



Sustainability and Circularity in the Textile Value Chain

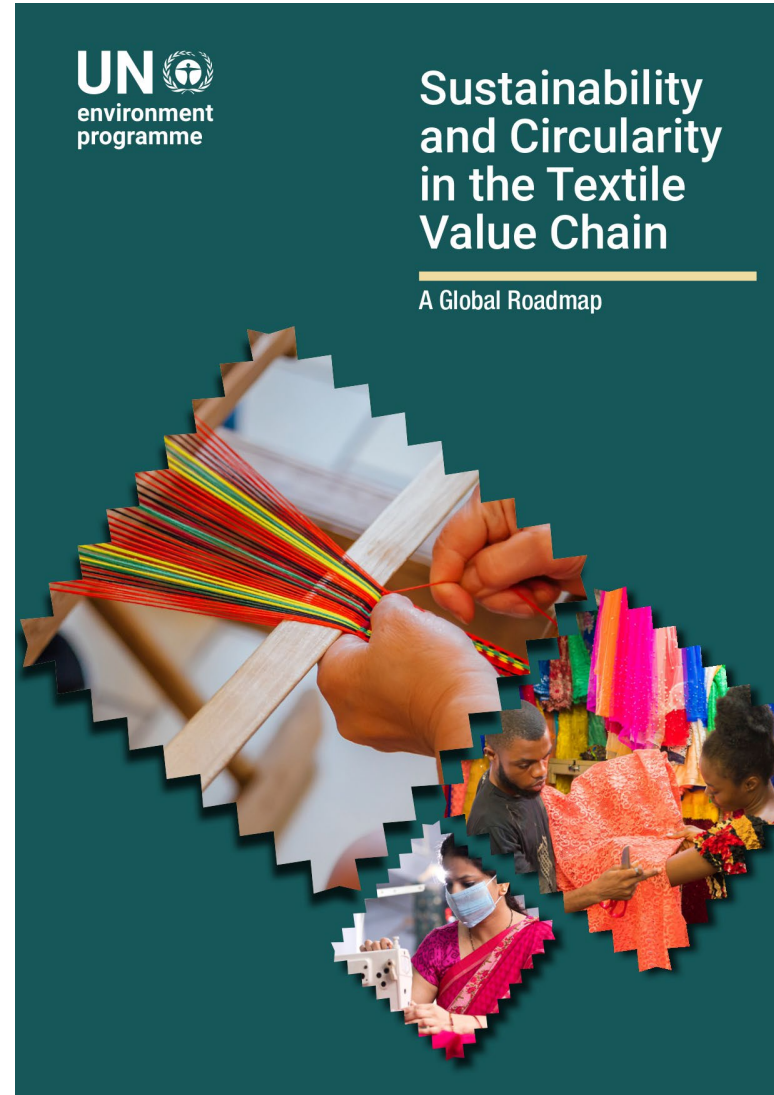
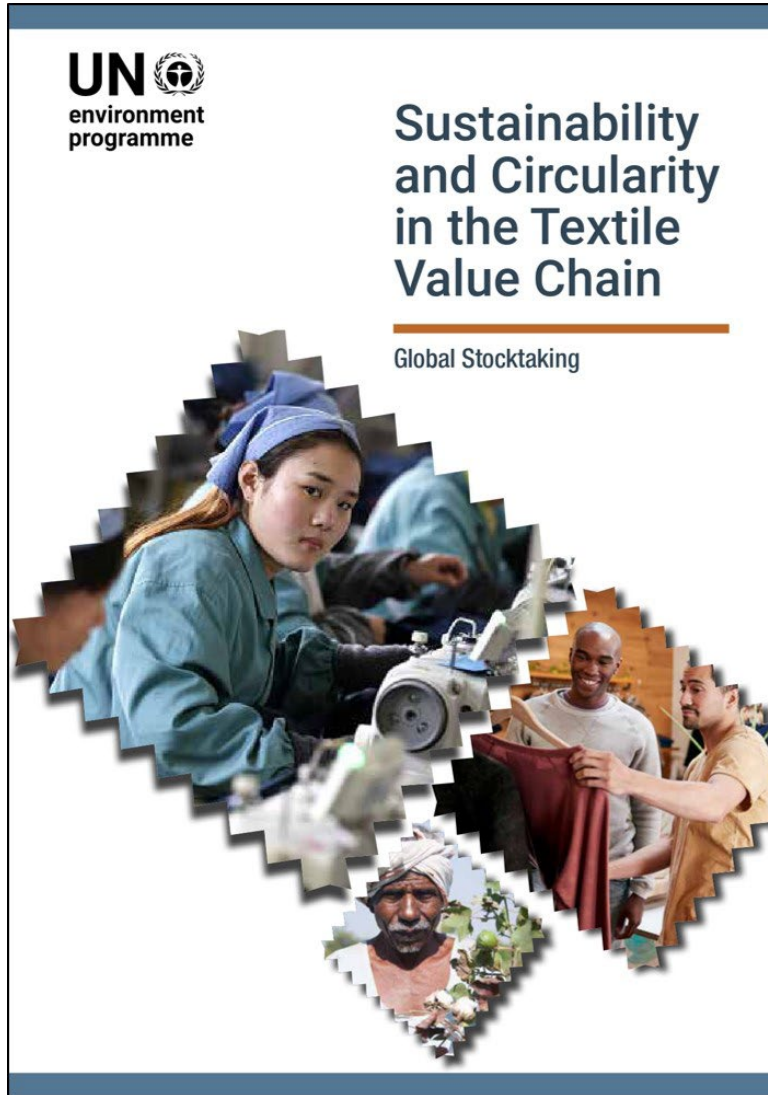
TRADE AND ENVIRONMENTAL SUSTAINABILITY
STRUCTURED DISCUSSIONS (TESSD)

