A call for a fashion pact: challenges and opportunities for circular economy in the brazilian fashion industry

Um chamado para um pacto fashion: desafios e oportunidades para a economia circular na indústria fashion brasileira

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ABSTRACT
The fashion industry comprises processes from manufacturing to retailing of a variety of products, such as clothes, shoes, and accessories. This global enterprise has shown a significant change towards the model of just-in-time production, consolidating the concept of fast fashion, resulting in higher production, lower costs, and more competitive prices, although less aligned with sustainable development. One of the challenges is the generation of higher volumes of solid waste, not always managed sustainably. This article focuses on investigate how the clothing industry in Brazil is dealing with its textile solid waste management. The approach is an analysis of the legal instruments presented by Brazilian policies regarding solid waste management. Results show that, although the country provides comprehensive legislation, Brazilian clothing industry lacks a logistical project for allowing a circular economy in its full capacity. This scenario leads to some Brazilian recycling industries importing textile solid waste to supply their units since the imported bales of textile waste are separated and classified. Therefore, compliance with Brazilian policies needs improvement to insert its own textile solid wastes back into production. One strategy is the call for a fashion pact among stakeholders in Brazilian clothing industry, as discussed in this paper.

Keywords: circular economy, fashion industry, environmental policy, compliance, fashion pact.

RESUMO
A indústria fashion compreende processos que vão desde a manufatura ao varejo de uma variedade de produtos, como roupas, sapatos e acessórios. Essa indústria global mostrou uma significativa alteração nos modelos de produção rápida, consolidando o conceito de fast fashion que resulta em maior produção, custos menores e preços competitivos, apesar de menor alinhamento com desenvolvimento sustentável. Um dos desafios é a geração de maiores volumes de resíduos sólidos e seu manejo sustentável. Este artigo foca em investigar como a indústria de roupas no Brasil está lidando com a gestão de resíduos sólidos, por abordagem que analisa os instrumentos legais da política brasileira de gestão de resíduos sólidos. Os resultados demonstram que, por mais que o país possua uma legislação compreensiva, falta à indústria de roupas Brasileira um projeto logístico que permita adotar a economia circular em toda sua capacidade. Este cenário leva parte das indústrias de reciclagem brasileiras a importarem resíduos sólidos têxteis para suprir suas unidades, uma vez que os resíduos importados ingressam no país já devidamente separados e classificados. Diante disso as políticas brasileiras e seu cumprimento deve ser melhorado, visando reinserir os resíduos têxteis sólidos próprios na cadeia de produção. Uma das estratégias é adotar um chamado por um pacto fashion, que envolva os stakeholders da indústria de roupas Brasileira, conforme proposto neste artigo.

Palavras-chave: economia circular, indústria fashion, políticas ambientais, compliance, pacto fashion.
1 INTRODUCTION

The concept of fashion is wider than just producing trendy clothes. Beyond the apparel creative design, the fashion industry comprises different activities from raw material extraction and production until the design, sale, and promotion of clothing, accessories, and footwear (HINES, BRUCE, 2007; STEELE, MAJOR, 2020). Moreover, the fashion industry also encompasses the manufacturing of cell phone cases, jewelry, glasses, hats, purses, and belts, just to name a few examples. In the textile factory, the yarn becomes fabric and is generally dyed and bleached. Then the textile material receives its own design to be sewn and printed, turning into a garment in the clothing industry. This multibillion-dollar business employs millions of people internationally, irrespective of being related to the high fashion industry, for instance on the production of luxury ball garments and expensive brands, or in the mass fashion industry with the production of what is also known as street fashion (STEELE, MAJOR, 2020).

