Research Note

CIRCULAR FASHION AND TEXTILE PRODUCING COUNTRIES

A first inventory of the potential impact of an EU circular fashion industry on non-European countries

2020
DISCLAIMER

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About the author - Ecopreneur.eu

Ecopreneur.eu, the European Federation of Sustainable Business, sets a course toward sustainable economic policies on the European level to support the economic and societal transformation across Europe and beyond. Ecopreneur.eu aims at opening solidified structures and brings sustainable matters to European policy makers. Ecopreneur.eu is a non-profit non-governmental organisation that now holds six associations from different countries of the European Union. Together they represent over 3,000 green businesses, mostly SMEs. While several of these companies are active in fashion and textiles, Ecopreneur.eu does not represent the fashion or textile industry.

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“A circular production chain can reduce social impacts, as well as environmental impacts. It increases transparency in the supply chain and requires long term collaboration between all chain partners.”

– Michiel van Yperen, MVO Nederland
Textiles and clothing play an important role in our everyday life. But the global fashion industry model is unsustainable. It uses large amounts of resources and has negative impacts on the environment and people. The global fashion industry, therefore, has to make a transition towards a circular model. In a ‘circular’ fashion economy, clothes, textiles, and fibres are kept at their highest value during use and re-enter the economy to avoid becoming waste. The EU is already steering towards circular. The resulting changes will have a great impact on textile-producing countries. The question is: will this impact be positive, negative, or both?

This research note is a first inventory of the potential impacts of future EU circular fashion on non-European textile producing countries. It uses existing literature and input from four circular economy experts to analyse the economic, social and environmental impacts. It aims to provide our preliminary results as input for further, more rigorous research on this important topic.

Results suggest that the overall impact of EU circular fashion policies on producing countries will be positive. Their economic, social and environmental situation could be improved by: new job opportunities; a lower adverse impact on the environment; better education; better (true) prices*; and improved quality, durability and industry resilience.

In the short-term, there could be a temporary downturn in the textile economy of producing countries as they adjust to a new model, reflecting the costs of the transition. Some measures might be hard to implement too. This is because of, for instance, a lack of infrastructure or technical knowledge and a low level of understanding of the new economic model and policies.

Social conflict, poverty and civil unrest in producing countries resulting from revolutionary changes in more circular value chains for the fashion and textile industry should be avoided. Ecopreneur.eu is calling on the EU to develop a specific agenda around this, with accompanying measures. In addition, international cooperation between policy makers is needed to clarify and align circular economy policies.

But most of all, this research note calls for more investigation to substantiate these preliminary outcomes.

* Prices reflecting the true costs, see Chapter 2.1.
CHAPTER 1
INTRODUCTION
Textiles and clothing are a fundamental part of everyday life and the fashion industry is an important sector in the global economy. The EUR € 1.1 trillion clothing industry employs more than 300 million people along the value chain.¹

However, as explained in the Ecopreneur.eu report Circular Fashion Advocacy, the current system for producing, distributing and using clothing cannot be sustained. It operates mostly in a linear way, following the take-make-waste model. Large amounts of non-renewable resources are extracted from the earth to produce clothes that are often used for only a short time period, and then discarded. The industry as a whole is extremely wasteful and polluting, including greenhouse gas emissions amounting to 8 per cent of the global climate impacts². Less than 1 per cent of material used to produce clothing is recycled. As an Ellen MacArthur Foundation report states, “on current trend, the negative impacts of the fashion industry will be potentially catastrophic”¹.

Circular Fashion Advocacy focused on formulating a strategy towards a circular fashion industry in Europe. This research note investigates the potential impacts of such a strategy on textile-producing countries outside Europe, such as India and China. The current linear economy model uses a large amount of non-renewable and virgin materials* which have negative impacts on the environment and people.

The supply chain for textiles contains many steps and links, so clothes have already been on a long journey before they reach the user. They have passed through the hands of cotton farmers, spinners, weavers, dyers, sewers, those involved in transport, retailers and other workers. Of those, 75 per cent are women between the ages of 18 and 35.⁴ And the majority of the people who participate in the production of clothes for the global market, in fact, live in poverty. Many are subject to exploitation and abuse. They usually work in unsafe and dirty conditions with a very low salary.⁵

The fashion industry, therefore, needs to be re-designed to slow down increasing consumption and stay within the so-called ‘planetary boundaries’, a set of nine boundaries (e.g. for climate change) within which humanity can continue to develop and thrive for generations to come. A complex systems dynamic model, called the Earth-3 Model, was recently developed by the Stockholm Research Centre. It combines the Sustainable Development Goals (SDGs) with planetary boundaries for climate, biosphere and...
the global economy[^7]. Calculations using this model show that textile producing countries, such as India, China and other emerging economies, face increasing production and consumption after 2020. This is contrary to the decreasing trend in the US and EU. This is illustrated in figure 1 which compares the ecological footprints per person by continent (as a proxy for SDG 12, Sustainable production and consumption). Considerable regional shifts occur, but the total global footprint per person stays almost the same.