Tuesday, 21 November

Bettina Heller
Programme Manager, Textile Lead
United Nations Environment Programme



UNEP Textile Resources



Available at: www.unep.org/sustainabletextiles

Environmental and Social Impacts of the Textile Sector

2-8%

is its share of the world's greenhouse gas emissions

86 million

Olympic-sized swimming pools of natural water is used annually

9%

of microplastic pollution in our oceans comes from the sector

0.58 kg

of chemicals are required to produce **1 kg of textiles**

Textile workers are at risk of exploitation, underpayment, forced labour, health risks and abuse – particularly women

Environmental Hotspots

cotton cultivation

- fertilizer, herbicides, pesticides
- land use (biodiversity & habitat loss)
- high water usage

synthetic fibre

- fossil fuel

wet finishing process

- coal-based energy
- chemicals & water pollution

washing & drying

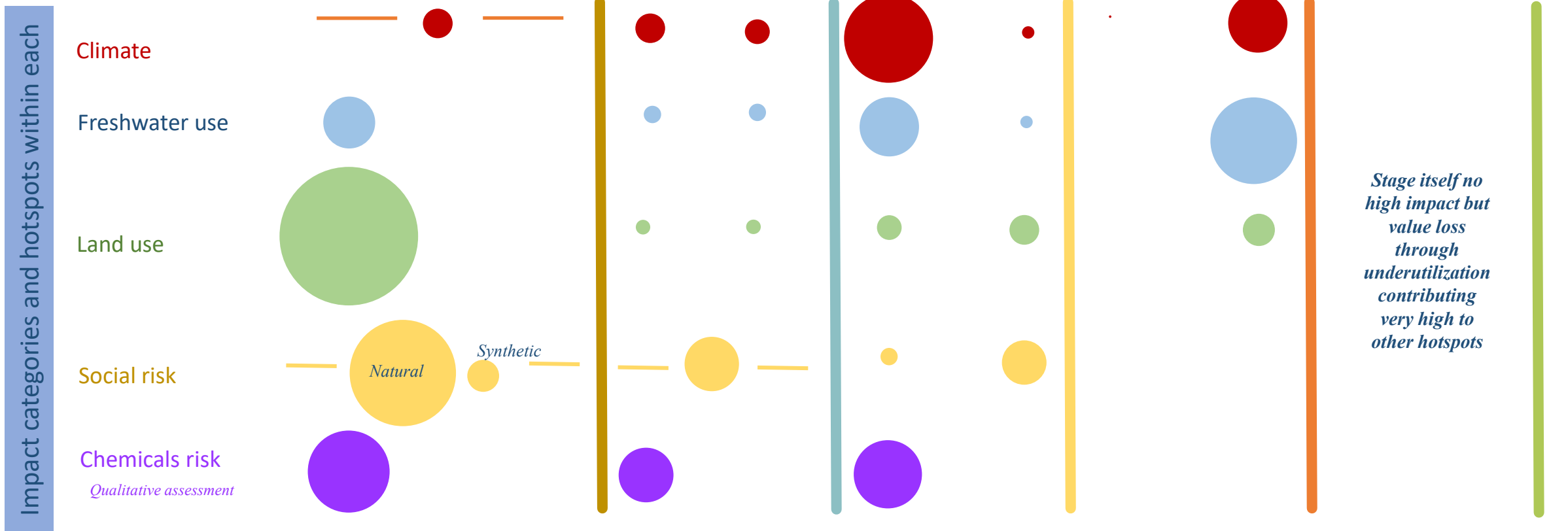
- electricity
- water
- detergent
- microfibres

impact relatively low, but significant resource and economic loss (only 13% recycled)
→ loss of potential to decrease impacts across all stages



Source: UN Environment Programme (2020). Sustainability and Circularity in the Textile Value Chain - Global Stocktaking.

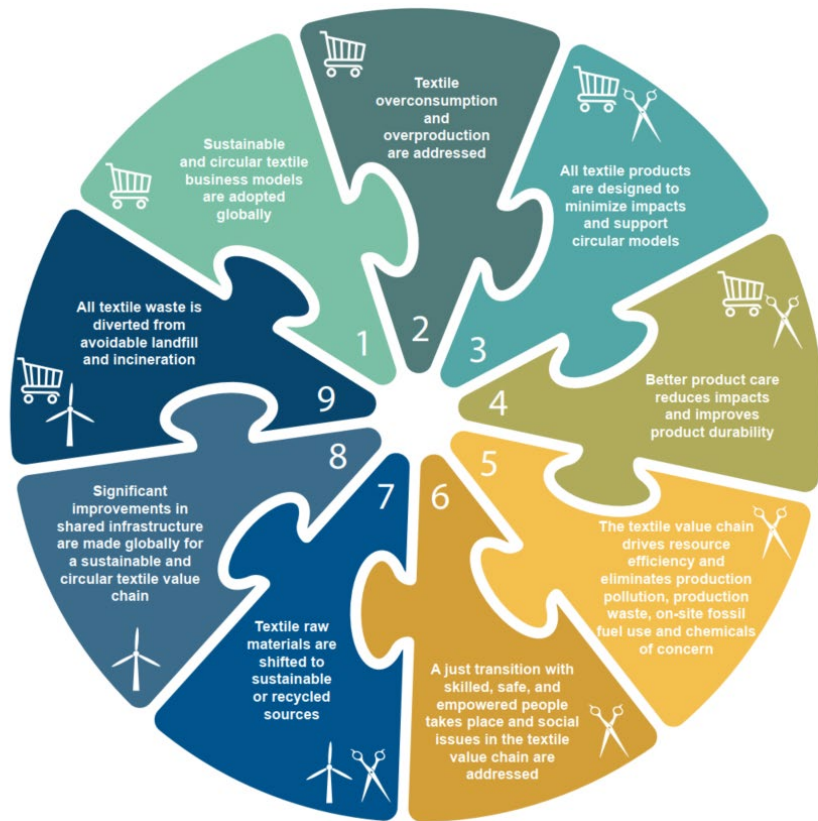
Textile Sector Hotspots



Source: UN Environment Programme (2020). Sustainability and Circularity in the Textile Value Chain - Global Stocktaking.



