

Technical Seminar 22:

Scaling Up Circularity: Collaborative Approaches to Post-Industrial Textile Waste Management.

22 January 2025

1. Introduction

The transition to a circular economy is critical for reducing the environmental footprint of global supply chains, conserving finite resources, and enhancing economic resilience. Upstream circularity focuses on producing garments, footwear, and textiles where (post-industrial) textile waste is often most abundant, and value can be reclaimed more efficiently. By addressing key issues such as material recovery, segregation, and recycling technologies, upstream circularity presents a unique opportunity to closed-loop recycling, reduce greenhouse gas emissions, and foster innovation within manufacturing ecosystems.

In 2024, with the support of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and H&M Foundation, the Global Fashion Agenda (GFA) launched the Upstream Circularity Playbook. The Playbook, available in 6 languages, is a pragmatic guide offering best practice examples to establish and scale post-industrial textile waste management practices and circular approaches in Asian garment manufacturing countries. The report aims to inspire and motivate public and private sector actions, including a wide range of stakeholders from manufacturers, brands, retailers, policymakers, and investors, to implement and support upstream circularity.

The session was aimed at industry professionals, and it raised awareness of upstream circularity, discussed challenges and solutions, introduced the Playbook, and invited comments and ideas for its successful application. Participants gained insights into textile waste strategies, policy frameworks, and technological advancements that drive circularity practices in production countries.

2. Webinar Objectives

The objectives of the seminar were:

1. **Showcase the Upstream Circularity Playbook:** To introduce the Playbook by giving an overview of the step-by-step guidance and purpose of the resource.
2. **Highlight Key Challenges:** To examine the environmental, social, and logistical challenges of implementing sound textile waste management and upstream circularity practices in manufacturing countries.
3. **Promote Best Practices:** To showcase success stories of companies and regions pioneering circularity initiatives.
4. **Foster Collaboration:** To encourage multi-stakeholder partnerships to scale circularity efforts.

3. Session Speakers

The seminar brought together three expert panelists who shared their insights and experiences with participants:

Speaker	Bio
Léa Mocheff Sustainability and Public Affairs Coordinator, Global Fashion Agenda	Since joining Global Fashion Agenda in January 2024, Léa Mocheff has been actively contributing to the organisation's public affairs activities and publication efforts, leveraging her prior experience in European public affairs and environmental matters.
Abdur Razzaque <i>Managing Director, Recycle-Raw Ltd</i>	Abdur Razzaque is the Managing Director of RECYCLE-RAW LIMITED, specializing in sustainable textile solutions- textile waste management with over a decade of expertise in international sales, marketing, and branding.
Kristin Sommer Team Lead Environment and Due Diligence, FABRIC Asia, GIZ	Kristin leads Environment and Due Diligence for GIZ FABRIC in Cambodia, with over 10 years of experience in sustainability, focusing on textiles, environmental stewardship, climate action, and

	circularity. She previously worked with an international NGO and global consultancy.
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4. Session Summary

The 22nd Asian Dialogues online seminar focused on *post-industrial textile waste* and the transition to a circular economy that is crucial for reducing the environmental footprint of global supply chains, conserving finite resources, and enhancing economic resilience.

Topics covered included the [Upstream Circularity Playbook](#) and an overview of this practical guide that offers best practice examples for establishing and scaling post-industrial textile waste management practices and circular approaches in Asian garment factories. The playbook covers a wide range of topics based on the suggested steps required to implement scale circularity practices, including segregating textile waste in factories and digital traceability of textile waste through access to financing and capacity building.

The seminar highlighted RECYCLE-RAW Ltd's work in Bangladesh and Indonesia, providing the opportunity to learn from the company's practical waste collection experience and the challenges faced and hopes for the future. It also made space for reflections learned from the GIZ FABRIC textile waste activities in several countries and considered the critical success factors that will pave the way for the future.



Léa Mocheff

Lea provided an overview of the Upstream Circularity Playbook, which provides a structured framework for textile waste management, outlining a five-step approach: waste segregation to prevent contamination, digital traceability for tracking waste flows, clear roles in waste collection, matching waste to suitable recycling technologies, and reintegrating recycled materials into the supply chain. She also discussed key enablers, such as supportive policies on tariffs and taxation, technological advancements, financial investment, and capacity building.

Strengthening global partnerships and turning challenges into solutions were central to her perspective on fostering a circular economy.



