

Circular Fashion Partnership

POLICY BRIEF

SCALING CIRCULARITY IN GARMENT MANUFACTURING COUNTRIES, SUCH AS BANGLADESH

February 2022

This policy brief is the result of learnings from the first iteration of the Circular Fashion Partnership (CFP) project that took place in Bangladesh from October 2020 to December 2021. It presents the opportunity and importance of valorising post industrial textile waste and scaling of domestic recycling in manufacturing countries like Bangladesh and how political barriers must be addressed to create a supportive environment for investment and an effective circular infrastructure. It is intended as an informative piece, sharing recommendations for policy makers and regulators in Bangladesh and at supranational level, in particular for EU policymakers working on circular textile strategies and policies, and for industry stakeholders such as fashion brands, manufacturers and recyclers working on the same goal. The recommendations derive from the opportunities and barriers indentified by the Circular Fashion Partnership, which are explained further on pages 3 – 6.

The CFP presents a compelling business case to scale domestic textile recycling, with demand for recycled materials from global brands and to secure consistent access to high quality traceable post-industrial feedstock from local manufacturers. CFP analysis conducted by Reverse Resources identifies that virgin cotton imports in Bangladesh could be reduced by approximately 20%, saving 750 million USD annually if just 100% cotton and cotton elastane waste streams were recycled domestically[1]. Building upon this work, McKinsey & Co. analysis identified that on a global level, existing recycling technologies have the potential to drive 80% circularity in the fashion industry if fully scaled to capture the three most prominent textiles used today: cotton, polyester and manmade celluosics[2].

To capture and prioritise the immediate opportunity of recycling post industrial textile waste in manufacturing countries and start narrowing the gap between industry-wide circularity targets and the availabity of recycled materials, **policy makers must support and incentivise investment to scale existing textile recycling technologies in manufacturing countries and address barriers that may obstruct the new processes – a critical step to accelerate the industrial transition to global circular fashion systems that are inclusive and distribute value across all actors.**

Recommendations to policy makers at regional or national level in manufacturing countries, such as Bangladesh:

- Create awareness amongst key political stakeholders and promote the economic, social and environmental benefits of a high-value domestic recycling industry, prioritising the immediate opportunity of capturing post-industrial waste, with the high demand these recyclable textile fibres have to global brands and recyclers.
- Provide capacity building support to key stakeholders to secure support for, and enable a pro-active approach to increasing domestic textile recycling.
- Recognise, incentivise and regulate the informal textile waste management sector, so social compliance can be established and an opportunity to participate in the value creation is provided.
- Explore how incentives such as taxation can encourage domestic textile recycling and discourage waste incinceration, downcycling and export.
- Foster industrialisation within Export Processing Zones by bringing recycling technologies into the zone, engaging licensed waste vendors and assessing value-added-tax implications for handling and moving waste within and outside of the zones.
- Support the realisation of a detailed mapping of the different policies that relate to recycling, following which support the development of a policiy engagement and reform plan.
- Establish policies and legislation to support green energy and infrastructure investment to provide access to affordable, clean alternative fuels to, moreover, attract investment in larger chemical

[1] *Pre-feasibility analysis of post-industrial textile fiber-2-fiber recycling in Bangladesh*
[2] *Scaling Circularity report - https://www.globalfashionagenda.com/sign-up-for-download*

recycling facilities who will be reliant upon good access to renewable energy and to deroute textile waste from incineration for energy.
- In the longer term, explore the opportunity to remove restrictions and establish new regulations and import licences to enable the import of post-consumer waste for domestic recyclers who can process both post-industrial and post-consumer materials. This can make establishing facilities more appealing for international recyclers, and further build domestic recycling in Bangladesh.
- Engage with local stakeholders, national platforms & industry consortia such as the Circular Fashion Partnership to further support the development of time-based national technology proposals.

Recommendations to EU and international policy makers:

- Keep the global nature of the textile value chain in mind, which is located – to a large extent – outside the EU and is essential for the income of millions of people[3] while developing national and regional circularity policies.
- Build upon the roadmap of the EU Textiles Strategy to include in the Strategy a truly global dimension that is supportive of the referenced cooperative approach to 'steer international cooperation and partnerships'.
- Include reducing the need for virgin materials and targeted investment to attract and scale innovation and recycling facilities in manufacturing countries in the forthcoming EU Textiles Strategy.
- Foster the creation of more high quality jobs and sustainable social value to manufacturing countries, through training and upskilling workers. The CFP requests the EU extends its work on skills to production countries, for instance under its Pact for Skills.
- Explore how incentives such as taxation can encourage recycling and the increased adoption of recycled materials in garments, for instance through a carbon tax or reduced taxation on garments that contain recycled fibers.
- Establish policies and legislation to support green energy and infrastructure investment in manufacturing countries, such as through the UNFCCC and its Fashion Charter WG4 on policy engagagement working on this topic, to, moreover, attract investment in larger chemical recycling facilities who will be reliant upon good access to renewable energy and to deroute textile waste from incineration for energy.
- Engage with industry consortia such as the Circular Fashion Partnership for support to connect regional and national policies, develop synergised strategies and to be informed on, contribute to, the development of criteria for successful and fair circular business models and work to establish a common understanding of legal issues such as waste ownership.