This indicates that our current attempts to decrease our ecological footprint are good, but what we are doing is not enough. In the Earth-3 model system, we do not achieve the SDGs within planetary boundaries by 2030, or even 2050. Neither do we achieve them in a business-as-usual scenario, or if the world chooses to go for accelerated economic growth or a stronger focus on achieving the SDGs[^8]. Tougher interventions are necessary, addressing head-on the problems arising from, for instance, increasing consumption. Even with a strong focus on meeting the SDGs, we cannot cope with the problems mentioned above, including the greenhouse gas emissions or polluting impacts. Rapid transformation is needed and the whole fashion industry has to change[^3]. The fashion industry is increasingly committing to a circular model, even if it is only at the beginning of a journey to create a more ethical and sustainable future. In addition, the new European Commission (EC), European Parliament (EP) and Council are expected to prioritise creating a circular economy to meet climate goals, with textiles as a key sector. This makes planning future changes to the industry important and urgent.

[^7]: Calculations using this model show that textile producing countries, such as India, China and other emerging economies, face increasing production and consumption after 2020. This is contrary to the decreasing trend in the US and EU.
[^8]: Tougher interventions are necessary, addressing head-on the problems arising from, for instance, increasing consumption. Even with a strong focus on meeting the SDGs, we cannot cope with the problems mentioned above, including the greenhouse gas emissions or polluting impacts.
[^3]: The fashion industry is increasingly committing to a circular model, even if it is only at the beginning of a journey to create a more ethical and sustainable future.
According to Ecopreneur.eu, adequate policy instruments to accelerate and mainstream circular fashion should be based on five pillars*:

1. Innovation policies – to facilitate change, technology, the sharing economy and the shift from selling products to delivering services;
2. Economic incentives – Extended Producer Responsibility (adding the waste management and environmental costs associated with a product to its market price), a tax shift from labour to resources, VAT, procurement;
3. Regulation, such as minimum requirements for circular design in the EU Ecodesign Directive;
4. Trade policies, for example, adapting the definition of waste for exporting to producing countries;
5. Voluntary actions such as covenants and industry commitments for footprint reduction.³

Other, related questions are:

• How could implemented measures affect material flows?
• What changes could be expected in prices and competition?
• What could happen to the demand for virgin raw materials-based clothes and their existing industries?
• What are the potential benefits of the circular economy for supplying countries outside of the EU?

Ecopreneur.eu is not positioned or equipped to perform a quantitative analysis of the above questions.

This research note is based on a literature study and qualitative input from four circular economy experts (see Chapter 2.3). Conclusions and recommendations come from Ecopreneur.eu for the fashion industry. Ecopreneur.eu represents some sustainable frontrunners in the sector, mostly SMEs, but does not represent the fashion industry as such. Furthermore, Ecopreneur.eu is not positioned or equipped to perform a quantitative analysis of the questions above.

* For more information see page 10 of the Circular Fashion Advocacy report.³
Reading guide

Following the introduction in this first Chapter, Chapter two is the focus of this research note. It starts with a brief description of a circular fashion industry as a business ecosystem. We also look at what an ideal model of a circular fashion industry could look like in 2030, and the global perspective on the fashion market and its suppliers. The chapter after analyses the largest clothing and textile-producing and exporting countries, introducing the focus countries of this preliminary study. Next, we describe the role of advocacy in the transition to a circular economy, and briefly explain what policy measures the EU could propose to foster a circular fashion industry. The last section of this chapter presents the questionnaire sent out to four experts (see also Colophon and acknowledgments on page 38).

Chapter three looks at how a transition towards a circular fashion economy in the EU could affect non-EU producing countries. It presents environmental, social and economic impacts on developing economies that might be expected from enforcing EU circular economy policies. Chapter four concludes with a number of recommendations and considerations for transitioning towards an EU circular fashion industry.
CHAPTER 2

SETTING THE STAGE
2.1 What could a circular fashion economy look like in 2030?

For this research note, ‘fashion’ refers to apparel and clothing. We are looking at the full multi-life cycle of the fashion industry, including the design, production, supply chain, retail, use, and the ‘end of life’ or ‘secondary raw materials’ phase. The industry is part of a broader textiles economy which includes fibres and other end products like fabrics, such as carpets, curtains and furniture. The difference between textiles and fashion, needs to be kept in mind when interpreting figure two and the statistical information presented in section 2.2.

