

A circular economy for textiles: the role of EPR policy

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Presented by

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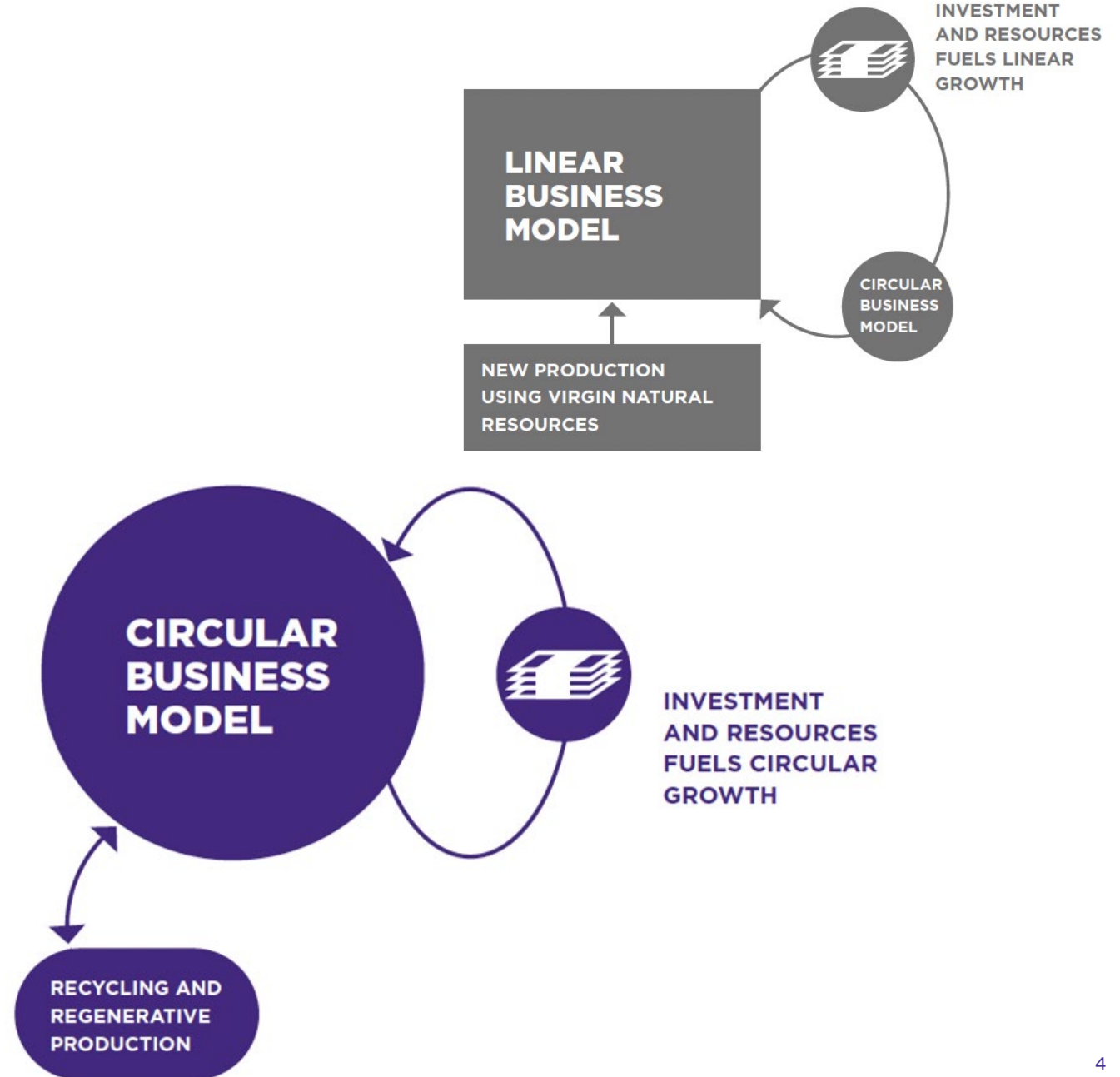
Approximately 12 Mt of textiles are placed on the EU market every year.

It is estimated that **more than 8 Mt** of textiles end up in **incineration or landfill** every year in the EU (JRC, 2023).

4-9% of all textile products put on the market in Europe are **destroyed before use** (EEA, 2024).



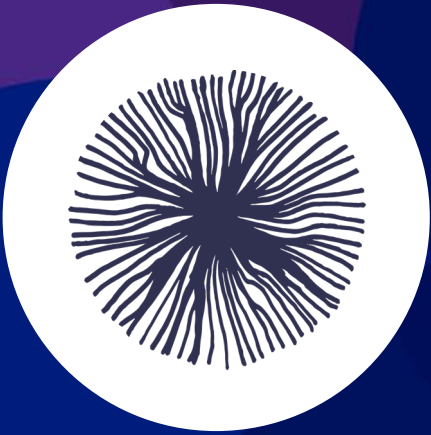
Clothing is generally delivered through linear, single-sale business models, which do not provide for take-back, resale, or repair operations.



Vision of a circular economy for fashion

- 1** used more
- 2** made to be made again
- 3** made from safe and recycled or renewable inputs

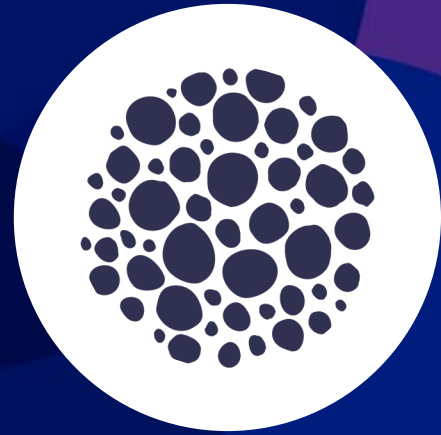




Design



**Business
models**



Infrastructure

Today's collection systems are highly fragmented, they are generally voluntary and therefore deliver limited results.



