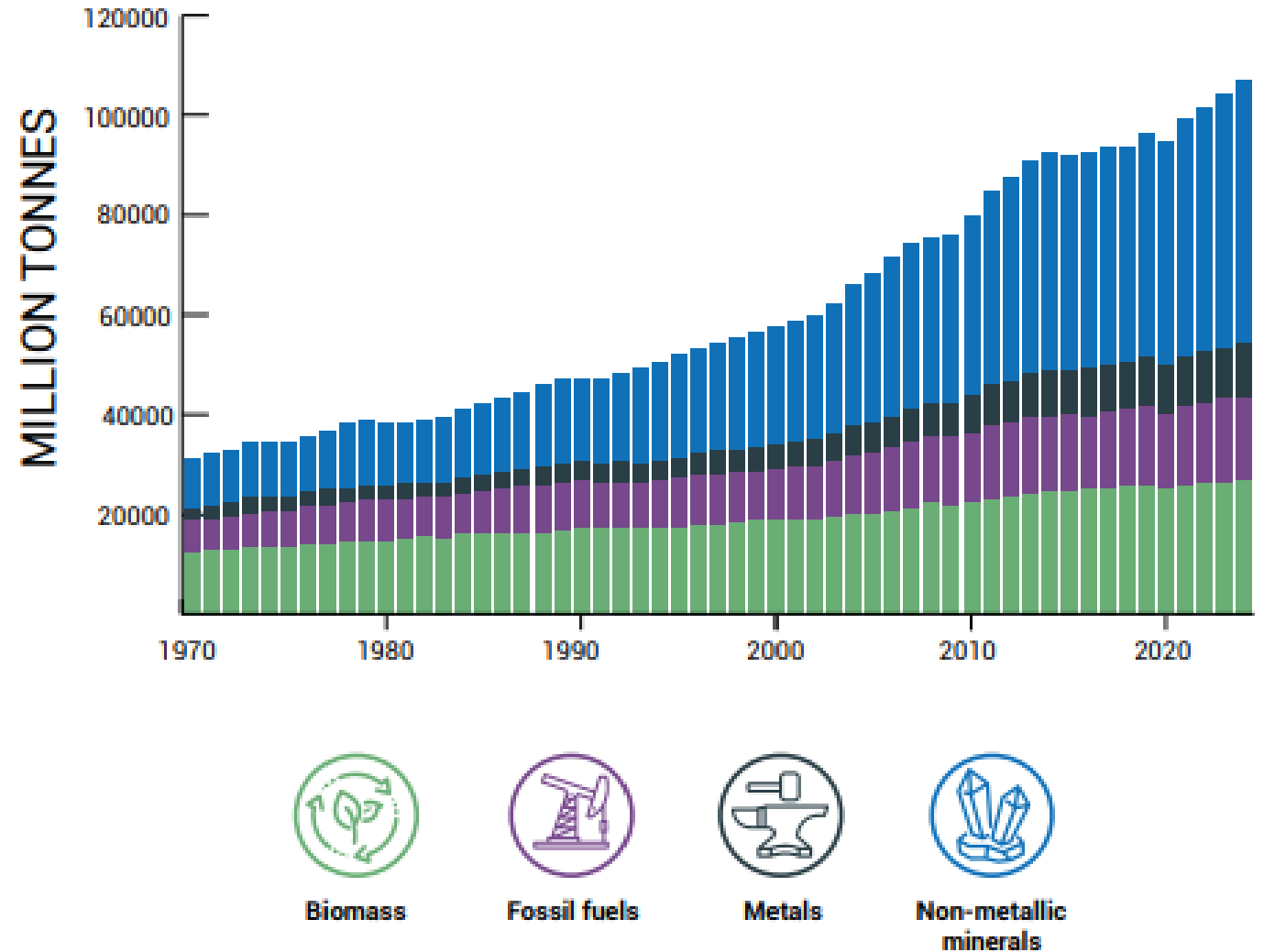


Overview of High-impact Sectors: Metals and Minerals Textiles

Janyl Moldalieva
United Nations Environment Programme

Global Material Extraction

- By 2060 resource extraction could **rise by 60%** from 2020 level.
- **Built environment and mobility** are the leading drivers of material demand, followed by food & energy.