A circular fashion economy will provide benefits for businesses, society, and the environment. The constant circulation of clothes, textiles, and fibres means they keep their highest value when they are used in and re-enter the economy after their use, with the potential to never end up as waste. Figure 2 visualises many important aspects of a circular business ecosystem for textiles, with a focus on material flows. Expanding on this schematic view, the characteristics of a circular fashion economy are summarised below. For a more elaborate description read Ecopreneur.eu’s *Circular Fashion Advocacy* report³.

The diagram shows how a circular fashion industry could function in the future with closed loops and some in- and outflux to and from other industries. The model shows us two flows: the flow of reusable textiles is in green and the flow of non-reusable textiles is in blue. The green flow suggests in three ways how a user can reuse textiles: by repair, maintenance, re-use as a product (e.g. second-hand trading), and as a material (e.g. as a
handicraft). The blue flow shows a sustainable way of recycling non-reusable textiles. It includes: picking up and separating, sorting, industrial processing, chemical or mechanical recycling, textile design and production, and working with other industries. For instance, the construction industry can use some recycled fibres for insulation material (downcycling).

A flux not included in the graph is that of biomaterials from secondary apparel back to farmers growing cotton. This would supply the system with virgin material. A circular system strives to decrease the use of virgin materials to a maximum extent, but they will always be substantial as they are needed to maintain quality.

Characteristics of a circular fashion economy

A circular fashion economy should have certain characteristics, which are not shown in the above diagram. These include the following that are especially relevant for this preliminary study:

• It regenerates ecosystems by net positive impacts, such as delivering clean water from production processes and not polluting the environment.
• It is distributive by design. It creates a thriving ecosystem of enterprises from small to large, retaining and then circulating enough of the value created so that businesses and their employees can participate fully in the wider economy.
• It reflects the true costs (environmental and societal) of materials and production processes in the price of products.
• It uses transparent and traceable transaction systems as a commitment to full and regular public disclosure of all policies, procedures, progress and the real-world impacts on workers, animals, communities and the environment.
• It is socially fair at a global level, operating under safe and just working conditions, including fair wages, no exploitation or abuse, and gender equality.³

A more extensive description of a circular fashion economy is discussed in the Circular Fashion Advocacy report.³
2.2 The global fashion market: suppliers outside of the EU

To analyse the potential impacts of a circular fashion economy in Europe on textile-producing countries outside Europe, we need to know which countries the EU is importing from. Figure 3 presents the five leading suppliers of clothing to the EU, ranked by their value from 2015 to 2018. China ranks as the main clothing supplier, with imports into the EU worth approximately EUR € 27 billion in 2017. Other major clothing and textile manufacturing countries and emerging economies supplying the EU market include India, Cambodia, Bangladesh and Turkey.

At the moment China is the largest textile producing and exporting country in the world, although imports from China into the EU have been declining. The rising cost of labour is a likely reason for that. China’s labour will soon become much more expensive than other developing economies. However, the minimum monthly wage for garment workers in China is still relatively low¹¹. Figure 4 shows the value of the 10 leading textile exporters worldwide in 2017, by country (in billion USD). As it turns out, the EU textile industry itself is pretty strong: it is the second largest textile exporting region in the world. Italy, Germany, Spain, and France are the leading countries. According to the World Trade Organisation, China and the EU rank first and second in the worldwide export of clothes as well¹².
There were over 170 thousand textile and clothing companies in the EU in 2017. About 70 per cent produce clothing, 30 per cent produce textiles. The latter share includes companies producing man-made fibres, such as viscose or nylon. That means, by changing EU circular economy policies for the fashion industry, a relevant part of the global supply chain can be addressed and steered towards positive change which inevitable will reach into the global scale. Of the five economies with the largest clothing exports to the EU, four are developing (India, Cambodia, Bangladesh and China) and one is considered to be more developed (Turkey). In this research note, we will focus on the developing economies of India, Cambodia, Bangladesh and China.

This is because, in comparison to developed economies, among other things, they are exposed to the following:

- more labour violations,
- less protection for workers,
- more human rights issue,
- cheaper labour and lower overall operating costs,
- a larger environmental footprint.

Circular fashion has the potential to improve the industry worldwide. But this preliminary study focuses on how measures that create a circular fashion economy in the EU could affect India, Cambodia, Bangladesh and China. It will also look at what can be done for those who suffer the most from the impact of the current fashion industry.
We will shortly introduce several specific EU circular fashion economy policy instruments that have been proposed by Ecopreneur.eu to create a circular fashion system in Europe. This will help us analyse their potential impact on non-EU textile producing countries. As stated in the introduction of this research note, an adequate set of policy instruments to accelerate and mainstream circular fashion should be based on five pillars: Innovation policies, Economic incentives, Regulation, Trade policies and Voluntary actions.