Around 1980, the retailers, to increase competition in the market, started to anticipate the demand earlier than the consumption (BHARDWAJ, FAIRHURST, 2010). Such strategies to increase consumption go along with the creation of fashion for the seasons, resulting in the named fast fashion. The concept of fast fashion is related to the changes that the clothing industry is going over the years, and is still evolving, due to its constant and fast expansion (DJELIC, AINAMO, 1999). Fast fashion, along with the adoption of the just-in-time production system, brought to the clothing industry a more competitive, higher production, although a less environmentally speaking sustainable scenario (BHARDWAJ, FAIRHURST, 2010; BUKHARI et al., 2018). Therefore, in the last decades, the consumption of clothes has increased by 400 percent, mainly because clothes are becoming cheaper and more accessible, resulting in irrational need and desire (MALULY, 2020). The higher production coming from new technologies related to just-in-time production results in higher manufacture and consumption which, although advantageous for sales, translates into the clothing industry generating negative impacts on the environment. The area of Dhaka, the capital city of Bangladesh, has 60 percent of its surface waters polluted, and textile factories being the second largest contributor to pollution (Natural Resources Defense Council 2012). Similar scenarios are presented
worldwide. Approximately 20 percent of all freshwater pollution globally is due to textile treatments and dyeing on clothes (UN Environment 2018). In addition to water contamination, solid waste generation is another issue related to the fashion industry. Textile solid wastes result in large quantities from the just-in-time production system, which not always is based on reducing residual materials. Another reason for the generation of textile solid wastes is the short lifetime of many items (BHARDWAJ, FAIRHURST, 2010). According to the Ellen Macarthur Foundation, less than 1 percent of the material used to produce clothing is recycled into new clothing, representing a loss of more than USD 100 billion (United States of America dollars) worth of materials each year (Ellen MacArthur Foundation 2017a). Beyond the cost of losses related to lack of recycling, high costs are associated with textile solid waste disposal. The estimated cost of landfilling clothing and household textiles each year in the United Kingdom is approximately GBP 82 million (British pound), which is equivalent to about USD 108 million (Ellen MacArthur Foundation 2017a).

This paper discusses how the clothing industry in Brazil is dealing with its textile solid waste generation and management and suggests a strategy to improve its circular economy (CE). The following sections will cover information on the clothing industry worldwide and the correspondent textile solid waste. A section about the environmental regulatory system in Brazil will be followed by analyses to verify if the national legal instruments are effectively contributing to implementing CE in this industry. In the end, some strategies for best textile solid waste management in the Brazilian clothing industry will be presented with a call for a fashion pact among stakeholders.

2 BACKGROUND

2.1 OVERVIEW OF THE CLOTHING INDUSTRY AND RELATED TEXTILE SOLID WASTE GENERATION

As indicated in the last section, the consumption of clothes has increased significantly over the last years. Higher consumption of clothes is resulting from a lifestyle prone to an increased feeling of need for following the fashion for each season, thus reducing the life cycle of garments. The number of clothes produced annually
worldwide has exceeded 100 billion pieces for the first time in 2014 (CHAIN, 2017). Overall global consumption of clothing in 2017 was 62 million tonnes and is expected to rise by 63 percent to 102 million tonnes in 2030 (CHAIN 2017). The positive aspects of such growth are related to economic progress, contributing both to wealth generation and employment. Despite this, at the same time, large amounts of textile solid waste, both post-industrial and post-consumer, are causing some negative environmental impacts. Post-industrial wastes are resulting from chips, scraps, flaps, or parts rejected due to defects. The amount of post-industrial waste depends on a variety of factors, including the volume of production, size, and shape of the molds, and width of fabric rollers. Moreover, the steps in the manufacturing process, such as modeling method, fitting, and marking, also affect the generation of waste, both for automated and manual systems. Post-consumer wastes are generated outside the industry, thus resulting from the disposal of torn clothes or even good pieces that consumers do not want anymore. An estimated 92 million tonnes of textile solid waste are created annually from the fashion industry and is estimated to increase by about 60 percent up to the year 2030, reaching 148 million tonnes (CHAIN, 2017). According to a report by the British Broadcasting Corporation (BBC), in 2017 approximately 85 percent of all textiles thrown away in the United States were either disposed into landfills or incinerated (BEALL, 2020). It is estimated that the average North American throws away around 37 kg of clothes every year (BEALL, 2020). However, about 95 percent of the textiles that are landfilled each year could be reused or recycled (CHAIN, 2017).