Photographer: Prashanth Vishwanathan/Bloomberg

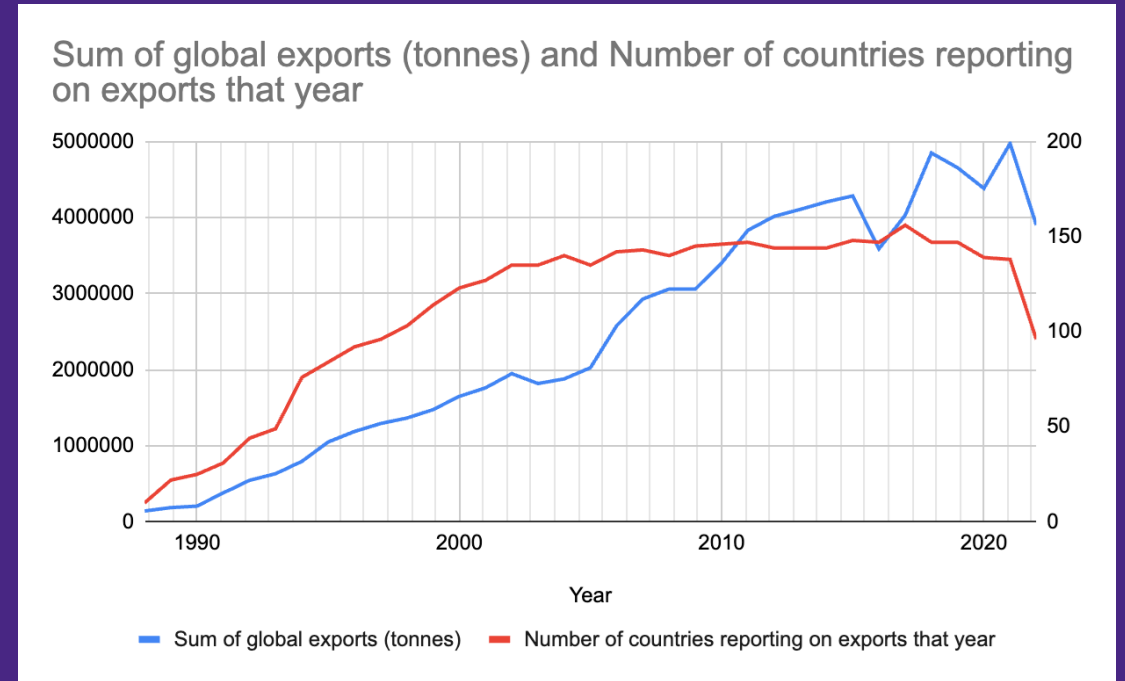
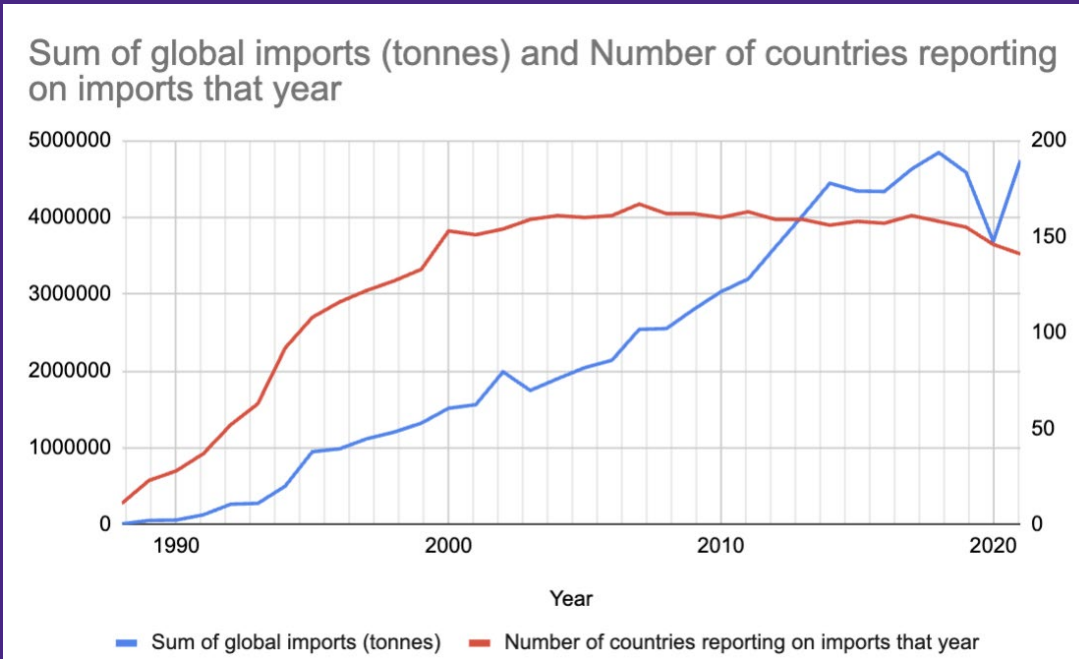
In countries that report on it, separate collection rates range between 15 and 45%.



The collection and sorting that exists today, only exists because the reusable fraction is profitable.