Three priorities to deliver system change in the textile value chain



Shifting Consumption Patterns

Optimising design, business models and consumer behaviour



Improved Practices

Optimising practices and behaviour in existing sites, companies and processes



Infrastructure Investment

Investing in shared physical technology and systems

Nine building blocks needed to deliver the three priorities

Shifting Consumption Patterns	1	Sustainable and circular textile business models are adopted globally.
	2	Textile overconsumption and overproduction are addressed.
Shifting Consumption Patterns + Improved Practices	3	All textile products are designed to minimize impacts and support circular models.
	4	Better product care reduces impacts and improves product durability.

Improved Practices	5	The textile value chain drives resource efficiency and eliminates production pollution, production waste, on-site fossil fuel use and chemicals of concern.
	6	A just transition with skilled, safe, and empowered people takes place and social issues in the textile value chain are addressed.
Improved Practices + Infrastructure Investment	7	Textile raw materials are shifted to sustainable or recycled sources.
Infrastructure investment	8	Significant improvements in shared infrastructure are made globally for a sustainable and circular textile value chain.
Infrastructure Investment + Shifting Consumption Patterns	9	All textile waste is diverted from avoidable landfill and incineration.

SHIFTING CONSUMPTION PATTERNS AND IMPROVED PRACTICES



All textile products are designed to minimize impacts and support circular models

Designing and producing products to increase material efficiency by 10% would drive 24 Mt CO₂e of emissions benefits by 2030.

Design must be informed and intentional. Improved data and feedback loops will be critical to take into account knock-on effects of design at the stage of production, use and end of use.

Products should be designed to consider the relevant circular business model (e.g. durability for rental), and with the assumption that they will be an input to closed loop recycling.

KEY ACTIONS



Products are designed for reduced impact, considering: the full impact of design choices, including fabric choice, elements affecting reuse and recycling (such as design for disassembly), specific dyes, finishes, and structures; and designs optimizing efficiency such as minimizing fabric cut-out.

01

02

Products are designed for circularity, including design for longevity, recycling, or disassembly (including modular designs, removable stitches/ glue, or mono-material designs).

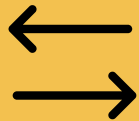
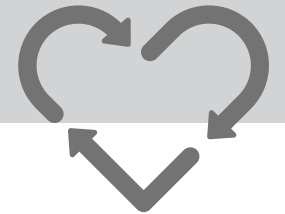


Design stays relevant, and feedback loops are created from both producers and consumers to ensure that designs stay relevant and optimal.

03

04

Design ensures that 'safe and recycled or renewable inputs' are used in products with substances that are hazardous to human health, or the environment designed out of systems, as they affect safe material circulation.



Encourage circular and sustainable product design through robust evaluation of life cycle impacts – including material choice, elimination of chemicals of concern, recyclability, and durability – **and by applying incentives and regulations** such as subsidies, tax/ VAT (dis)incentives , sustainable design criteria, or links to EPR mechanisms



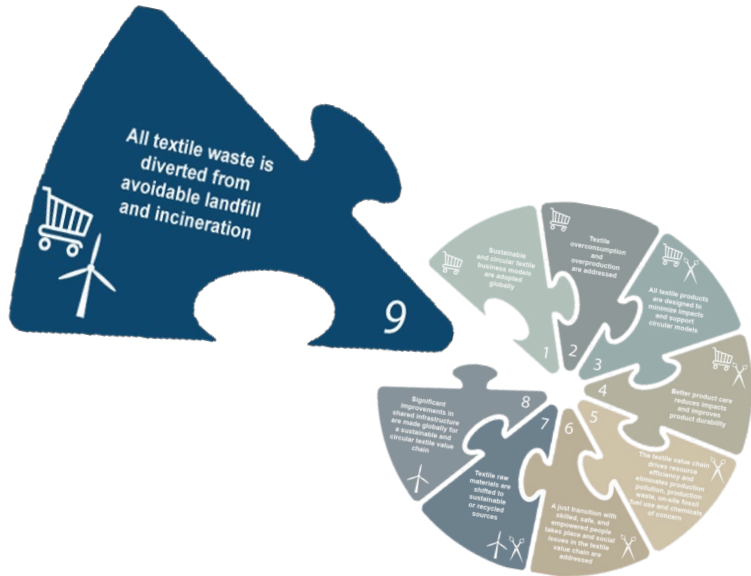
Support the development of credible global standards, decision support data and tools, and guidelines for circular design with adequate industry consultation to reflect value chain realities, ensuring that duplication is minimized, and solutions are usable across markets, such as considering the geographical variations of existing policies and initiatives.