Brazil holds fourth place in the world for clothes manufacturing, and third in denim production, being a significant player in the sector (CNI 2014, p. 99)). The country is self-sufficient in cotton production and, coupled with the high investments being done in the manufacture of synthetic fibers, produces 6.5 billion pieces of clothing per year (CNI 2014, p. 99). The clothing sector in the country encompasses about 32,000 companies, of which more than 80 percent are small and medium-sized enterprises (SME) (SCHOTT, 2019). According to the latest report of the Brazilian Textile and Apparel Industry Association (in Portuguese known as ABIT - Associação Brasileira da Indústria Têxtil e de Confecção), the textile sector employs around 1.7 million workers, of which
75 percent are employees in the clothing segment (SEBRAE, 2014). In 2012, the turnover of the textile and clothing sector was USD 56.7 billion, which represents 6 percent of the total production value of the country's manufacturing industry. On the other side, the same report of ABIT indicates that the textile industry in Brazil produces approximately 170,000 tonnes of textile solid waste per year and at least 80 percent is disposed of in dumps or landfills (SEBRAE, 2014). Nevertheless, with proper management and valuation, such textile solid waste could go back to the production chain, which would generate income and minimize environmental impacts. Beyond the clothing industry, textile solid waste can become raw material to other industries such as automotive, furniture, mattress, and coarse yarns, just to name a few. According to the Brazilian National Confederation of Industry, almost all textile waste generated is liable to reenter the production chain, regardless of its composition (CNI, 2014, p. 100).

Therefore, with proper separation, for instance, by size, color, and composition, followed by the implementation of the organized collection, textile solid waste could be either defibered and recycled into new yarns, new clothes, or upcycled. The concept of recycling involves the process of turning waste into reusable material, irrespective of the final quality of the product. Upcycling is a specific form of recycling that turns waste into a material or product that is of the same or higher quality than the original piece (LUCY, 2020).

The paradox created by the inexistence of a structured separation of textile solid waste in Brazil is such that some recycling industries prefer to import textile waste from other countries to supply their units with raw material. The reason these industries import bales is that they enter the country properly separated and classified. In 2012, some recycling industries imported an equivalent of 10 tonnes or USD 11 million of textile solid waste in bales (CNI, 2014, p. 104). Just as an example, only one of the largest textile clusters in Brazil, the area known as Bom Retiro located in the city of São Paulo, generates 12 tonnes of textile solid waste daily, which are not being recovered (CNI, 2014, p. 102). Therefore, the economic potential for the recovery of Brazilian textile solid wastes exists and would contribute significantly, beyond the opportunity for businesses, for also
meeting aspects of the environmental regulatory system in the country, as discussed in the following section.

2.2 ENVIRONMENTAL REGULATORY SYSTEM IN BRAZIL

This section will discuss some aspects related to the Brazilian regulatory system, regarding the topic of textile solid waste from the clothing industry, being the National Environmental Policy, the Brazilian Federal Constitution, and the National Solid Waste Policy.

The National Environmental Policy was launched by the Federal Statute number 6.938 in 1981 (BRASIL, 1981). This governmental policy brought goals, formulation, enforcement mechanisms, as well as created the National Environment System and the Environmental Defense Platform. The main calls of the National Environmental Policy are the importance of the balance between economic and social development while ensuring the preservation of the quality of the environment. It is noteworthy that the mentioned statute aims to preserve, improve, and recover the environmental quality conducive to life. It aims to ensure conditions for socio-economic development, the interests of national security, and the protection of the dignity of human life, considering the control and zoning of potentially polluting activities. This national policy has brought the legal definition of pollution as the degradation of environmental quality, resulting from activities that directly or indirectly launch materials or energy that do not comply with the established environmental standards. Moreover, it reinforces that the polluters are obliged, regardless of the existence of a fault, to indemnify or repair the damage caused to the environment and to third parties, affected by their activity. It is interesting to note that this policy was launched 40 years ago, and it was considered very progressive at that time.