Global trade of used clothing has grown significantly since 1990



Source: EMF analysis of UN Comtrade data

Whilst for reusable clothing sorters are able to turn a positive operating margin, the non-reusable clothing fraction (sold to downcyclers or recyclers) is operating at a loss, based on current market prices.

| | Reusable | Non-reusable | Waste |
|----------------------------------|----------|--------------|-------|
| Revenue per unit (€/kg) | 1.67 | 0.16 | 0 |
| Cost per unit (€/kg) | 0.80 | 0.80 | 0.93 |
| Operating margin per unit (€/kg) | 0.87 | -0.64 | -0.93 |

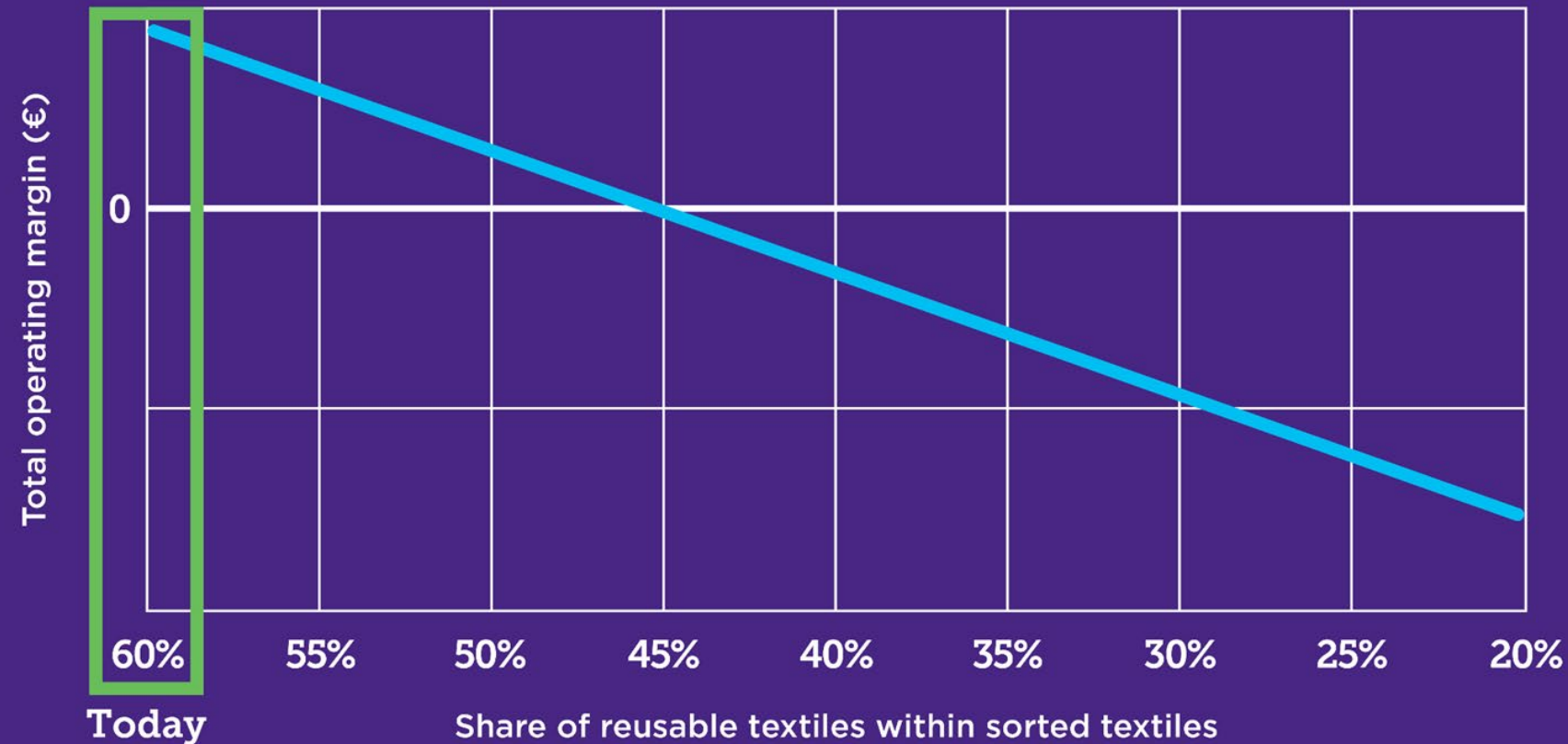
Sources: EMF analysis based on data from Fashion For Good (2022), McKinsey & Company (2022), EigenDraads (2022)

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There is currently no viable business case to separately collect and process discarded textiles - beyond reusable clothing.

The operating margin of the average EU sorter is likely to become negative when reusable share of collected textiles falls 45% (from today's 60%).

