

DOSCM

## CASE STUDY

ZARA



# Data-driven Circular Economy

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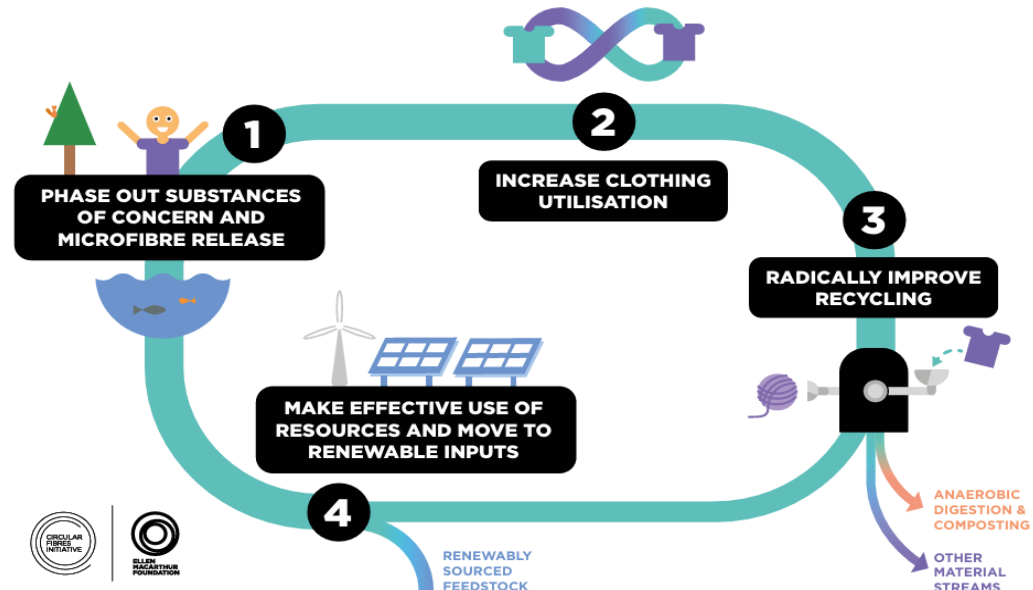
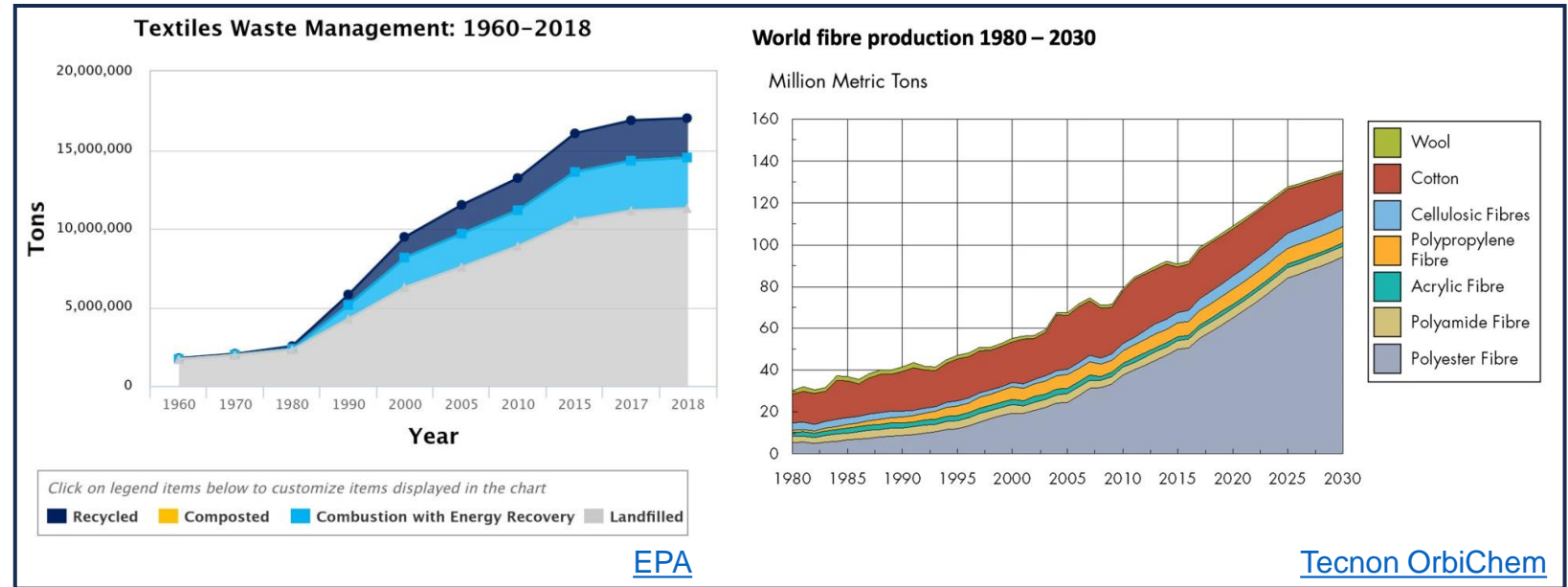
# Recent Challenges and Opportunities of Circular Economy