We focus here on the pillars of Economic incentives, Regulation and Trade policies. The impact of the proposed measures under these three pillars on producing countries could be substantial and direct. Measures proposed under pillars one and five (Innovation policies and Voluntary actions) are elaborated on in our Circular Fashion Advocacy report. They propose non-binding obligations for organisations that could certainly have some impacts outside Europe, but more indirect and probably less substantial.

2.3 Proposed circular fashion policies

**Pillar two: Economic incentives**

**Circular procurement**

Circular procurement can accelerate the transition to a circular fashion industry by creating demand for circular fashion and creating economies of scale. One example of how this is already happening is the procurement of circular uniforms from the Dutch Ministry of Defense, carried out under the government’s Green Deal Circular Procurement. Such measures enable the purchasing party to demand, that products or materials will be re-used effectively in a new cycle. It is crucial that products and materials retain their value. A new approach like this can effectively end competition on price only. To facilitate circular procurement procedures for the demanding and offering party, EU procurement rules need to be reformulated and simplified.

**Extended Producer Responsibility (EPR)**

EPR is a strategy to add all the environmental costs associated with a particular product’s life cycle to its market price. These costs are paid by the producer of the end product. This is usually the brand owner or company that determines the specifications of the garment or footwear, either by producing it themselves or by procurement on price and specifications. EPR is a proven policy in sectors such as packaging, electronics, tyres, cars and batteries, however, it needs further improvements. Ecopreneur.eu recommends that the fashion industry works towards establishing a strong EPR system, including eco-modulated fees for textiles, by 2030. A crucial steppingstone for doing this is to build on lessons learned and recommendations from other sectors. The industry can also draw on the
functioning example of France, even though the country only has a low textile collection rate.³

**Tax shift from labour to resources**

A tax shift for the fashion industry would combine a lower labour tax with a higher tax on resources and impact on the environment, from pricing carbon, water and fossil fuels to waste streams and pesticides. Tax shifts are a powerful instrument to make linear products and services more expensive. The need for tax reform, in general, is becoming more apparent. Recent protests in France (such as the yellow vests movement¹⁸) and across the globe against rising fossil fuel prices show that environmental taxes can only be successfully introduced in combination with social policies like decreasing the tax on labour. This connects environmental and social domains and requires a new type of ‘New Green Deal’.³

**Lower the VAT on circular fashion products**

Differentiation of the Value Added Tax (VAT) can, as part of a tax shift, accelerate circular fashion by ‘nudging’ consumers towards circular products and services. Ecopreneur.eu recommends that EU member states introduce low VAT rates for textile repair services, re-sold goods and transactions with clearly defined social reasons. Another recommended measure is to discuss the VAT rate proposal adopted by the EP in the context of its potential for the circular economy, and put it on the agenda for voting in the Council only when adoption by all member states can be reached. In parallel, we recommend to continue investigating majority voting on tax matters. Opening up the EU VAT Directive would allow member states to set low or zero VAT rates for circular fashion products and services, including products with low environmental impact and activities contributing to social welfare.³¹⁹

**Pillar three: Regulation**

**Ecodesign policies**

A general regulatory framework to increase harmonised transparency and traceability, verification, and market surveillance in Europe would support a circular fashion economy. This can only be established by government policies. Ecodesign policies, meaning policies addressing the design of products, can have two main effects: to remove the worst materials and products from the market and to foster ecodesign. To accomplish the first of these, Ecopreneur.eu recommends introducing new requirements for designing fashion products. Existing regulation could be extended to include requirements for durability, maintenance, repair, recycling fashion products and the release of
microplastics into the environment. An example of progress in this area is the establishment of nine durability criteria for textile products. Developed under the EU Green Public Procurement, these are linked to ISO norms that test performance²⁰.

Another example is a separate, but related ban on oxo-degradable plastics which was successfully approved and introduced as part of the Single-use Plastics Directive in 2019²¹. Ecopreneur.eu recommends that the EU expands the list of substances of very high concern (SVHCs), steps up market surveillance, tracks all SVHCs as of a set date, considers extending warranty periods, and manages all goods imported into the EU in the same way as those traded within it.

As well as price incentives using EPR, we can foster ecodesign by creating markets for circular products and services using methods like an energy label.³

**Pillar four: Trade policies**

*International trade policies*

A transition towards a more resource-efficient and circular economy has strong links with international trade. Unnecessary trade barriers, such as import and export restrictions on waste and scrap, should be avoided as much as possible. For instance, if India removed barriers to importing secondary raw materials from existing anti-dumping policies, this could have a positive effect. The country could produce apparel from secondary materials received from the EU after use. At the same time, however, the risk of creating negative social impacts in producing countries should be weighed against extra CO₂ emissions from transporting textile waste across the globe.³

For a more extensive discussion of required policy instruments, see our *Circular Fashion Advocacy report.*³
2.4 Input from experts