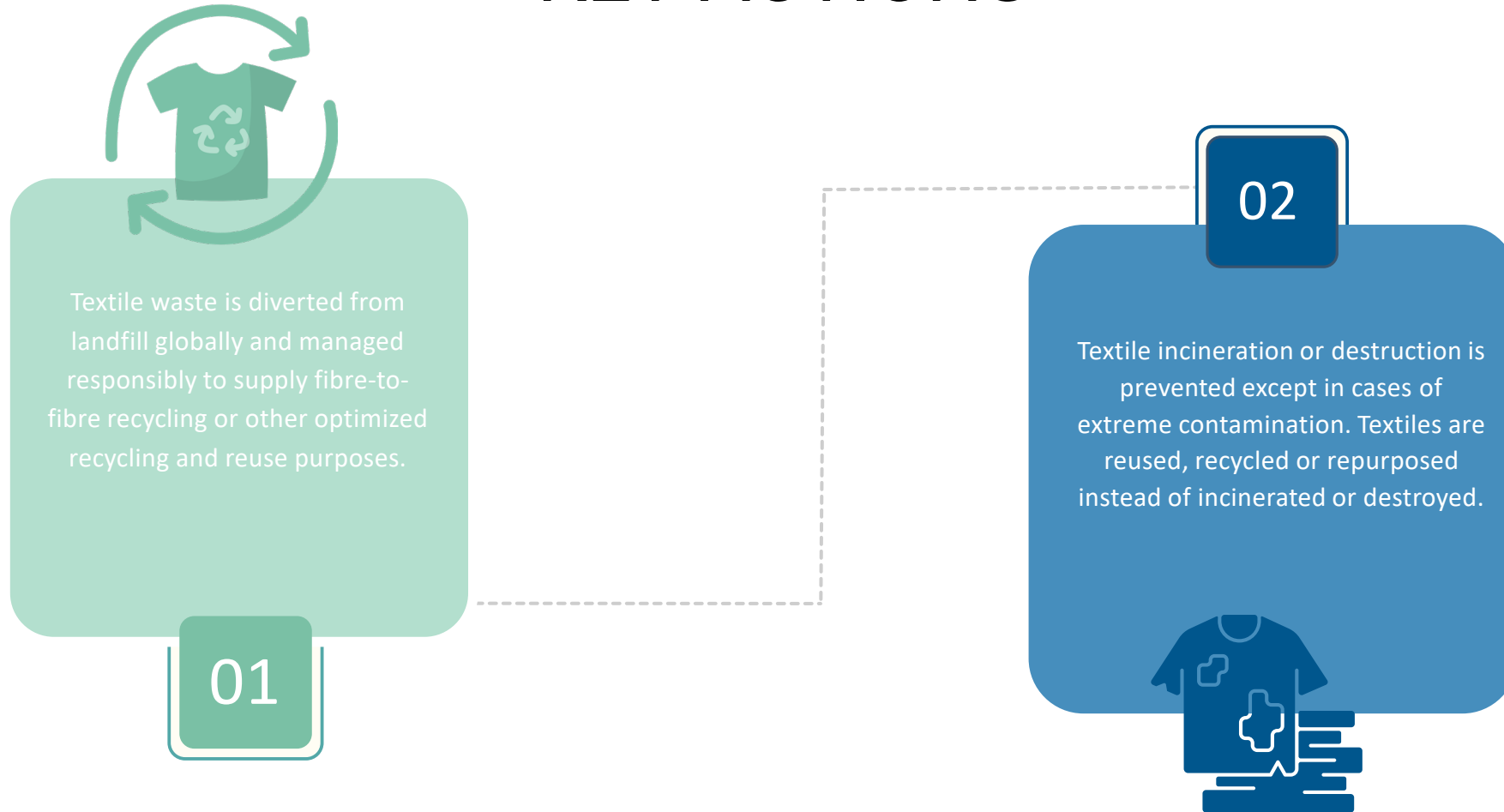
All textile waste is diverted from avoidable landfill and incineration

