140–157

Hogevold N. M., Svensson G. (2012), A business sustainability model: a European case study, *Journal of Business & Industrial marketing*, 27 (2), 142-151

International Organization for Standardization (2006), Online Browsing Platform, available at: <https://www.iso.org/obp/ui/#iso:std:iso:14040:ed-2:v1:en>

Ivan Montiel (2008), Corporate Social Responsibility and Corporate Sustainability: Separate Pasts, Common Futures, Source: *Organization & Environment*, September 2008, Vol. 21, No. 3 (September 2008), pp. 245-269, Sage Publications, Inc.

Joergens C. (2006), Ethical fashion: myth or future trend?, *Journal of Fashion Marketing and Management*, Vol. 10, No. 3, pp.360-371

Jones G. (2017), *Profits and sustainability. A History of Green Entrepreneurship*, Oxford University Press

Jones G., Lubinski C. (2014), Making ‘Green Giants’: Environment Sustainability in the German Chemical Industry, 1950s-1980s, *Business History* 56, no.4, pp.623-49

Karaosman H. (2016), *Sustainability in fashion. The factbook*

Kärnä J., Juslin H., Ahonen V., Hansen E.N. (2001), Green Advertising: Greenwash or True Reflection of Marketing Strategies?, *Greener Management International*, Spring 33, 59-70

Kaynak H., Montiel I. (2009), The relationship between sustainable supply chain management and sustainable performance: an integrated framework, *Academy of Management Proceedings*, Academy of Management

Kerr J., Landry J. (2017), *Pulse of fashion Industry*, Global Fashion Agenda & Boston Consulting Group

Konar S., Cohen M.A., (2001), Does the market value environmental performance? *Rev. Econ. Stat.* 83, 281–289

Kotler P, Zaltman G. (1971), Social Marketing: An Approach to Planned Social Change, *Journal of Marketing*, 35, July, 3-12

Kotler P. (2011), Reinventing Marketing to Manage the Environmental Imperative, *Journal of Marketing*

Kumar V., Agrawal T. K., Wang L., Chen Y. (2017), Contribution of traceability towards attaining sustainability in the textile sector, *Text Cloth Sustain* 3,5

Lee K-H. (2012), Linking stakeholders and corporate reputation towards corporate sustainability, *International Journal of Innovation and Sustainable Development*, 6(2), 219–235

Loetscher S. (2017), Changing fashion: the clothing and textile industry at the brink of radical transformation. WWF Switzerland

Lopes D. S. T., Lubinski C., Tworek H. J. S. (2020). *The Routledge Companion to Makers of Global Business*, Routledge Companions, Taylor & Francis Group

Lovins A.B., Lovins L.H., Hawken P. (1999), A Road Map for Natural Capitalism (HBR Paperback Reprint 2000), *Harvard Business Review*, 1–14

Luqmani A., Leach M., Jesson D. (2016), Factors behind sustainable business innovation: The case of a global carpet manufacturing company, *Environmental Innovation and Societal Transitions* 24 (2017) 94-105

Lyon T.P., Montgomery A.W. (2015), The Means and Ends of Greenwashing, *Organization and Environment*

Martilla J.A., James J.C. (1977), Importance-Performance Analysis, *Journal of Marketing*, 41(1), 77-79

McNeill J.R., Engelke P. (2014), *The Great Acceleration: An Environment History of the Anthropocene since 1945*, Cambridge, MA: Belknap Press of Harvard University Press

McKinsey & Company (2020), The state of fashion 2020

Meadows D.H, Meadows D.L., Randers J., Behrens W.W. III. (1972), The Limits to growth: A report for the Club of Rome's. Project on the Predicament of Mankind. New York, Universe Books

Michelini L., Fiorentino D. (2012), New business models for creating shared value, *Social Responsibility Journal*, 8(4), 561–577

Ministero della Transizione Ecologica (2015), Carbon footprint, available at: <https://www.minambiente.it/pagina/cose-la-carbon-footprint>

Okonkwo U. (2010), *Luxury Online: Styles, Systems, Strategies*, London: Palgrave Macmillan

Parrish B.D. (2007), Designing the sustainable enterprise, *Futures*, 39(7), 846-860

Parveen S. (2014), Rana Plaza factory collapse survivors struggle one year on, *BBC News* (online)

Pedersen E.R., Gwozdz W., Hvass K.K. (2018), Exploring the Relationship Between Business Model Innovation, Corporate Sustainability, and Organisational Values within the Fashion Industry. *J Bus Ethics* 149, 267–284

Pedersen, E.R.; Neergaard, P. Caveat Emptor (2006), Let the Buyer Beware! Environmental Labelling and the Limitations of ‘Green’ Consumerism. *Bus. Strat. Environ.* 2006, 15, 15–29