Global material extraction, four main material categories, 1970 – 2024, million tonnes
(Source: UNEP-IRP (2023) Global Material Flow and Resource Productivity Database)

Mining Industry Responsible for:

Pollution:



ASGM largest anthropogenic source of Hg emissions (1000 tons, **40%** of global emissions)

Risk of wide-spread contamination through tailings dam failures, toxic emissions, acid mine drainage

Climate



8% of global CO2 footprint
3-6% of methane emissions from fugitive emissions in coal mining
28% scope 3 GHG emissions in supply chains

Nature:



7% of total global forest loss
1500 large scale mines located in tropical forests, **1800** under development
ASM responsible for **10%** of forest loss in Amazon between 2005-2015



WORKING GROUP
ON TRANSFORMING THE EXTRACTIVE INDUSTRIES
FOR SUSTAINABLE DEVELOPMENT

Priority Areas for the Secretary General

1

Financing for
Development

2

Governance and
resources
management

3

Green Economy

4

A just transition
towards Sustainable
Systems

5

Technology and
Innovation and the
Circular Economy

6

Regional and global
collaboration

UNEA Resolutions

UNEA-5 Resolution

- Intergovernmental regional consultations **to develop non-prescriptive proposals**
- Knowledge gaps in relation to the environmental aspects of **tailings management;**

UNEA-6 Resolution

- Establish a **digital knowledge hub** with good practices
- Develop **capacity-building opportunities on environmental aspects of minerals and metals**
- Cooperation among MS on **policy, technological, technical, and scientific aspects**

UNEP Work on Minerals and Metals: Pollution and Waste

Vision: The mining and metals sector becomes an integral part of the **green transition** by

- sourcing critical materials for renewable energy technologies responsibly,
- reducing negative environmental impacts, and
- advancing recycling and circular design.

Impacts

Results

Pollution

Impacts of pollution are minimized, working towards zero harm to people and the environment.

- **A Global Tailings Management Institute (GTMI)** is established as a centre of expertise on mine waste and certification of waste facilities
- Mining companies adopt **Global Industry Standard (GISTM) on Tailings Management** as standard practice
- Governments require **mandatory adoption** of GISTM
- **Mercury free** artisanal gold mining

UNEP Work on Minerals and Metals

Outcomes

- 1) Member States adopt principles for responsible and sustainable mining sector
- 2) Industry adopts responsible business practices along the entire value chain
- 3) Reduced impacts of minerals and metals on climate, biodiversity and pollution

Cross-cutting: Member States strengthen the environmental dimension of existing governance initiatives and address environmental governance gaps related to minerals

Outputs per workstream



Policy Action

- ❑ Development of the overall **Vision for a responsible and sustainable mining sector** as overarching framework
- Intergovernmental consultations organized
- In-country implementation support to Governments on alignment with GISTM



Private and finance sector engagement

- ❑ Development and implementation of **Guiding Principles on Mining and the Environment**
- ❑ Support to the **establishment of GTMI** to oversee implementation of GISTM
- ❑ Contribution to **development of Mining 2030 Investor Agenda** in collaboration with PRI



UNEP/Interagency Collaboration

- ❑ Dialogue and collaboration organized to enhance **UN system coherence and impact on extractives industries** through UN Secretary General's Working Group on Extractives Industries
- Mapping exercise and analysis of gaps in extractives industries landscape
- UNEP analysis of knowledge gaps on **tailings management**



One UNEP Textile Initiative

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



One UNEP Textile Initiative



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

The circularity and used textile trade project



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**.