Increased recycling and collection of waste can reduce annual CO₂e by 18 mln tons and move the industry towards a closed-loop system.

Shifting consumer behaviour and **global dynamics** are required to avoid the need for landfill and incineration; for example, through circular solutions that reduce waste outputs. Solutions are needed to avoid shifting responsibility for waste disposal, such as trade of used textiles to locations that cannot use them and lack the infrastructure to adequately process textile waste.



KEY ACTIONS



Explore trade policy options for textiles waste (pre- and post- consumer) to **maximize circularity** across the value chain, while recognizing current challenges with countries receiving used textiles and waste they cannot process and finding joint solutions that are beneficial on all sustainability pillars.

Identified gaps to achieve sustainability and circularity in the textile value chain



Shared global industry targets on sustainable and circular textiles



Data is gathered and analysis tools improved to support effective decision-making



Policymakers create a cohesive global policy strategy and formalize measurable national plans



Knowledge on consumer communications and behaviour for circularity is delivered to policymakers and the private sector



One UNEP Textile Initiative



Policies, financial measures, industry practices and norms, and advocacy that promote a circular textile value chain



FOCUS PRIORITIES



Scaling circular business models



Addressing overproduction and overconsumption



Eliminating hazardous chemicals



FOCUS STAKEHOLDERS



Shifting industry norms towards sustainability through target setting, design for circularity, and phasing out most harmful practices



Development and implementation of policies, strategies, legislation and action plans for a circular textile value chain



Shifting investments to finance circular textile business models, technologies and infrastructure



Advocacy to shift textile consumption towards circularity, and thereby activate changes across the entire value chain

Global Fashion Industry Target Consultation



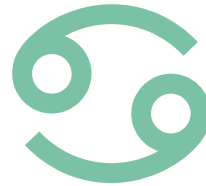
900+
STAKEHOLDERS



90+
COUNTRIES



6
REGIONAL
WORKSHOPS



29
ACTION
POINTS



BRANDS
RETAILERS
PRODUCERS

The circularity and used textile trade project



Funded by
the European Union



Overview

- Project funded by the European Union, duration from **1 October 2023 – 30 September 2025**.
- Focus countries (tbc): **Ghana, Kenya, Tunisia and Pakistan** – world's top importers of used textiles.
- In collaboration with **governments** - environment, trade, industry and development agencies, **policymakers, industry partners, civil society, intergovernmental and trade organizations**.



Objectives

- 1. Produce a global guideline with criteria to differentiate a used-textile product from waste and to determine the suitability of exporting used-textiles** that promotes the transition to circular and green(er) economies of importing countries, sustainable social and economic development.
- 2. Create and facilitate platforms for knowledge exchange and dialogue among exporting and importing countries to advance a sustainable trade of used textiles**, to promote circularity in the sector, support sustainable socio-economic growth, and help alleviate negative impacts on the environment and human health.





THANK YOU

Bettina Heller

Programme Manager, Textile Lead
United Nations Environment Programme
bettina.heller@un.org

Sign up to your newsletter :
www.oneplanetnetwork.org/value-chains/textiles/newsletters