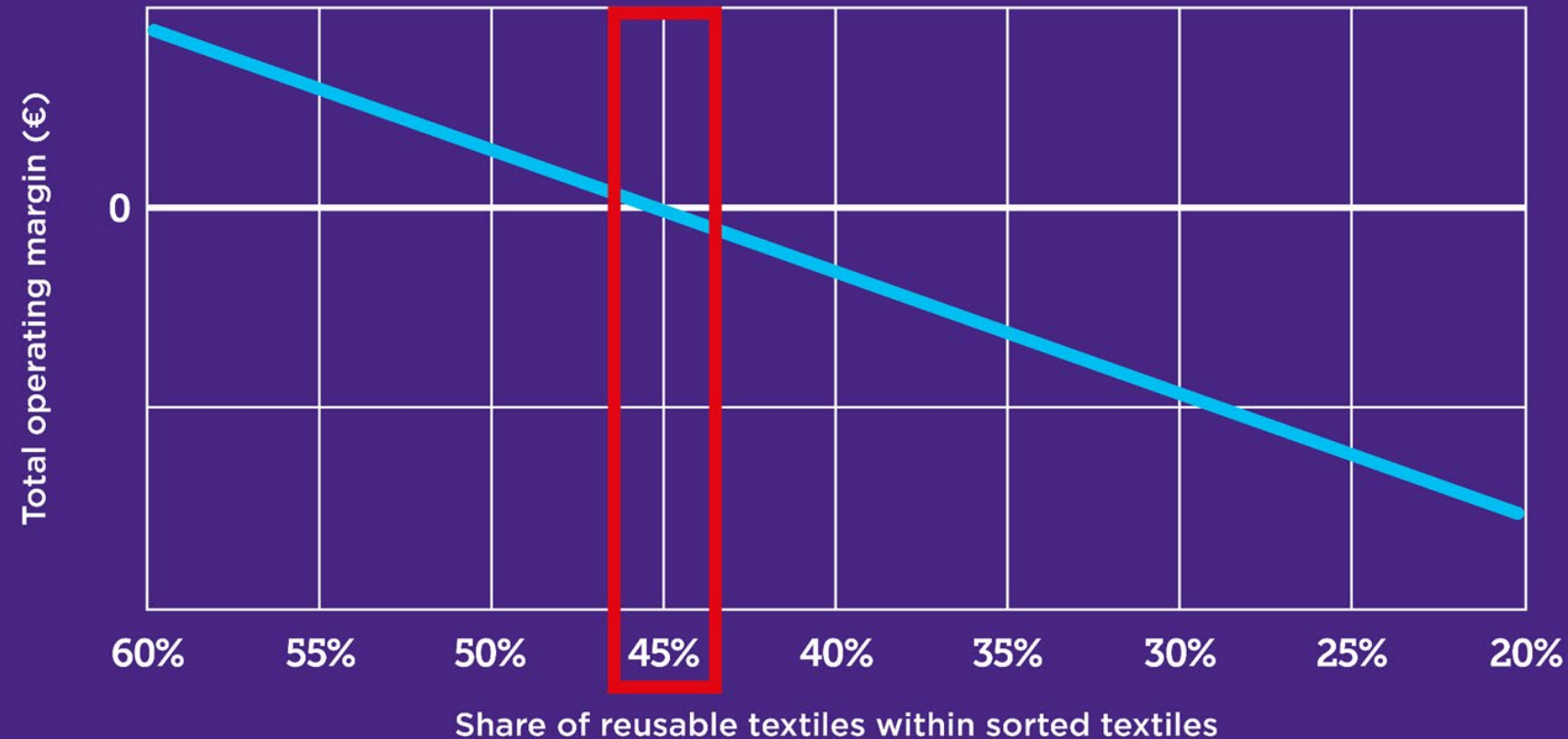
Margin of average EU sorter (difference between revenues and costs)



Sources: EMF analysis based on data from Fashion For Good (2022), McKinsey & Company (2022), EigenDraads (2022)

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Margin of average EU sorter (difference between revenues and costs)



Sources: EMF analysis based on data from Fashion For Good (2022), McKinsey & Company (2022), EigenDraads (2022)

**EPR is a necessary
part of the solution
to create the
circular economy
for textiles we
are aiming for**



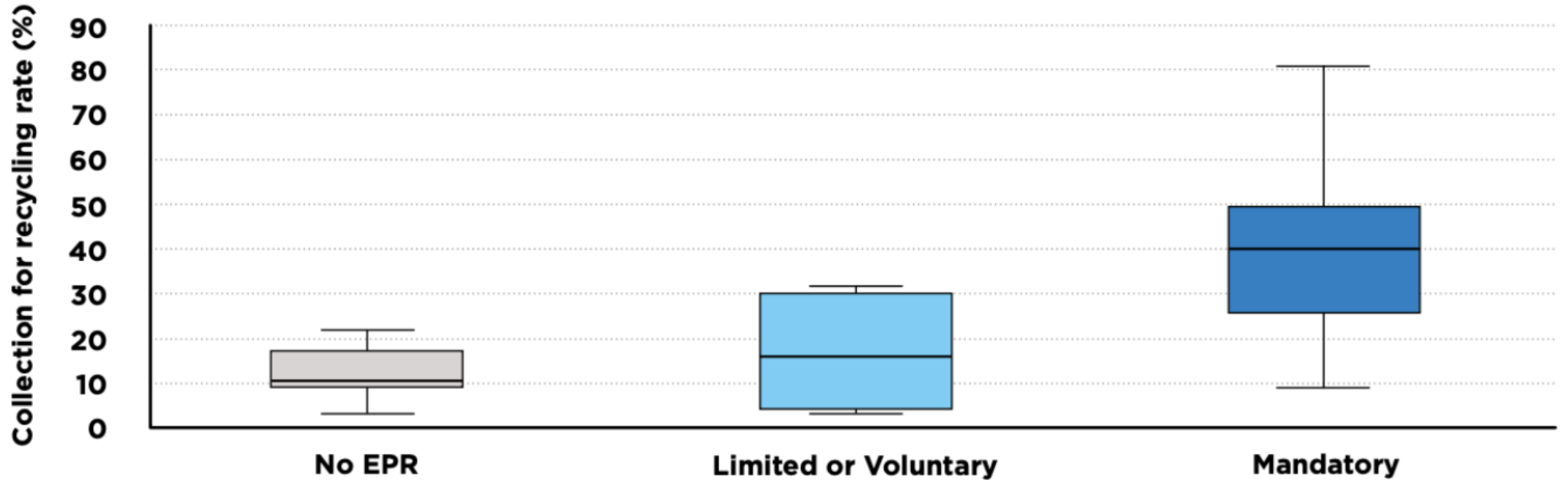
**Public
funding**



**Mandatory, fee-
based EPR**



**Voluntary
contributions**



National collection-for-recycling rates for plastic packaging.