Following the world's growing concern on environmental issues, an updated Brazilian Federal Constitution was approved in 1988 (BRASIL, 1988). At that time, for the first time in Brazil, the healthy environment was included as a fundamental right and as an offshoot of the fundamental principle of human dignity. Article 225 of the Brazilian Federal Constitution states that “everyone has the right to an ecologically balanced
environment, a good for the common use of the people and essential to a healthy quality of life, imposing on the government and the community the duty to defend and preserve the environment for those present and future generations”. The consolidated understanding of the Brazilian Supreme Court has been interpreting the provisions of Article 225 of the Federal Constitution as a third generation right.

Such interpretation comes from the aspect that the protection of the environment is an intergenerational entitlement. Therefore, a clean and healthy environment must be preserved not only in the present but also for future generations. The third generation right constitutes a legal prerogative of collective ownership, reflecting, within the human rights affirmation process, the expression of an attributed power not to the individual itself, but in a comprehensive sense of the social collectivity itself (BRASIL, 1995, p. 3). The Federal Constitution recognizes that issues pertaining to the environment are of vital importance for the whole of our society, either because they are necessary for the preservation of values that are not measurable economically, or because the defense of the environment is a general constitutional principle that conditions economic activity (ROCHA, QUEIROZ, 2011).

Then, in 2010, the Brazilian National Solid Waste Policy (NSWP) was instituted by Federal Law number 12.305 (BRASIL, 2010). This governmental policy is a major regulatory mark in the sector, as it enforced the obligation of the producer to treat all solid wastes, regardless of the origin and characteristics. Moreover, for some scenarios, this policy calls for shared responsibility between public and private sectors, as well as citizens. The NSWP presents 15 major elements for actions, as follows.

- Protection of public health and environmental quality.
- Reduction, reuse, recycling, and treatment of solid waste as well as the environmentally appropriate final disposal.
- Reduction of hazardous waste.
- Incentives for the recycling industry.
- Inclusion of informal recyclers in actions involving shared responsibility with public and private sectors. Informal recycler is the term used for people who collect reusable and recyclable materials on the streets.
● Integrated solid waste management.
● Regularity, continuity, and functionality of public services for urban cleaning and municipal solid waste management, with the adoption of mechanisms to ensure costs recovery to guarantee operational and financial sustainability.
● Continued technical building capacity.
● Articulation between the public and private sector, towards technical and financial cooperation for the integrated solid waste management.
● Priority, in government procurement and contracting, for recycled and recyclable products, as well as goods, services, and works that consider criteria compatible with socially and environmentally sustainable consumption patterns.
● Encouragement for implementation of product life cycle assessment.
● Encouragement for environmental labeling.
● Incentives for the adoption, development, and improvement of clean technologies.
● Incentives for the development of environmental and business management systems aimed at improving production processes, including energy recovery and material recovery, by means of reverse logistics.
● Encouragement of sustainable production and consumption of goods and services.

Within the objectives of this paper, the last three aforementioned elements deserve special attention due to the strict relationship with the production and consumption of clothing. The NSWP stresses the encouragement for the adoption of sustainable patterns of production and consumption of goods, thus there is room for related improvements in the clothing industry. Furthermore, reverse logistics, as indicated in the NSWP, is an instrument of economic and social development characterized by a set of actions, procedures, and means designed to enable the collection and return of solid waste to the business sector, for reuse in its cycle, in other productive cycles, or another appropriate destination. Based on the NSWP, reverse logistics in Brazil is mandatory for some products and their packings considered hazardous, such as pesticides, batteries, tires, lubricating oils, fluorescent lamps, electronics, and their components, just to name a few.
Although the textile solid waste may contain oil and other chemicals, consequently with potential for hazard, there is no obligation imposed by the NSWP to implement reverse logistics systems for the clothing industry. Not to mention the amount of plastic resulting from pieces in clothes and respective packing, which adds to the large volumes of plastic being generated worldwide. This aspect adds to the potential generation of microplastics in the oceans (GHOSH, AGAMUTHU, 2019).