Ponte S., Cheyns E. (2013), Voluntary standards, expert knowledge and the governance of sustainability networks, *Global Networks*, Volume 13, Issue 4, pp. 459-477

Porter M.E., van der Linde C. (1995), Toward a New Conception of the Environment - Competitiveness Relationship, *Journal of Economic Perspectives* 9, no. 4, pp.97-118

Purvis B., Mao Y., Robinson D. (2019), Three pillars of sustainability: in search of conceptual origins, *Integrated Research System for Sustainability Challenge*, Springer

Sarkis J. (2003), A strategic decision framework for green supply chain management, *Journal of cleaner production*, 11(4), 397-409

Schaltegger S., Hansen E.G., Ludeke-Freund F. (2016), Business models for sustainability: Origins, present research, and future avenues, *Organization & Environment*, 29(1), 3–10

Schaltegger S., Lüdeke-Freund F., Hansen E. G. (2011), Business cases for sustainability and the role of business model innovation, developing a conceptual framework, centre for sustainability management, Leuphana Universität Lüneburg

Schaltegger S., Ludeke-Freund F., Hansen E. (2012), Business cases for sustainability: the role of business model innovation for corporate sustainability, *International Journal of Innovation and Sustainable Development*, 6(2), 95–119

Seuring S., Muller M. (2008), From a literature review to a conceptual framework for sustainable supply chain management, *Journal of cleaner production*, 16 (15), 1699-1710

Shen D., Richards J., Liu F. (2013), Consumers' awareness of sustainable fashion, *Marketing Management Journal*, 23(2), 134-147

Siano A. (2014), *Management della comunicazione per la sostenibilità*, Franco Angeli, Milano

Simmel G. (2003), The philosophy of fashion, In: Clarke D.B., Doel M.A., Housiaux K.M., *The Consumption Reader*, New York: Routledge, pp. 238-245

Skjoett-Larsen T. (1999), Supply Chain Management: A New Challenge for Researchers and Managers in Logistics, *The International Journal of Logistics Management*, Vol. 10 No. 2, pp. 41-54

Sommer A. (2012), *Managing green business model transformations*, Berlin: Springer



Stocchetti A. (2015), The Sustainable Firm: from principles to practice, *International Journal of Business and Management*, Canadian Center of Science and Education, vol. 7, pp. 34-47

Stocchetti A., Verma P., Mohapatra S. (2020), Professionals as the 4th 'P' of sustainability: a sustainable HRM framework with strategic implications, *International Journal of Sustainable Strategic Management*, vol. 8, pp. 159-180

Stubbs W., Cocklin C. (2008), Conceptualizing a ‘‘sustainability business model’’, *Organization & Environment*, 21(2), 103–127

Todeschini B.V., Cortimiglia M.N., Callegaro-de-Menezes D., Ghezzi A. (2017), Innovative and sustainable business models in the fashion industry: Entrepreneurial drivers, opportunities, and challenges, *Business Horizons* (2017) 60, 759—770

The Business of Fashion and McKinsey & Company, (2019), *The State of Fashion 2019*

The UN Global Compact–Accenture CEO Study on Sustainability, (2013), *Architects of a Better World*, Accenture and United Nations Global Compact, [unglobalcompact.org](http://unglobalcompact.org)

United Nations (1987), *Report of the World Commission on Environment and Development. Our Common Future*

United Nations, (2002), *International Year of Freshwater 2003*, New York: United Nations

Van Dyke F. (2008), *Conservation Biology: Foundations, Concepts, Applications*, New York: Praeger, p.19

Vigneron F., Johnson L. W. (2004), Measuring perceptions of brand luxury, *Journal of Brand Management*, 11(6), pp. 484-506

Witkowski T.H., Jones D.G.B. (2016), *Historical Research in Marketing: Literature, Knowledge and Disciplinary Status*, University of Texas Press, *Information & Culture: A Journal of History*, vol. 51, Number 3, pp. 399-418

Wrigley A. (2010), *Energy and the English Industrial Revolution*, New York, Cambridge University Press

Yunus M., Moingeon B., Lehmann-Ortega L. (2010), Building social business models: Lessons from the grameen experience, *Long Range Planning*, 43(2–3), 308–325

Zhang T., Kraisintu K. (2011), The role of traceability in sustainable supply chain management, Master Thesis, available at: <http://publications.lib.chalmers.se/records/fulltext/146242.pdf>

2012 Sustainable Investment Review, Global Sustainable Investment Alliance, 2013, [gsi-alliance.org](http://gsi-alliance.org)