Abdur Razzaque

Abdur shared insights from his company’s journey in transforming textile waste into sustainable solutions since 2015. He detailed the waste collection and sorting process, emphasizing contamination control, material filtration, and mechanical recycling as a preferred low-impact method. His company has significantly scaled operations and collaborates with spinning mills to ensure traceability. However, he highlighted key industry challenges, including limited fiber identification technology, funding constraints, and slow brand adoption of recycled materials. He stressed the importance of stronger brand engagement, better regulatory frameworks, and expanding recycling efforts beyond a single company’s capacity.



Kristin Sommer

Kristin emphasized that while recycling is vital, reducing waste and reusing textiles should not be forgotten to address overproduction and waste. She highlighted the need for collaboration among factories, waste handlers, recyclers, and brands to ensure waste is properly pre-sorted at the source and meets recycling requirements. She also addressed challenges informal waste handlers face, including compliance issues and licensing barriers. Kristin pointed out upcoming regulatory shifts, such as the CSDDD due diligence legislation, which may lead to brands being more accountable for the waste practices under their due diligence obligations. Lastly, she stressed the importance of government investment in waste management infrastructure and policies to drive circularity in the textile sector.

5. Key Themes from the Q&A

Infrastructure Challenges & Investment Needs

- Upgrading waste management infrastructure remains a key challenge, particularly for post-consumer textile waste.
- Limited funding and investment in recycling facilities hinder progress, with governments often prioritizing other issues.
- Some countries, like Cambodia, have introduced investment laws favoring green technologies, which could support recycling initiatives.

Digital Product Passport & Traceability

- There is growing interest in digital traceability solutions to track textile waste more effectively.
- While technology is available, manufacturers hold critical data that must be shared to improve transparency and recyclability.

Role of Government & Policy Incentives

- Governments can be motivated to invest in waste management by demonstrating its economic benefits, such as job creation, local economic growth, and reduced landfill costs.
- Many governments have sustainability goals, but financial constraints and competing priorities often slow progress.
- Stronger regulations and policies, such as mandatory recycling requirements, could accelerate industry adoption.

Formalizing Waste Handlers & Compliance Issues

- Many waste handlers operate informally without licenses, making it difficult for them to secure business with brands that require regulatory compliance.
- Steps are being taken to formalize and train waste collectors, ensuring they adhere to labor laws and safety standards.
- Organizations like GIZ are working with governments and local groups to improve conditions and compliance in the waste sector.

Brand Engagement & Adoption Barriers

- Despite increasing awareness, the adoption of recycled textiles remains slow due to supply chain limitations, cost concerns, and the availability of high-quality recycled materials.
- The gap between the quality of virgin and recycled fibers is a significant hurdle.
- Brands need to commit to purchasing recycled materials to create a stable demand, which would help scale recycling efforts.

Collaboration Across the Value Chain

- Effective textile-to-textile recycling requires alignment between factories, waste handlers, recyclers, and brands.
- Internal collaboration within brands—across sourcing, materials, and compliance teams—is essential to ensure textile waste is properly collected, recycled and reintegrated into supply chains.
- The complexity of the circular supply chain means that all stakeholders must work together to overcome logistical and regulatory barriers.

6. Seminar takeaways

- **Enablers for Circularity:** Progress requires supportive policies (e.g., tariffs and taxation for recycled goods), advanced traceability technologies, accessible financing for innovation, and capacity-building initiatives to raise awareness and foster responsible consumption.
- **Challenges in Scaling Circularity:** Barriers include inadequate infrastructure for collection/sorting, availability of advanced recycling technologies, higher costs and low demand from brands for recycled materials, contamination issues in textile waste, and lack of integration of the informal waste sector actors.
- **Collaboration and Partnerships:** Key stakeholders—factories, recyclers, waste handlers, and brands—must align efforts. Governments should invest in waste management, partner with informal sectors for compliance, and emphasize the economic and environmental benefits.
- **Opportunities and Future Growth:** Recycling capacity expansion and technological innovation are essential. Legislative actions such as the corporate sustainability due

diligence directive (CSDDD) and eco-design regulations provide momentum. Brands must commit to using recycled materials to drive demand.

- **Circular Supply Chain Complexity:** Aligning production, collection, and recycling stakeholders is critical. Effective collaboration is needed both within organizations and with external partners to create a functional circular economy.
- **Advocacy and Awareness:** Governments should treat waste management as a sustainability priority and economic opportunity, fostering public-private partnerships to achieve a circular economy in textiles.