See Ellen MacArthur Foundation, *Extended Producer Responsibility: a necessary part of the solution to packaging waste and pollution* (2021).

EPR is a necessary part of the solution because...

It “makes the economics work” for separate collection and sorting of post-consumer textiles

**FUNDS
COLLECTION
AND SORTING**

**UNLOCKS
CAPITAL
INVESTMENT**

It incentivises capital investments in the infrastructure we need to reuse and recycle at scale

EPR is a necessary part of the solution because...

It “makes the economics work” for separate collection and sorting of post-consumer textiles

**FUNDS
COLLECTION
AND SORTING**

**UNLOCKS
CAPITAL
INVESTMENT**

It incentivises capital investments in the infrastructure we need to reuse and recycle at scale

It creates transparency and traceability for global material flows

**CREATES
TRANSPARENCY**

**SPURS ACTION
TOWARDS
TARGETS**

It spurs collective action towards common targets on collection, reuse, and recycling

EPR for textiles around the world

WRAP - Textiles EPR Status Report (2024)

- Active
- Upcoming / Pending Implementation
- Drafted / Planned
- Voluntary



Why look at EPR from a global perspective?

- While EPR is confined to national jurisdictions, products flow across borders after use.
- EPR is an important element on the table in the ongoing negotiations for a Global Plastics Treaty.

We need to explore pathways towards a more aligned application of EPR across borders.

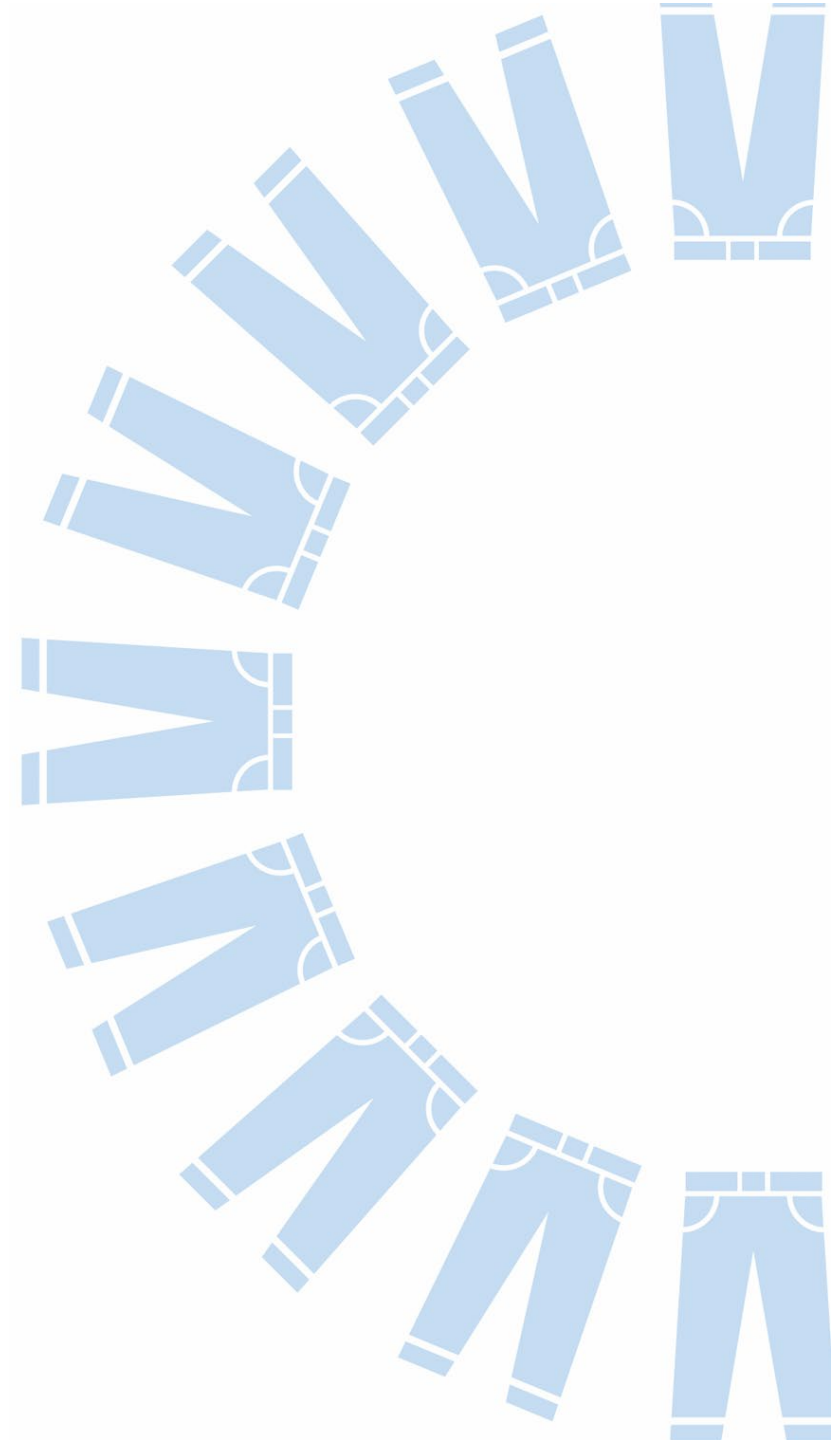


Without international collaboration, EPR systems for textiles risk fragmentation and ineffectiveness.