As the CFP enters its next iteration in 2022, it plans to scale and evolve criteria for successful *circular commercial collaborations* and support in the attraction of investment to increase recycling capacity in Bangladesh. Furthermore, it plans to continue its national and EU policy engagement, partnering moreover with local stakeholders to engage with the informal sector and review national policies, laws and regulations to identify entry points for scaling domestic textile recycling as well as identify legal, regulatory and policy gaps and create an action plan that pinpoints where reform is needed and how it can further streamline waste flow and treatment processes. As it gathers public and private support, the

[3] *The Policy Hub- Circularity for Apparel and Footwear, EU Textile Strategy Position Paper policyhub.org https://bit.ly/3lUUol7*

CFP also plans to explore replication opportunities in other manufacturing countries, including Vietnam and Indonesia.

More information on the potential for scaling recycling in Bangladesh and beyond, is available adjacent to this brief in the *Pre-feasibility analysis of post-industrial textile fiber-2-fiber recycling in Bangladesh* - available here and the *Scaling Circularity report - Lessons learned from the Circular Fashion Partnership for building pre-competitive collaborations to scale upstream circular fashion systems* - available here.

Learn more about this project on www.circularfashionpartnership.com and contact the project team to express interest in participation via cfp@globalfashionagenda.com.

CIRCULAR TEXTILES POLICIES IN THE EU

The fashion industry expects drastic upending due to its resource intensity, environmental impacts such as GHG emissions, and poor ability to protect workers and foster prosperity for all. Circular principles are widely believed to have the potential to offer systemic resolve for these issues and several European level strategies are advancing on this topic. The EU Strategy for Sustainable Textiles aims to help the EU shift to a climate-neutral, circular economy where products are designed to be more durable, reusable, repairable, recyclable and energy-efficient[4]. The European Apparel and Textile Confederation (EURATEX)'s work in line with the Green Deal proposes five recycling Hubs throughout Europe to capture and recycle post-consumer textile waste and develop a new raw material textile value chain in Europe[5]. Another example is the upcoming EU Sustainable Products Initiative (SPI), which was announced in the New EU Circular Economy Action Plan (CEAP) in March 2020. This legislation will raise the bar on sustainability standards of new products placed on the market in the EU with legal measures requiring design criteria for products´ durability, recyclability and reusability expected by 2023. *Increased awareness and urgency of action to mitigate consequences of the climate crisis, increasingly see EU policies shifting towards circular systems.*

A GROWING GAP BETWEEN RECYCLED MATERIAL TARGETS AND AVAILABILITY

While COVID19 still presents many challenges in regions with low vaccination rates and the industry is struggling with fluctuating commodity and logistics prices, brands are increasingly setting targets to increase recycled material quantities in their product offering and increase the adoption of circular business models such as rental, resale and recollection. Similarly, manufacturers are seeking to offer circular services to their brand clients, reduce waste, buy more recycled materials and capture value from textile offcuts generated in production. Together with new circular business models, textile recycling is seen as a major opportunity to build more industry resilience for current and future crises and supply chain disruption – a potential holy grail for an industry that must drastically revise its business model. *Already, there's a significant and growing gap between the availability of recycled materials and the quantities needed to meet brands' targets. Furthermore, there's an unclear plan of action to bridge the gap.*

NEED FOR A GLOBAL TRANSITION TO A CIRCULAR TEXTILE SYSTEMS

Textile and garment manufacturing countries predominantly in the Global South are currently dependent on traditional fashion systems, wherein large quantities of products are created at relatively low cost, and then exported and retailed with a relatively high markup in the Global North. For instance, the worlds' second and third largest textile and garment exporters, Vietnam - with an export value of $29 billion - and Bangladesh – with an export value of $28 billion in 2020[6] - could be at risk of significant value loss if production volumes are reduced, new fashion systems are designed without them, and innovation and value capturing is primarily positioned in the Global North. *As supportive policies for new circular systems are developed regionally, consideration of the global, fashion supply chain is critical.*

[4] *https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12822-EU-strategy-for-sustainable-textiles_en*
[5] *https://euratex.eu/wp-content/uploads/Recycling-Hubs-FIN-LQ.pdf*
[6] *World Trade Statistical Review World Trade Organisation*

Opportunities identified through the Circular Fashion Partnership
Background information

THE CFP – A CASE STUDY IN BANGLADESH

The CFP is a cross-sectoral programme, led by Global Fashion Agenda with Reverse Resources and the Bangladesh Garment Manufacturers and Exporters Association with the support of Partnership for Growth. The goal of the CFP is to reduce dependency on virgin materials and increase the availability of recycled materials by establishing a long-term, scalable transition to a circular fashion system in garment manufacturing countries.