Conclusion

Textile waste management and circularity in textiles present immense opportunities but require coordinated efforts to overcome significant challenges. Existing solutions, including waste segregation, traceability, and reintegration of materials, demonstrate scalable approaches while enabling factors like supportive policies, financing, and capacity-building, which are essential for success. Collaboration across brands, factories, recyclers, and governments is critical to address issues such as inadequate infrastructure, economic incentives, and informal waste sectors. Legislative measures and innovation drive progress, but widespread adoption depends on stronger brand engagement, cost parity for recycled materials, and investment in advanced technologies. Fostering a circular economy in textiles demands global partnerships, local action, and sustained advocacy to ensure environmental and economic benefits.

Resources / Organisations for sharing

- [Upstream Circularity Playbook](#)
- [Promoting Textile Waste Management and Recycling in the Garment, Footwear and Travel Goods \(GFT\) Sector — Asia Garment Hub](#)
- [Waste No More — Asia Garment Hub](#)
- [Webinar: GRS/RCS Certification for Factories in Cambodia — Asia Garment Hub](#)
- [Fabric Waste Streams Mapping — Asia Garment Hub](#)
- [Recycle Raw Ltd](#)
- [Global Fashion Agenda](#)
- [GIZ FABRIC Asia](#)

- To learn more, watch the [recording of the Seminar](#). The slides presented in this seminar are attached below. For more online seminars on similar topics, check out the [Asian Dialogues Series](#).
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FABRIC Asia

Global Circular Fashion Forum (GCFF)

The Global Circular Fashion Forum is a global initiative to spur local action in textile manufacturing countries to accelerate and scale recycling of post-industrial textile waste:

An effort to achieve a long-term, scalable, and just transition to a circular fashion industry

1

Mobilising Industry Commitment

to producing and using recycled materials

2

Knowledge Exchange

facilitate knowledge exchange, capture, analyse and present insights, develop tools & disseminate learnings across industry actors

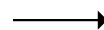
3

Establishing Circular Fashion Partnerships (NCFP)

which realise & scale effective national infrastructures for circular textiles through multi-stakeholder collaboration

GCFF Steering Committee

Role: Steer the strategic development of the GCFF, providing support, guidance and advice.



- Funded the establishment of the GCFF and the Upstream Circularity Playbook
- Fully funded Cambodia and Vietnam pilots and are implementation partners of the two CFPs

The Upstream Circularity Playbook



Objective

A pragmatic step-by-step guide, with best practice examples, for replicating proven programmes to establish circular fashion and textile business models and systems in manufacturing countries.

Target Audience

Public and private sector actors producing and operating in textile & garment manufacturing countries.
Targeting those who have the objective to scale circularity in their regions and/or become more circular.



**STEP-BY-STEP
GUIDE**



**>20 GLOBAL
CASE STUDIES**



**AVAILABLE IN
6 LANGUAGES**



**FREE
DOWNLOAD**

About the report

A step-by-step guide providing essential tools for:



Segregating Textile Waste in Factories

to prevent contamination and enhance recycling quality



Digital Traceability of Textile Waste

to track waste flows and align with recycler requirements.



Collecting, Aggregating and Sorting

textile waste to ensure it is properly prepared and delivered to recyclers.



Matching Textile Waste to Best Use Case

by selecting the most suitable recycling technologies to ensure high-quality material recovery.



Design and Recycled Materials

by incorporating recycled materials into new products, contributing to the creation of a closed-loop system.

A resource outlining essential enablers to support a conducive environment for circularity:



Supportive Policy, Taxation and Tariffs

to create a favourable environment for investment in textile recycling and compliance of circular value chains.



Technologies

to allow the appropriate identification and traceability of feedstocks and matching to the best recycling technology.



Access to Finance

to enable investments in advanced recycling technologies and build the infrastructure to achieve effective textile waste processing.



Capacity Building

to raise awareness amongst consumers, favorise up- and reskilling, and professionalise the informal sector.

THANK YOU

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A woman with long blonde hair, wearing a teal dress, is holding a large, flowing teal fabric in a forest. The background is filled with green trees and foliage, creating a natural and serene atmosphere. The fabric she is holding is draped and billowing, suggesting movement and grace.

GFA