Therefore, it would be beneficial if some types of textile waste were included in the mandatory items, hence requiring compliance from the clothing industry. As presented in this section, throughout the years in Brazil, the government passed a few federal environment protection statutes. It is unfortunate that not always these regulations are properly followed. Although Brazil has robust legislation, the country faces many negative impacts on its environment, due to a lack of compliance in a variety of situations. Nevertheless, the next section will bring some opportunities to promote better management of the textile solid waste generated, based on the concept of the circular economy (CE).

2.3 INSTRUMENTS TOWARDS CIRCULAR ECONOMY IN THE FASHION INDUSTRY

According to the Ellen MacArthur Foundation, in the world, an equivalent of one garbage truck with textiles is landfilled or incinerated every second (Ellen MacArthur Foundation 2017b). The economic model based on extract, produce, and discard, known as linear economy, is among the reasons for generating large volumes of wastes. One of the possibilities to overcome such a scenario is the adoption of the concept of CE and its related practices of reducing, reusing, and recycling. Three of the main principles to achieve the goal of the CE - which is converting the linear economy system into circular material flows - are: (1) reduce consumption of finite stocks and renewable resources, (2) optimize resource’s use by increasing its utility, and (3) take negative externalities into account (Ellen MacArthur Foundation 2015). The principles set by the CE model, when applied to the fashion industry, intend to optimize the design and processes to reduce
waste and make products that will have a longer life and will be easily recycled (TODESCHINI et al., 2017, p. 764).

Adoption of the CE model in clothing can go beyond the industrial level. Some companies are promoting other methods to adopt the CE system at the consumer level. One example comes from the company ‘Mud Jeans’ (a Dutch company founded in 2012), with its ‘Lease a Jeans’ program created in 2013 (described in https://mudjeans.eu/pages/lease-a-jeans, with no indicated data of publication). After several leasing times, this brand has a collection system for jeans considered old by the consumers and, instead of being discarded, they are shred and blended with virgin cotton to reuse the fabric (MOORHOUSE, MOORHOUSE, 2017).

Another case of the implementation of the CE in the fashion industry comes from the Asian denim manufacturer ‘Saitex’. The company is adopting cleaner production for its clothing manufacturing processes, which has led to gaining some environmental certification, but it is also promoting the reuse of its industrial textile sludge into the production of construction bricks at another plant. Hvass (2016) performed a comprehensive study of practical examples and the related benefits of the CE in the fashion industry. Some takeaway messages from that study are the call for actions to minimize the use of the environment as a disposal place, the need to reduce the use of virgin materials for manufacturing new clothes, and a call for producing clothes that are more durable. A discussion on the altruistic choice of donation of used clothes to charity is included as it also represents an action of a CE worth of attention (HVASS, 2016).

In the CE system, regarding the industrial processes, it is a consensus that reverse logistics play a critical role. Reverse logistics in the clothing industry involves activities associated with the collection and recovery or proper disposal of textile solid waste. An investigation on identifying opportunities for improvements in the use of reverse logistics was performed for the clothing industry in a cluster in the South of Brazil and pointed out the importance of valuing the textile solid waste (PINHEIRO et al., 2019).

Their results indicated some practical opportunities for improvement towards reverse logistics, including (1) use of control sheets of waste generated; (2) separation of waste according to the composition; (3) reuse of textile waste by the generating company;
(4) marketing textile waste for entrepreneurs of other sectors; (5) investment in technology and development of modeling steps, fitting and cuts to reduce losses; (6) raise awareness with customers and suppliers for sustainable production and consumption; and (7) creation of partnerships with other companies for proper management of textile waste. One of the highlights is the importance of articulating efforts with other businesses in the same region to value the waste, for instance combining generated volumes for commercialization (PINHEIRO et al., 2019).