In January 2019, Ecopreneur.eu prepared a list of 17 questions about the impacts of an EU circular economy on non-EU textile and fashion-producing countries. This list was sent to four experts who are relevant to one or more aspects of circular economy, country knowledge and trade:

- Michiel van Yperen, MVO Nederland
- Adrienna Zsakay, Circular Cambodia
- Joakim Rådström, Royal Swedish Academy of Engineering Sciences (IVA)
- Pranav Khanna, Frajorden (Fashion from Earth, an ethical fashion label from India)

The questionnaire was separated into the following two broad categories:

1. “The impact of an EU circular fashion economy in general”. Respondents were asked to state their opinion on the general economic, social and environmental impacts of an EU circular economy. They were also asked what the EU should or should not do to create a circular economy in the fashion industry, and finally, how the EU could help to remove existing barriers to cross-border trade of post-consumer secondary raw materials.

2. “The impact of specific EU circular economy tools and instruments”. Selected instruments were named with a short explanation. Respondents were asked to state their opinion about what impacts they would expect from applying those tools. Feedback specifically concerned India and Sri Lanka, and circular textiles in general. The input from these experts forms the basis for this first inventory of the environmental, social and economic impacts of an EU circular economy which is presented in the following Chapter.
CHAPTER 3

POTENTIAL IMPACTS
of EU circular economy policies on supplying countries
CHAPTER 3 - POTENTIAL IMPACTS

3.1 Environmental impacts

This chapter analyses the potential environmental, social and economic impacts of EU circular economy policies on supplying countries.

Lower adverse impacts on the environment

Many apparel firms are currently taking advantage of lower environmental awareness and looser regulatory systems in producing countries outside the EU. Developing economies have tended and even been encouraged by international institutions to prioritise economic growth over stronger environmental and social regulation.²¹

Concern for the environmental impact of apparel manufacturing is important. The earth is not able to support the current level of apparel production and disposal because of depleting natural resources and the rate at which landfills are being filled²⁰, ²². Therefore, circular production requires facilities to be located and designed in harmony with the surrounding environment and communities. Where possible, these production facilities must be regenerative. That means, for instance, that they should run on renewable energy²³.

We expect EU circular economy policies will help make production processes in producing countries more sustainable. CO₂ emissions will drop. New business models that internalise longevity, like renting and re-selling used products (recommence), will consume less water, chemicals and energy. Pollution will be reduced. The modern fashion industry is highly globalised, and so the overall environmental impacts will improve globally.

Post-industrial waste (clippings, scrap, cutting waste and other waste generated during the manufacturing process) will become a major source of secondary raw materials. At the moment, this is a pristine, well-registered and almost virgin resource, mainly considered as waste. The percentage of secondary raw materials is expected to grow vastly, especially since a battle for clippings has already begun. Recycling organisations have started to sign contracts with factories to save, collect, register and ship post-industrial waste material. Post-consumer waste will follow. But it’s a bigger challenge technically, organisationally and logistically.²⁴
3.2 Social impacts

Anonymity in a circular supply chain disappears

The fashion industry is highly anonymous. In a circular supply chain, anonymity disappears in the sense that transparency increases. This will have a positive impact on working relations and long-term collaboration between companies and producers. Employers and buyers can be held accountable for respecting these rights. The whole circular supply chain is transparent and traceable, which helps to keep the power balance between suppliers and buyers. Supply chains, working conditions and purchasing practices are publicly disclosed. In a closed loop supply chain, business activities in the circular fashion market can be monitored. This fosters fair trade and business models. Tools, like blockchain technology, increase transparency and still protect sensitive kinds of information. Tracking where the product has been produced or materials have been sourced can further increase trust in a producer.\textsuperscript{25}

Better working conditions

The concept of EPR covers different types of responsibilities. So far, the main purpose of EPR in the EU is to foster recycling and sorting, and put environmentally sound management in to practice. However, EPR can also be used to establish better working conditions. This responsibility can be assigned to producers and brands or shared between different stakeholders in the supply chain.

Recycling and separation at source is one of the basic elements of EPR systems. This means it’s necessary to ensure worker’s health and safety and preventing child labour is a priority if the recycling and separation activities take place outside Europe. Inclusion of workers in cooperatives, associations and companies, and training could help make sure this happens.\textsuperscript{26}

This positive impact of EPR should result from the actions done of producer responsibility organisations in producing countries. There is one main immediate impact of EPR-systems operating in the EU on textile and fashion producing companies outside the EU. This is the introduction of additional requirements, such as recycled content, and/or a fee for goods that are exported to the EU.\textsuperscript{27}