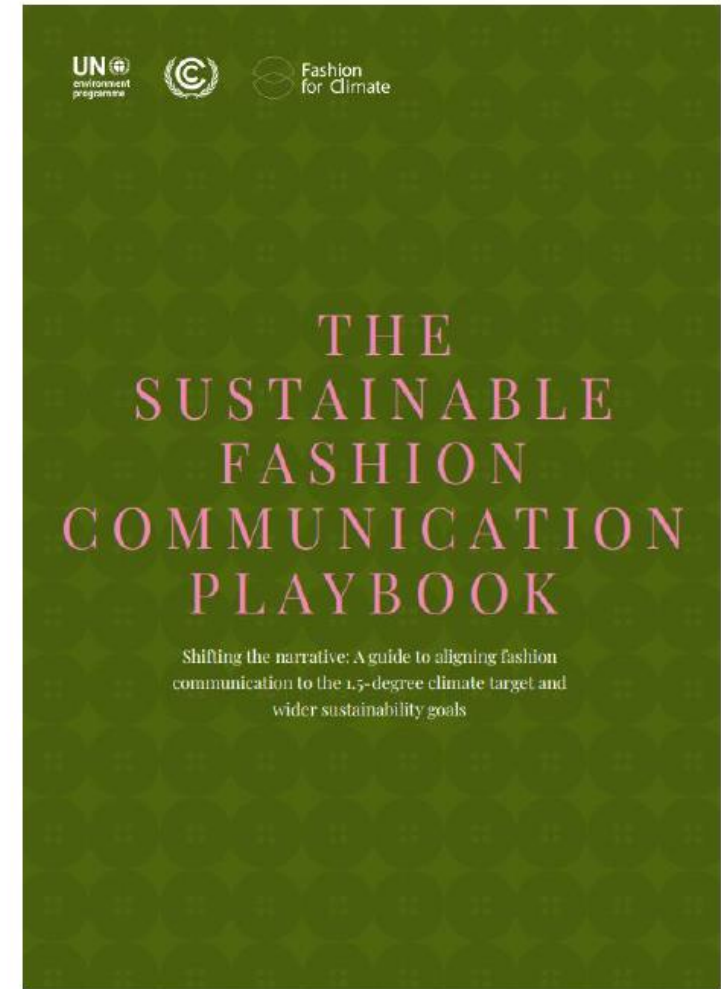
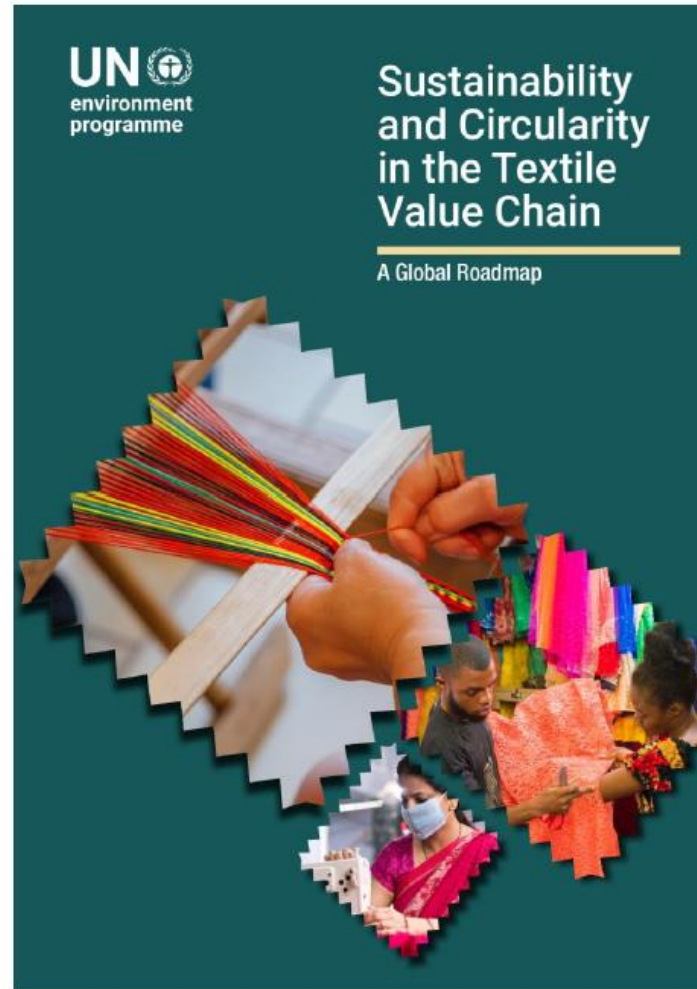
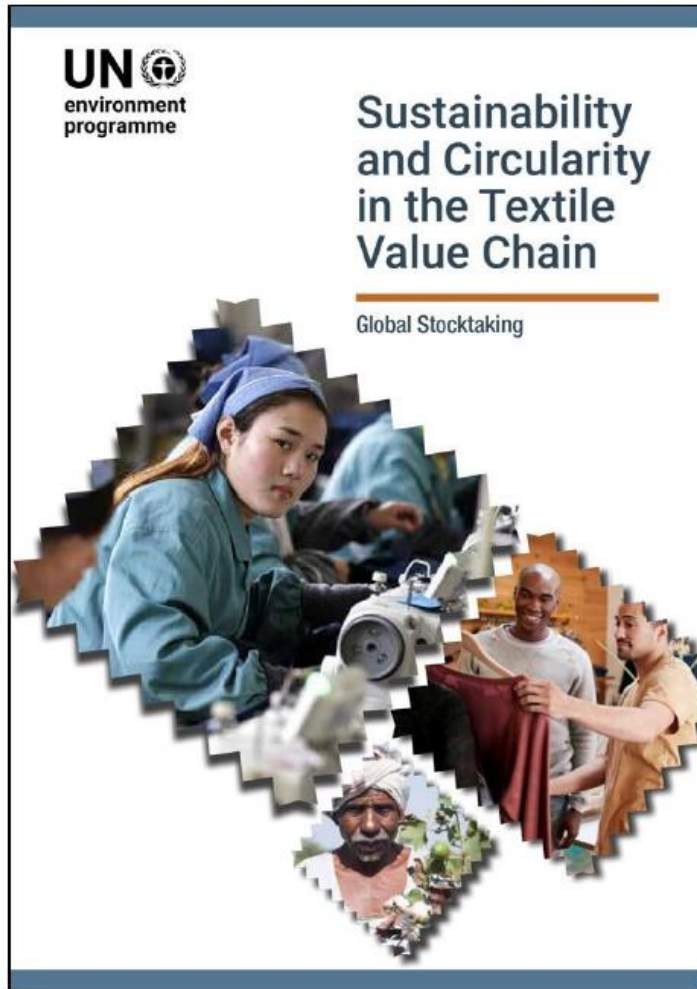