Looking forward

- 1. Align on key objectives and minimum requirements**
- 2. Account for exports beyond jurisdictional borders**
- 3. Achieve common definitions of waste**



Thank you

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Textile Landscape in India: Implications for EPR

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How much textile waste is enough?

Global **92000 – 100000**
kilotonnes

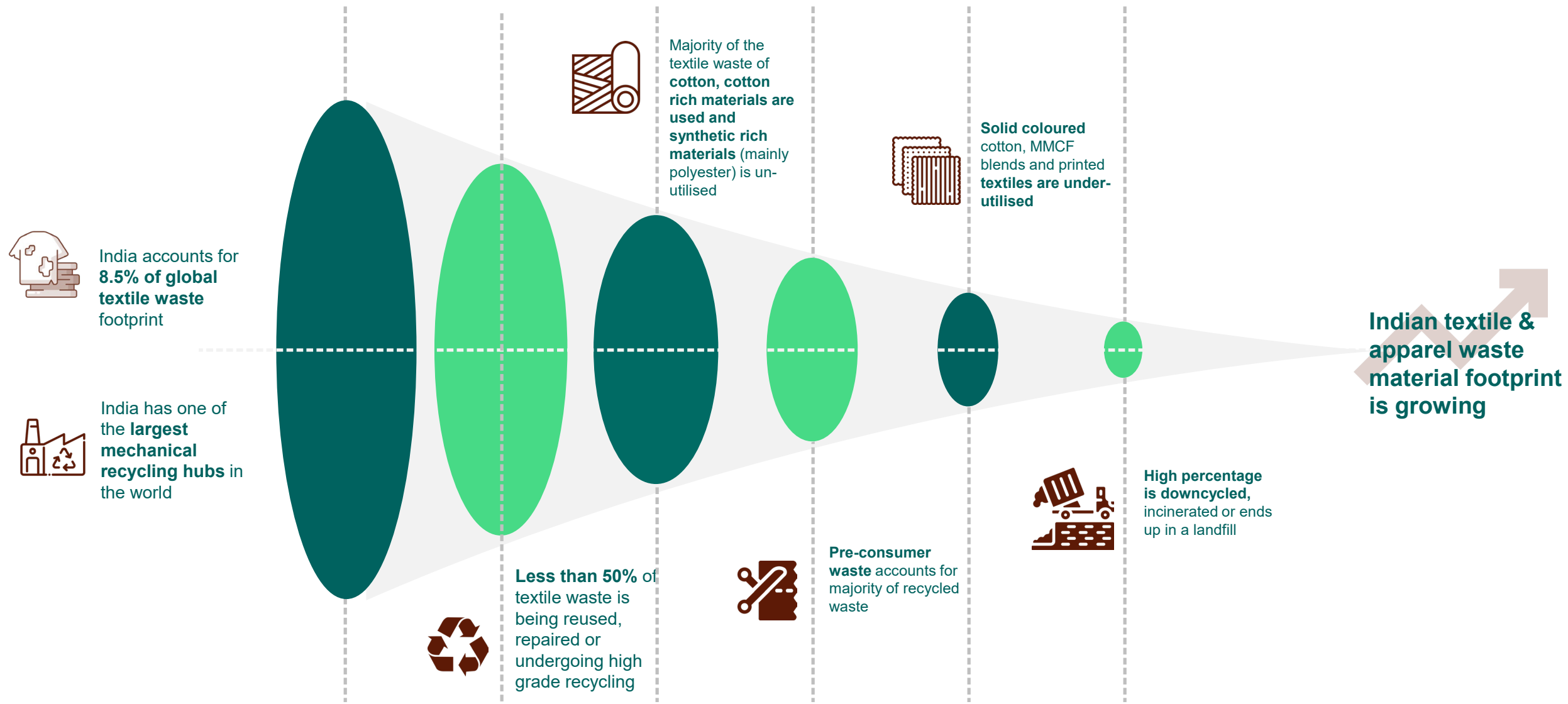


India **7793**
kilotonnes

India's textile waste accounts for 8.5% of the global waste



Underutilised potential





Are there cultural, psychographic and behavioural impacts of being *time poor* and *money rich*?

In India the per capita expenditure on apparel was around EUR 70 in 2023, rising from EUR 43 in 2018.

The total Indian apparel consumption expenditure is expected to be around EUR 103 billion