In the short-term, applying EPR as a EU circular economy tool could decrease results and profits for companies in textile producing countries. However, in the long-term, it might lead to a more sustainable economy, including safe and just working conditions. In these, workers are respected, have a say and are able to make changes in their work and lives – a preferable option.
Better living conditions for local communities

Production facilities based on circular business models run on renewable energy and supporting clean energy systems will contribute to better living conditions for surrounding communities. This can be due to lower released emissions contributing to better air quality.²³

Higher education level

Many marginalised people in developing economies end up working in textile factories because the skills required for this work are limited. As they mostly work on one task all day, they do not get the chance to develop their skills; their professional development stagnates. A circular fashion industry requires more advanced technologies for production, traceability, separation, sorting, reuse and recycling. This means generally higher skills. Professional development measures, such as training, will be needed to support the desired characteristics of a circular fashion value chain. Ideally, the fashion industry would contribute to the diversification of economies in production regions by: deploying business activities with higher added value; educating workers; and supporting them to develop themselves within, or even beyond, fashion production.²³

Provided that this higher education level can be realised at place, this represents a key advantage of an EU circular fashion economy.
3.3 Economic impacts

New job opportunities

Textile reuse and recycling are already a major source of employment in developing economies. In India, for example, 1.5-4 million people are involved in informal waste management, including textile waste\(^{28}\). A new recycling industry in producing countries will also create new job opportunities. Besides circular production itself, resource-efficient and organic farming practices require significant labour in quantity and quality, particularly in rural areas. Improving the economic, environmental and social situation in both centralised and decentralised areas could help to balance economic growth and will automatically tackle geographic inequality. For example, more service-oriented business models, especially in fields of ‘reverse logistics’* could provide job opportunities to workers with different backgrounds and skills. This would in turn increase the financial accessibility for people in all segments of society.\(^{29}\)

A new recycling industry in producing countries creating economic value

A new recycling industry in producing countries will create new economic value in terms of additional regional or national income (GDP), contributing to the local economy. However, the establishment and growth of this industry is based on the intact trade of post-industrial and post-consumer textile waste and/or functioning national textile waste collection systems as it is in place, for example, in Germany and the UK.\(^{3}\)

Short-term income and employment loss

Specific EU circular economy tools and instruments could lead to short-term transition costs on the linear economy. This can include difficulties and decreased earnings for farmers and workers in producing countries. For example, switching to producing clothes from secondary materials close to end customers or replacing cotton with a new type of environmentally-friendly fibre may result in short-term job losses for economies reliant on manufacturing, like Bangladesh\(^{30}\). Therefore, transitioning to a circular fashion economy requires accompanying measures to avoid social conflicts, poverty and civil unrest in producing countries\(^{30}\). Such measures for the example mentioned could include support for innovation and retraining employees to manage the changes that would be needed on cotton farms.

Positive impact on price, quality, durability and industry resilience

The impact on the volume of affordable yarns, fabrics and textiles with recycled content is expected to grow dramatically.

* the process of returning the product to previous supply chain actors, such as retailers.
From an economic perspective, this is favourable for the whole supply chain as the price of conventional virgin cotton is expected to rise sharply in the long-run. Materials from recycled garments, therefore, represent a reasonable alternative to this. However, to be competitive, the products have to fulfill certain criteria. Indeed, there is already a growing demand for quality secondary textile materials in the fashion market.²¹

Fashion items are supposed to be designed for longevity. Using recycled content and high-quality fibres represents one practicable example to do this. The market for extended user models, such as sharing, renting and second-hand markets, is expected to grow. Also, changing lifestyle and consumer values, such as from wanting less fast and more to slow fashion, are expected to have an increasing influence on daily decisions about purchases.

Simultaneously, on the industry side, sourcing and production need further drastic changes. To meet the rising demand for fashion and textile items and respect planetary boundaries, conventional sourcing, which is polluting and exploiting, needs to be less harming and more sustainable. Decreased material use on the supply and demand side would contribute to reduced exposure to volatile raw material prices for businesses, increasing their resilience. This applies to businesses along the supply chain in developing economies as well as and in the EU. A radical increase in the amount of clothing that is recycled by the current recycling system is a key way to realise these benefits for the textile industry¹. Notably, as the economy increasingly focuses on the reuse, remanufacturing and recycling of certain resources, the demand for primary raw materials is likely to decrease, with an overall price decrease as a result. Without system changes, the transition to a circular economy, therefore, could lower the costs for sourcing virgin materials, slowing down the transition.

A push to transform to a circular economy

A powerful incentive to motivate the EU to invest in technical assistance and innovation, and process management by independent parties is an EU-wide lower VAT, or other tax tariff adjustment and/or EPR fee modulation on circular content in textiles. This could play a crucial role in accelerating the transition towards circular fashion in producing countries. If the EU did this, it would send a powerful signal to other countries, showing the need for a shift in the economy and interrelated production system. This would certainly have a positive effect on producing countries as they supply the global market.