The CFP has an ecosystem approach. It facilitates *circular commercial collaborations* between textile and garment manufacturers, recyclers and global fashion brands to capture and direct post-industrial textile waste back into the production of new fashion products. Using the Reverse Resources SaaS platform, the CFP provides a systematic way to build and communicate global demand from brands for products made with recycled materials, and improve access to consistent, high quality, digitally-traced feedstock for recyclers. It also engages local stakeholders, both national and European policy makers and, increasingly, the investment community to create a conducive environment for a circular fashion system.

With its participants and partners, the CFP develops and tests the needed infrastructure, identifies and addresses barriers and presents opportunities to scale circular fashion systems. By demonstrating the business model for recycling post-industrial textile waste domestically, the CFP aims to attract investment to the local recycling sector, to increase recycling capacity and quality of technologies, starting in Bangladesh. In the international arena, the CFP aspires to demonstrate how a country can increase its GDP and economic growth decoupled from environmental impacts. Instead of importing raw materials, recycled materials will be produced locally without use of virgin resources.

OPPORTUNITIES OF SCALING DOMESTIC RECYCLING IN MANUFACTURING COUNTRIES

Reverse Resources' analysis shows that virgin cotton imports in Bangladesh could be reduced by approximately 20%, saving 750 million USD annually, if just 100% cotton and cotton elastane waste streams were recycled domestically. Now, less than 5% of total textile waste is recycled domestically back into fibers suitable for the apparel industry. Together with McKinsey & Co., CFP initiator Global Fashion Agenda identified that existing recycling technologies have the potential to drive 80% circularity in the fashion industry if fully scaled. *The CFP presents a compelling business case to scale domestic recycling, with demand for recycled materials from global brands and secure consistent access to high quality traceable feedstock from local manufacturers.*

CAPTURING POST INDUSTRIAL TEXTILE WASTE IN BANGLADESH

With its large quanitities of standardised and cotton-rich textile waste streams, Bangladesh has an immediate opportunity to scale mechanical recycling solutions. More advanced recycling technologies are critical for a longer-term transition to circularity that will cater to the need of high quality recycled outputs and explore the future potential to recycle domestic post-consumer waste. In 2022, the CFP aims to secure funding to develop a roadmap and recommendations on the adoption of recycling technologies, cost and benefit analysis and investment portfolio availablity and its impact on textile and waste flows. *The immediate opportunity for garment manufacturing countries like Bangladesh is capturing post industrial textiles and the creation of recycled materials that can be utilised in productions for global brand customers.*

Barriers identified through the Circular Fashion Partnership
Background information

FORMALISING THE INFORMAL WASTE MANAGEMENT SECTOR

Textile waste generated by textile and apparel factories in Bangladesh is currently being managed by informal traders in often inefficient networks. It is hard for manufacturers to control their own waste flows as these traders are territorial with regards to their sourcing partners/manufacturers and are also influenced by local political actors. This waste then flows through convoluted routes in informal channels and passes through numerous middlemen. As segregation and sorting undertaken throughout this section of the supply chain are done manually and often inefficiently, the contamination levels of the waste are high and do not meet requirements of many of the emerging recycling technologies. Furthermore, due to the informal nature of the waste handling networks, it is difficult to ensure the social welfare of the people working for informal traders. There are concerns about the wages, working conditions and labour rights extended to people working in this section of the textile supply chain. As engaging with these informal players and networks is currently difficult, upholding accountability, establishing traceability and implementation of new circular solutions is challenging. *The post-industrial recycling opportunity will not be captured without incentivising and regulating this group, ideally in a way which offers an opportunity to participate in the value creation - moving from downcycling to recycling and capturing domestic opportunities versus export and social compliance must be established.*