Objectives

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.



UNEP key publications



Resources

Mining

UNEA resolution 5/12 on environmental aspects of minerals and metals management:

<https://wedocs.unep.org/bitstream/handle/20.500.11822/39927/ENVIRONM%20ASPECTS%20OF%20MINERALS%20AND%20METALS%20MANAGEMENT.%20English.pdf?sequence=1&isAllowed=y> and [UNEA-6 draft resolution](#)

All the papers relating to the Res.5/12 intergovernmental process:

<https://www.greenpolicyplatform.org/initiatives/environmental-aspects-minerals-and-metals-management/Intergovernmental%20meetings>

UNEP report Sand and Sustainability: 10 Strategic Recommendations to Avert a Crisis: <https://www.unep.org/resources/report/sand-and-sustainability-10-strategic-recommendations-avert-crisis>

Marine Sand Watch: <https://unepgrid.ch/en/marinesandwatch>

Global Tailings Portal: <https://tailing.grida.no/>

Global Industry Standard on Tailings Management: <https://globaltailingsreview.org/global-industry-standard/>

Compendium of papers prepared for the Global Tailings Review: <https://globaltailingsreview.org/compendium/>

Textiles

One UNEP Textile Initiative: <https://unep.org/sustainabletextiles>

UNEP report Sustainability and Circularity in the Textile Value Chain: Global Stocktaking:

<https://wedocs.unep.org/handle/20.500.11822/34184;jsessionid=67A4EBBB4D691D101940FA4CDED334BF>

UNEP report Sustainability and Circularity in the Textile Value Chain: A Global Roadmap: <https://www.unep.org/resources/publication/sustainability-and-circularity-textile-value-chain-global-roadmap>

UNEP report Sustainable Fashion Communication Playbook: <https://www.unep.org/interactives/sustainable-fashion-communication-playbook/>

UNEP Circularity and Used Textile Trade Project: <https://www.unep.org/circularity-and-used-textile-trade-project>