Many economic activities in lower-income
economies already revolve around sorting and reusing waste, formally and informally. They provide excellent political ‘entry points’ on which future initiatives and measures could be built and demonstrate innovative circular economic models that governments, the private sector, civil society and other actors can promote.29

Circular textiles produced by developing economies would offer a competitive advantage. Realising circularity requires labour. This is more economically viable in regions with an abundance of low-cost labour and unemployment, as it is the case in many developing economies. This does not imply taking advantage of low-cost labour. In the first place, a circular textiles industry offers diverse employment opportunities and the potential to establish a stable and evolving economy that will incrementally improve working conditions. Therefore, it would represent a win-win situation for the EU and producing developing economies.

Making the shift towards a circular economy might also be more ‘intuitive’ for developing economies. Many circular activities are already carried out informally and inherently. Thus, it may require less of a change in behaviour than in many advanced economies29. However, the linear economy automatically pressures developing economies to move towards the same direction. Developing economies have the opportunity to leapfrog to a circular model. They would skip the “linear economy with waste management” and avoid locking in inefficient and resource-intensive practices and infrastructure that the EU is trying to change29. In fact, learning from industrial countries, brings multiple advantages, for example, in economic investments or time, to build a more resilient local economy. However, circular economy policies could be hard to implement and enforce. Factors, such as corruption, income inequality and poverty act as fundamental barriers to adopting sustainable consumption and production practices in developing economies.

“A Circular Economy strategy could help lower-income countries ‘leapfrog’ to a more sustainable development pathway that avoids locking in resource-intensive practices and infrastructure.”

– The Chatham House26
Even in the EU, environmental law enforcement is impeding the progress towards a circular economy. Further studies are needed to explore barriers and drivers for developed and emerging economies. For developing ones, we need to examine which of their models can be adopted and implemented based on different cultural and geographical contexts.³¹

**Transformation of the competition structure**

The global textile and apparel market is highly competitive. Producing countries such as China, Pakistan and India compete, for instance, on labour costs. Companies offer lower prices and faster results regardless of inappropriate working conditions. In a closed loop supply chain, it will be more difficult to profit from a lack of transparency. While competition on price continues, it will become part of a broader competition with other aspects, such as quality and circularity. In many cases, the cheapest options, of which the linear system took advantage, will disappear from the market due to political enforcements and shifting market demand. Instead, circular products will dominate the market.
CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS
CONCLUSIONS

The global fashion industry has to make a transition towards a circular model. The EU is already steering towards circularity in the fashion and other sectors. Drastic changes in the fashion industry and market can already be observed. Even more are expected, such as the rising price of virgin cotton and changes in consumer demand for more environmentally and socially friendly products. These changes will inevitably have impacts on textiles producing developing economies.

The preliminary study described in this research note, which is based on the literature review and feedback from circular economy experts, derives the following impacts of EU circular economy policies on non-EU textile producing countries:

• Short-term transition costs, like income and employment loss;
• Creation of new job opportunities;
• Lower adverse impacts on the environment;
• Disappearance of anonymity and lack of transparency in a circular supply chain;
• Improving working and living conditions for local communities
• Rising education level;
• Positive impact on price, quality, durability and industry resilience;
• A global push to move to a circular economy, following the example of the EU;
• Ending competition on the lowest price.

In the long-term, circular economy policies are expected to lead to more sustainable and robust production in developing economies. Overall, the economic, social and environmental impacts of a new EU circular fashion industry on non-EU textile producing countries are expected to be positive. If they take advantage of the positive impacts, these countries have the opportunity to leapfrog the linear model and develop circular economy policies that enable a sustainable economy.³²

At the same time, the outcome suggest a risk of a short-term downturn in the textile economy of producing countries directly after the implementation of new EU circular economy policies. During the transition to circular value chains, this downturn might affect the job market and economic results in companies in textile producing countries in a negative way. Some legislative approaches might be too rapid and challenging to implement. Therefore, it is crucial to take such risks into account to minimise any negative impact for EU and non-EU countries as the linear system becomes a circular one.

(See next page for recommendations)
To maximise benefits and minimise transition costs of EU circular economy policies on textile-producing developing economies, Ecopreneur.eu recommends the following:

1. More research is needed to substantiate these preliminary findings.
   This could implement an EU Horizon 2020/Europe research programme with a call for proposals to study the impacts of an EU circular economy on the global economy and fashion industry. The EU needs to develop a specific agenda with accompanying measures. This will avoid social conflicts, poverty and civil unrest in producing countries resulting from revolutionary changes to more circular value chains for the fashion and textile industry.