PROVIDING GREEN ENERGY ALTERNATIVES TO TEXTILE WASTE INCINERATION

Many manufacturers consider incineration of cotton (and other textile waste types) as a sustainable, cost efficient and reliable energy source. Additionally, advantageous characteristics of cotton such as high calorific value for incineration, it being cleaner to burn and easier to capture toxins through filters (than synthetic textiles) make cotton and cotton rich textile waste an appealing raw material for incineration. This has resulted in a system where large volumes of highly valuable and easily recyclable textiles are lost from the value cycle. Cotton waste should undergo incineration only as the absolute last resort when all options of reuse and recycling are not available or feasible. Incineration of these valuable resources works against the fashion industry's demand to increase recycling and create a circular economy. *Access to affordable, clean alternative fuels must be developed to shift incentives towards channelling textile waste towards recycling and away from incineration. Over time banning incinceration of textile waste or discouraging through taxation must be considered. In Bangladesh and beyond, this will rely on energy and infrastructure investment and policy directives.*

ESTABLISHING A COMMON UNDERSTANDING OF WASTE OWNERSHIP

As the value of textile waste becomes more widely apparent, discussions are raised on waste ownership between manufacturers and brands, as well as between brands producing at the same manufacturing facility and increasingly, recyclers partnering with brands. Brands investing in recycling technologies are engaging their supply chains to support in recyclers feedstock needs and secure their recycled material offtake. *The industry needs to establish a common understanding of waste ownership and criteria for succesfull circular commercial collaborations to ensure value is fairly distributed and acceleration isn't deterred.*

ADOPTING TRACEABILITY TOOLS TO PRESENT WASTE VALUE AND FLOWS

When recyclers currently receive textile waste through the informal waste handling network, they have no access to the background information of their sourced material. As there are no quality control measures in place among informal traders, it is easy to manipulate the quality of the textile waste.

Mechanical recyclers active in the domestic industry have for a long time observed and reported the deterioration of quality in textile waste due to purposeful contamination. Some recyclers report having to lab test every single batch of textile waste sourced to check for suitability. This further adds to the over costs of before recycling is undertaken. *Traceability is the missing element that can enable recyclers to gather valuable background data of the sourced feedstock and access to waste data is key to circular systems.*

ADDRESSING WASTE GENERATION LIMITS AND RELATED TAXATION IN BANGLADESH

Manufacturers in Bangladesh have referred to legal barriers on the quantity of waste that is allowed to be reported in comparison to imported fabric and exported garments. Waste volumes exceeding 10% are believed to be taxed and an official price limitation has been referenced on the maximum price of waste that manufacturers can officially declare. Regulation limiting or taxing waste generation could discourage accurate and transparent reporting of waste streams and form a roadblock to circular systems. *Further research is needed on waste taxation and it is important to consider how one tax revenue stream can replace another while incentivising the desirable behaviours. If waste volumes can be exempt from tax when suitably recycled, how will that tax revenue stream be replaced? Can taxation be developed to incentivise local recycling?*

INCREASING AWARENESS AMONG POLICY DEVELOPMENT IN BANGLADESH

There is limited insight into and awareness of the potential economic benefits to Bangladesh from the circular economy movement. Relative to other global apparel manufacturing hubs that grow and spin yarn domestically, Bangladesh does not have an active mechanical recycling industry. It does however have factories that manufacture textiles and garments from recycled fibre, wherein the recycled fibre is imported from neighbouring countries. There is limited knowledge and awareness of the potential economic benefits of adopting formal and digitally verified circular value cycles. Because of this reason, Bangladesh has yet to take advantage of its access to huge volumes of recyclable waste and production capabilities and accordingly invest in supporting infrastructure to develop a thriving textile recycling industry. *To successfully address the identified barriers and implement circular systems at a country level, broad awareness must be created about the potential opportunities of such systems amongst key stakeholders.*

HARNESSING POTENTIAL OF EXPORT PROCESSING ZONES IN BANGLADESH

Export Processing Zones (EPZ) are regulated and can offer organised and transparent waste management. Anno August 2021, large quantities of textile waste, including approximately 5000 tonnes of cotton fabric are registered leaving EPZ via 218 licensed waste vendors per month in Bangladesh. However, once waste streams leave the zones, there is no visibility into their route or destination. In collaboration with the licenced waste vendors, technology platforms can be utilised to support in creating transparency and traceability into the waste flows leaving EPZ. *Industrialisation can be fostered within EPZ by bringing recycling technologies into the zone and engaging licensed waste vendors. Value-added-tax implications (VAT) for handling and moving waste must be assesed.*

FACILITATING CROSS-SECTORAL COLLABORATION IN BANGLADESH AND BEYOND

Collaboration, funding, transfer of technology and knowledge as well as skills building will be key to helping the industrialisation of Bangladesh and other leading manufacturing countries towards a circular economy. The CFP and its respective partners have experience in facilitating conversations between policy makers and businesses – they bring the brands, manufacturers and recyclers voices and are here to help with knowledge on sustainability and policy work. *To create time-based national technology proposals and engage with industry actors in a unified voice and circularity strategy, facilitated cross-sectoral collaboration is key.*