THE TEXTILE WASTE JOURNEY IN INDIA

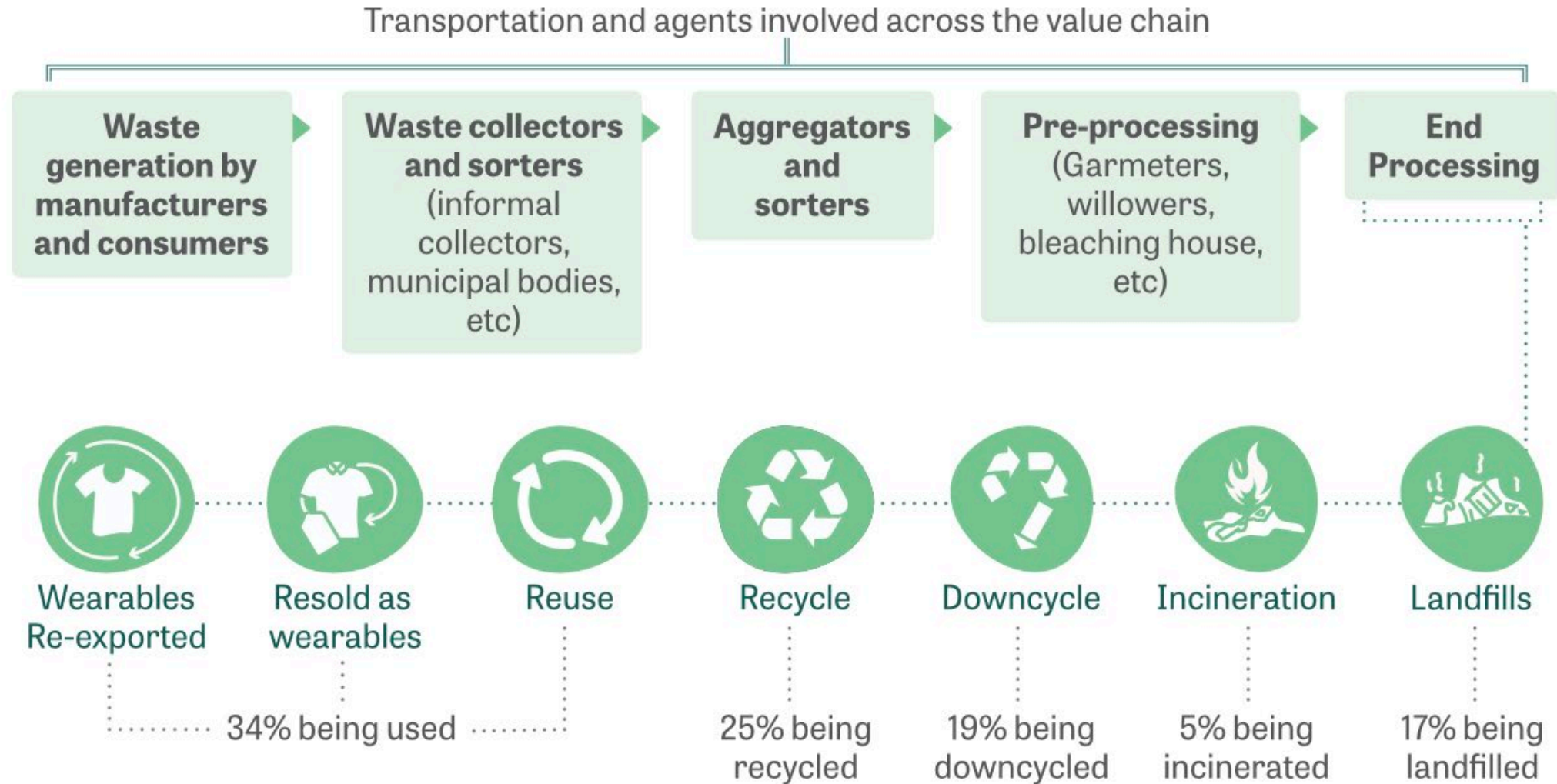


Figure 3: Value chain of textile waste in India

BARRIERS FOR EPR

1

Fragmented
Supply Chain
& lack of
Informal
sector
integration

2

Information
and
Awareness
Barriers &
lack of
Consumer
participation

3

Constraints:
Innovation
&
Investment

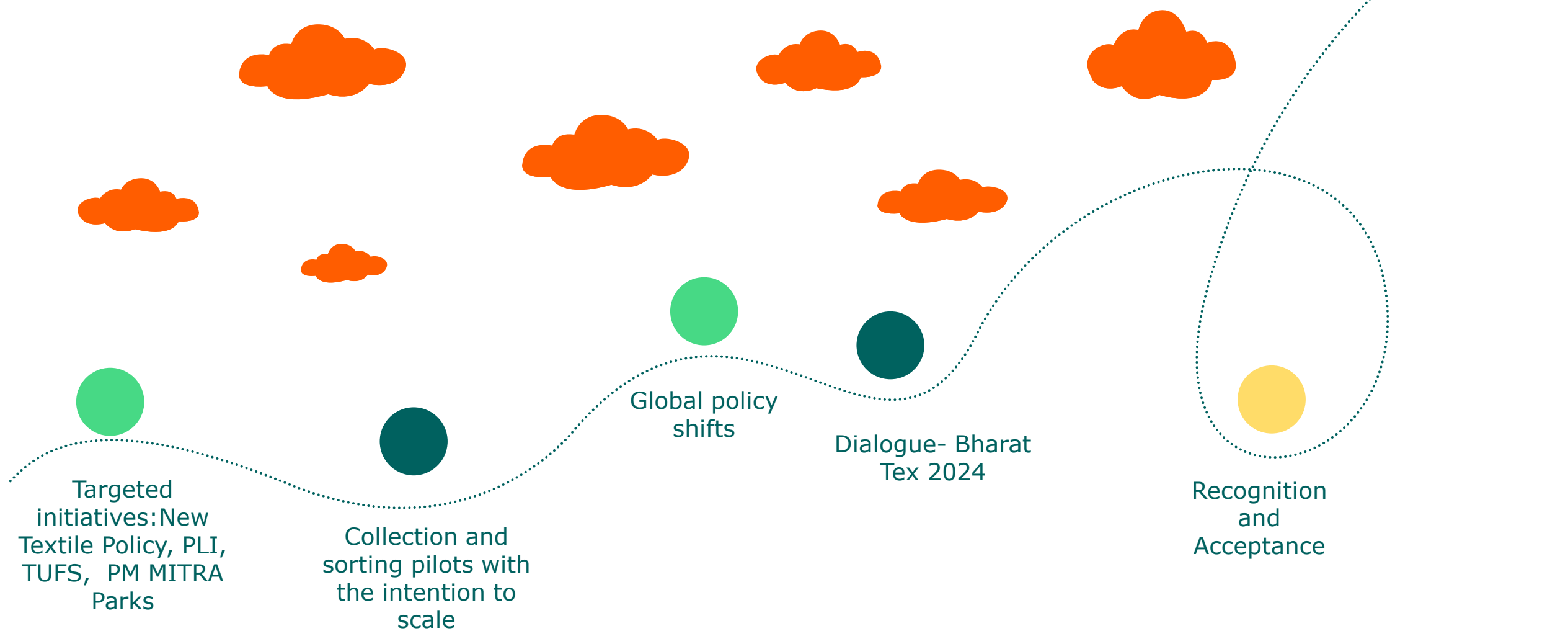
4

Coordination
among
Stakeholders
& capacitated
stakeholders?