In agreement with such analysis, a previous study conducted by Akdogan and Cingsz (2012) has discussed the concept of ‘coopetition’ as a term that includes cooperation and competition simultaneously. That study on ‘coopetition’ points out that joining efforts among nearby small and medium-sized enterprises (SMEs) promote advantages in terms of improving their reverse logistics opportunities.

On the global scale, the United Nations (UN) is promoting the ‘Global 2030 Agenda of the Sustainable Development Goals (SDG)’, with its seventeen objectives towards sustainability to be achieved by 2030 (United Nations, 2015). The circular economy principles can support the achievement of the SDGs (GHOSH, AGAMUTHU, 2018, p.482).

Among the 17 sustainable development goals, SDG number 12 – Ensure sustainable consumption and production patterns - is the one that relates directly to the topic addressed in this paper. It stresses that the signatory countries must promote efforts to ensure sustainable production and consumption patterns, as well as it encompasses the call for reduction and proper destination of industrial waste. Besides that, it favors the discussions towards the adoption of consolidated proposals and projects to implement CE models. In connection with SDG 12 initiatives, the United Nations has started in August of 2019, a campaign named ‘ActNow Fashion Challenge’. Its objectives aim to raise awareness and promote lasting behavior change towards individual fashion choices. The campaign calls for consumers to contribute to zero-waste fashion, mainly by adjusting consumption patterns. The challenge is to share zero-waste fashion actions on social media using either #ActNow and log it on un.org/ (United Nations 2019).
It is noteworthy that circular economy, reverse logistics, and sustainable development principles have interconnections, regarding human and environmental health but are also of interest to industries because of its economic advantages, mainly coming from better use of resources, reduction of waste in their industrial processes, and lowering pollution emission (FIEP, 2019). Therefore, the potential for moving towards CE offers valuable opportunities for the clothing industry, as discussed in the following section.

3 A CALL FOR A FASHION PACT IN BRAZIL

As previously discussed in this paper, there is a worldwide consensus on the significant amount of textile solid waste generation by the clothing industry, both from post-industrial manufacturing processes and post-consumer patterns. The negative impacts of the linear production model based on ‘take, make, and waste’ in the clothing industry have been gaining attention, and many companies are pursuing shifts to the CE model. The opportunities for better managing post-industrial waste lie in the implementation of techniques and procedures for the correct separation and collection of textile waste by size, color, and composition, as well as investing in changes in the production processes to reduce losses. The preparation of proper bales of textile solid waste can contribute to producing revenue for the clothing industry by commercializing and inserting them back as raw material. Beyond that, post-costumer waste when properly separated and classified also offers opportunities aligned with the CE principles when resale or donated by either the altruistic person or collaborative charity by business entrepreneurs. Nevertheless, our perception is that although considered a serious issue, textile solid waste is not being addressed as a joint collaborative effort on a large scale among the public and private sectors. It seems it has passed the time to assimilate that the textile solid waste is in fact a valuable textile resource.

One significant step towards partnership between public and private segments started in 2019 when French President Emmanuel Macron was hosting an edition of the Group of Seven (G7) meeting. The G7 is an intergovernmental organization consisting of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. On
that occasion, President Macron challenged the fashion industry to take actions to reduce its negative environmental impacts, by applying more sustainable solutions in their global production chains (The Fashion Pact, 2019). That challenge resulted in a Fashion Pact for a partnership to mobilize a coalition of players in the fashion industry to create a list of goals to tackle three major environmental issues: stopping global warming, restoring biodiversity, and protecting the oceans (The Fashion Pact, 2020). The first chair of the Fashion Pact is François-Henri Pinault, the CEO of the Kering Group, which is the owner of some international luxury brands (The Fashion Pact, 2020). It is noteworthy that the issue of waste generation is being addressed, but not directly for the textile solid waste, so there is room for improvement in that aspect. In January of 2020, another initiative from the French government regarding environmental protection was launched. It is a new act of law against waste and for a circular economy. The act contains about 50 measures providing for new obligations, new prohibitions, and new tools related to changes in the production methods of companies and the consumption patterns of citizens, thus aligned with the CE principles. Regarding this law, the issue of textile solid waste is directly addressed, as landfilling and incineration of clothes will be prohibited, thus promoting the reduction of waste and solidarity reuse (EU 2020).