2. Further investigation into aspects of circular fashion in relation to textile producing countries can inform policy and resulting practical measures.
   We found a lack of available information in this area, possibly due to the novelty of the topic. Most comprehensive studies on fashion-related sustainability and circular economy topics are focused on developed Western markets. But sustainability is an interrelated issue and as relevant to developing economies as they are crucial parties in the supply chain. As yet, there are many studies focused on circular fashion in Western markets, but rarely take producing countries into account. For instance, the lack of infrastructure for collection and reprocessing in producing countries might be a problem that needs further investigation. Also, apparel is not only produced but also consumed in developing economies. And the population and affluence of developing economies is growing constantly and rapidly. There’s a need to examine the future market distribution between demanding and producing countries. Connected to this is changing consumer behaviour in developing economies and their perception of circular fashion.

3. EU circular fashion policy instruments should be clarified to avoid misunderstandings.
   The publication of the Ecopreneur.eu report Circular Fashion Advocacy, published in March 2019 for the C&A Foundation, can serve as a first step in aligning perspectives.

4. International cooperation is needed to help develop a global circular fashion industry.
   High-level meetings and conferences with a textile focus could draw attention to the opportunities and issues.
ANNEX

List of questions of the questionnaire sent out to experts

Ecopreneur.eu survey on the impacts of an EU circular fashion economy on non-EU producing countries

1. This questionnaire concerns non-EU countries that are producing and exporting textile & apparel products for the fashion industry in Europe. What country /countries will you be referring to in your answers? India / Bangladesh / China / Cambodia / Other

2. If the EU would create a circular fashion economy, what kind of economic impacts of the EU circular economy in the fashion industry could be expected in the non-EU clothing producing countries?

3. If the EU would create a circular fashion economy, what kind of environmental impacts of the EU circular economy in the fashion industry could be expected in the non-EU clothing producing countries?

4. If the EU would create a circular fashion economy, what kind of social impacts of the EU circular economy in the fashion industry could be expected in the non-EU clothing producing countries?

5. What should the EU do to create a circular economy in the fashion industry?

‘Circular fashion’ can be defined as clothes, shoes or accessories that are designed, sourced, produced and provided with the intention to be used and circulate responsibly and effectively in society for as long as possible in their most valuable form, and hereafter return safely to the biosphere when no longer of human use. (Dr. Anna Brismar, 2017, circularfashion.com)

6. What shouldn’t the EU do to create a circular economy in the fashion industry?

7. How can the EU help to remove existing barriers to the cross-border trade of post-consumer waste, including semi-finished products such as clean fibers, clippings and sorted textile residues, which are considered as waste by several non-EU clothing producing countries?

8. If EU member states would introduce harmonized extensive producer responsibility schemes for fashion, what would it mean for the non-EU clothing producing countries?

Extended Producer Responsibility (EPR) is a policy measure which focuses on making producers responsible for closing the loops. One key objective of EPR is to encourage producers to take the environmental impact of their products into consideration, as early as from the design stage. To this end, the modulation of the fees which are paid by producers to the Producer Responsibility Organisation (PRO) when putting a product on
the market is an efficient way to stimulate the collection, recycling and eco-design of products. In France, EPR has increased collection rates for textiles. Existing schemes should be improved first and then expanded.

9. If EU member states would shift taxes from labour to resources, what would it mean for the non-EU clothing producing countries?

A tax shift for the fashion industry would combine a lower labour tax with a higher tax on resources and environmental impacts, such as the use of fossil fuels, water, pesticides and incineration. Also, trade could be taxed on the use of natural resources.

10. If EU member states would lower the VAT on circular fashion products and services, what would it mean for the non-EU clothing producing countries?

Ecopreneur.eu advocates opening up the EU VAT directive to allow member states to set a low or zero VAT for reused apparel, fashion products with an ecolabel, and activities contributing to social welfare.

11. If EU would introduce minimum requirements for circular design for all fashion products and services, starting with those with high resource intensity what would it mean for the non-EU clothing producing countries?

The EU could ban the worst apparel products from the market by expanding the EU Ecodesign Directive with new requirements for their design. This could include requirements for maintenance, repair and recyclability, and a ban on oxo-degradable plastics.

12. If EU municipalities, governments, and authorities would introduce circular procurement of apparel at a large scale, what would it mean for the non-EU clothing producing countries?

Circular procurement enables the purchasing party to ensure that, at the end of their service life or useful life, products or materials will be re-used effectively in a new cycle. It is crucial that products and materials retain their value. Circular procurement can accelerate the transition by creating demand for circular fashion, especially workwear, and create economies of scale.

13. Can you refer us to other experts on the impacts of an EU circular fashion economy on non-EU producing countries, especially concerning trade issues and gender issues?

14. Can you refer us to any recent publications on the impacts of an EU circular fashion economy on non-EU producing countries?
REFERENCES

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Colophon

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