5

Is there a
Regulatory
Framework,
favourable
Market
Dynamics,
Traceability?

Is there light at the end of the tunnel?



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FORUM ON EXTENDED PRODUCER RESPONSIBILITY FOR
PLASTIC WASTES
SPOTLIGHT ON TEXTILES EPR

**Roadmap For Transition To Circular Economy
The Case Of Textiles In Ghana**

Oliver Boachie

Special Advisor to Minister

Ministry of Environment, Science, Technology & Innovation,
(MESTI)

Monday 11 March 2024

INTRODUCTION

- ❑ There are many opportunities within the textiles value-chain in Ghana; there are also many challenges for the sector.
- ❑ An Extended Producer Responsibility (EPR) Scheme would be an effective tool to address the challenges and exploit the opportunities.
- ❑ Textile waste is a significant challenge for Ghana
 - Primarily from excess second-hand clothing imports
- ❑ Suspected as one of the main causes of the Kpone Landfill Fire in 2019
 - Just one example of many negative environmental impacts the second-hand textiles industry causes the environment and health of the people of Ghana.
- ❑ Garments are sent to Ghana as part of the waste management strategies of the global fashion industry.
- ❑ Ghanaian customers pay exporters in North America, Europe, the UK and across Asia to get rid of their waste from clothing.
- ❑ This demonstrates the need and the potential to capture waste materials as resources for circularity.

STATISTICS

| INDICATOR | RESULT |
|---------------------|--|
| Economic indicators | <p>Raw cotton imports: USD 1.5 million from other West African countries USD 91 million from China in 2020;</p> <p>Finished garment exports: US \$ 20 million annually</p> |
| Employment | <p>Formal textile sector estimated to be < 1% of total manufacturing jobs</p> <p>About 40,000 are employed as dressmakers and tailors in the informal sector and</p> <p>About 600,000 apprentices learning the trade annually</p> |
| Inclusion | <p>Employment is predominantly informal sector, women and children</p> |

KANTAMANTO MARKET

- ❑ The Kantamanto Market is the world's largest clothing resale market
- ❑ 30,000 people work at the market
 - 15 million items enter the market every week
 - 25 million pieces are recirculated every month.
- ❑ Carbon offset created equivalent to removing 500,000 private vehicles.
- ❑ Globally, the fashion reuse economy worth over USD 73 billion in 2021.
 - ❑ Expected to grow to a USD 700 billion industry by 2030.
- ❑ Trend expected to positively affect Ghana.

OPERATION OF GHANA'S REUSE ECONOMY

- ❑ The operation of Ghana's reuse economy is currently based on exploitative and dangerous labour practices.
- ❑ The Kayayei trade
 - Amounts to a form of modern-day slavery
 - Uses young women as the literal backbone of the market
 - Head carrying heavy bales throughout narrow and uneven market lanes
 - Often suffering debilitating injury and sometimes death.
- ❑ Predatory lending and financially imbalanced relationships
 - Between second-hand importers and second-hand hand retailers
 - Leaves many participants deeply in debt.

OPPORTUNITIES FOR CIRCULAR TRANSITION

- ❑ There are existing upcycling work underway within Kantamanto Market and other second-hand clothing markets in Ghana.
- ❑ Several stakeholders are investigating circular methods of managing textile waste.
- ❑ These initiatives range from small-batch upcycling processes to industrial scale remanufacturing
 - “Fibre-to-fibre” recycling, waste-to-energy and decomposition.
 - Other circular pathways on fibre type, garment type and condition.

PRIORITY ISSUES

- ❑ There are many positive benefits of second-hand clothing trade
- ❑ However, there are also many challenges for the sector
- ❑ Opportunities in the sector
 - Developing a sorting industry sector
 - Creating a clothing fibre to fibre recycling sector
 - Clothing Recycling- Utilising recycled fibre in other products
- ❑ Private Sector Participation in the Textiles Industry

DESIGN AND IMPLEMENTATION OF EPR SCHEME IN GHANA

- ❑ Circular Roadmap And Action Plan

- ❑ Design of EPR Scheme for Plastics funded by World Bank ProBlue

- Future Adaptation for Textiles

- ❑ Establishing A Circular Economy Framework For Plastics

- Model for Textiles and Other Sectors
- Resource Recovery Secretariat

- ❑ Ghana Circular Economy Center Of Excellence

- ❑ Revamping Of Textiles And Apparel Value Chain Based On Circularity

- Funded by AfDB, KEITI and DBG
- Feasibility Study

EPR FOR TEXTILES

- ❑ Textiles industry is global, and transboundary.
 - Fashion and clothing know no borders.
 - Inequalities in standard of living and cost of living.
- ❑ Textiles Waste dumping
 - Shifted responsibilities to countries without capacity.
 - Need for fairness, transparency and accountability.
- ❑ EPR schemes in textile waste originating countries.
 - Must contribute to cost of Waste Management in destination countries.
 - Infrastructure, services, capacity building, technology and private sector participation in partner countries.
- ❑ Role of Regulators, Trade and Environment Law Enforcers