Unfortunately, in Brazil, there is no such call from the government for the clothing industry. The Brazilian government does not require the sector to reach more constructive and collaborative actions towards sustainability. The government also does not promote relevant actions to encourage citizens to attain conscious and sustainable consumption patterns, including requirements on the proper disposal of waste and on the extension of the lifetime of products purchased. The joint effort between the public and private sectors, as for instance is being pursued in France, would also contribute to the Brazilian scenario, in all aspects of sustainability and the CE. Simply starting by reinforcement of compliance with the National Solid Waste Policy (NSWP), which is in place for over 10 years, would improve the potential towards reaching similar goals of the Fashion Pact in Europe. Even before the launch of the NSWP, Brazil had launched in 2008 an ‘Action Plan for Sustainable Production and Consumption’, encompassing six priorities: education for sustainable consumption; sustainable public procurement; governmental environmental
agenda; improvement of solid waste recycling; sustainable retail practices; and promotion of sustainable buildings (PAGOTTO, GONÇALVES-DIAS, 2020).

However, that Action Plan has not taken place on a relevant scale. Thus, it would be timely if the Brazilian government could also take the front in identifying an industrial partner to challenge for a Fashion Pact in the country. Therefore, a call for a Fashion Pact in Brazil would contribute to articulate actions towards compliance of the clothing industry with the governmental policies, as well as promote better practices along with the country’s ‘Action Plan for Sustainable Production and Consumption’. A Brazilian Fashion Pact could be led by a partnership between a leader from the government and a representative of a stakeholder from the private sector to reinforce elements of the circular economy in the fashion industry. Some key goals would be as follow.

● Incentives for industries aiming to reach a proper selective collection system for textile materials.
● Incentives for industries aiming to change technology towards cleaner and more sustainable production.
● Consumer awareness campaigns on the amount of textile solid waste generation coupled with the promotion of sustainable consumption.
● Promotion of initiatives towards extending the lifetime of clothes to minimize disposal, including donation and resale market of used pieces.

A Call for a Fashion Pact in Brazil would have the potential to promote the CE model in the clothing industry, hence moving towards compliance with the national regulatory system, as well as achievement of SDG 12. It would also be necessary to disclose ongoing actions and results by publishing annual reports to motivate other businesses to join the Pact. Furthermore, the clothing industry, from manufacturing to retail, would set up the example towards promoting the fundamental rights concerning the preservation of the planet for the generations to come, and the fundamental and universal right to live in a healthy environment.
4 CONCLUSION

Frivolous as it may be seen, the fashion industry is a worldwide multibillion-dollar global enterprise that creates jobs and generates income for lots of people. Therefore, it is of significant economic and social importance. At the same time, it has become one of the worst environmental polluters, and the wrong disposal of textile solid waste from the clothing industry plays a big role in this disheartening scenario. Nonetheless, some good practices are being implemented in the clothing industry regarding the shift from the linear model to the CE model. The textile solid waste generation is an issue that must be faced by shared responsibility between consumers and the private sector, but in order to spur action, it has to be led by the government. Particularly in Brazil, the fourth largest clothing producer in the world, there are great opportunities for improvements towards CE. An effort from the government, for the fashion industry to reach compliance with the National Solid Waste Policy, would contribute towards both reducing textile solid waste and inserting them back into production. Therefore, a call for a Brazilian Fashion Pact has the potential to start promoting the necessary changes towards responsible production and consumption in this sector. This may allow the construction of a code of good practices for stakeholders in the Brazilian fashion industry, embracing the environmental, economic, and social aspects of sustainability.
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