## CHALLENGES

- Environmental pollution
- Shorter product life
- Lack of sustainability
- Lack of collaboration

## OPPORTUNITIES

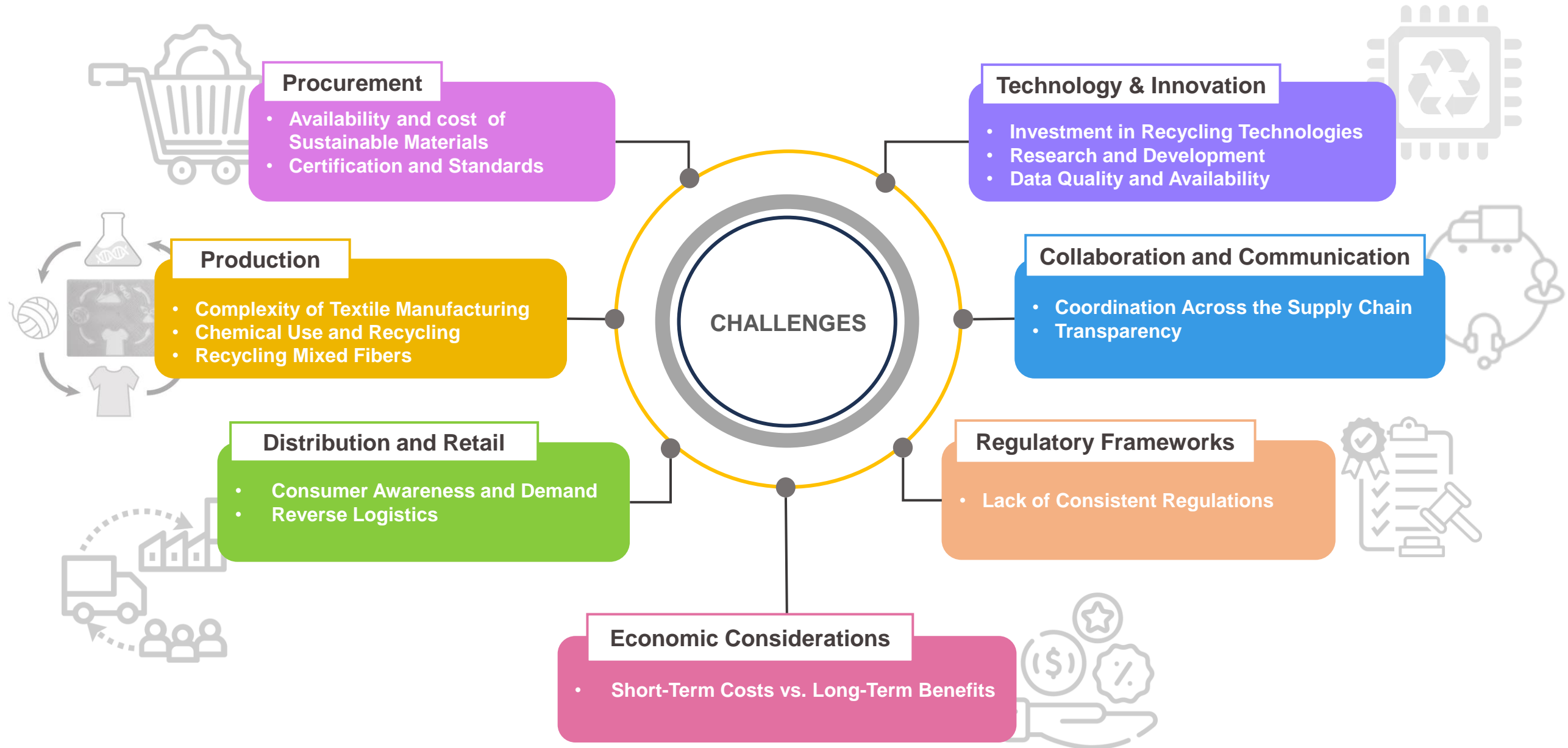
- Bio-degradable and innovative material sources
- Maximum use and reuse of textile products
- Recycling strategies
- Market redistribution
- Cooperation between the public and private sectors



[Ellen MacArthur Foundation](#)

Presented by - Arushi

# Challenges with respect to Supply Chain



# Initiating a Transition to form a Closed Loop System

## Efficient Supply Chain set up

Future considerations should include setting up recycling factories closer to the supply chain to minimize transportation costs



## Technology Upgrade

Ensuring consistency in waste volume commitments, promoting awareness of recycled materials within brands, and upgrading technology for mechanical recyclers



## Enhanced Waste Handling Network

Integration of traceability into existing waste handling networks is crucial for effective management



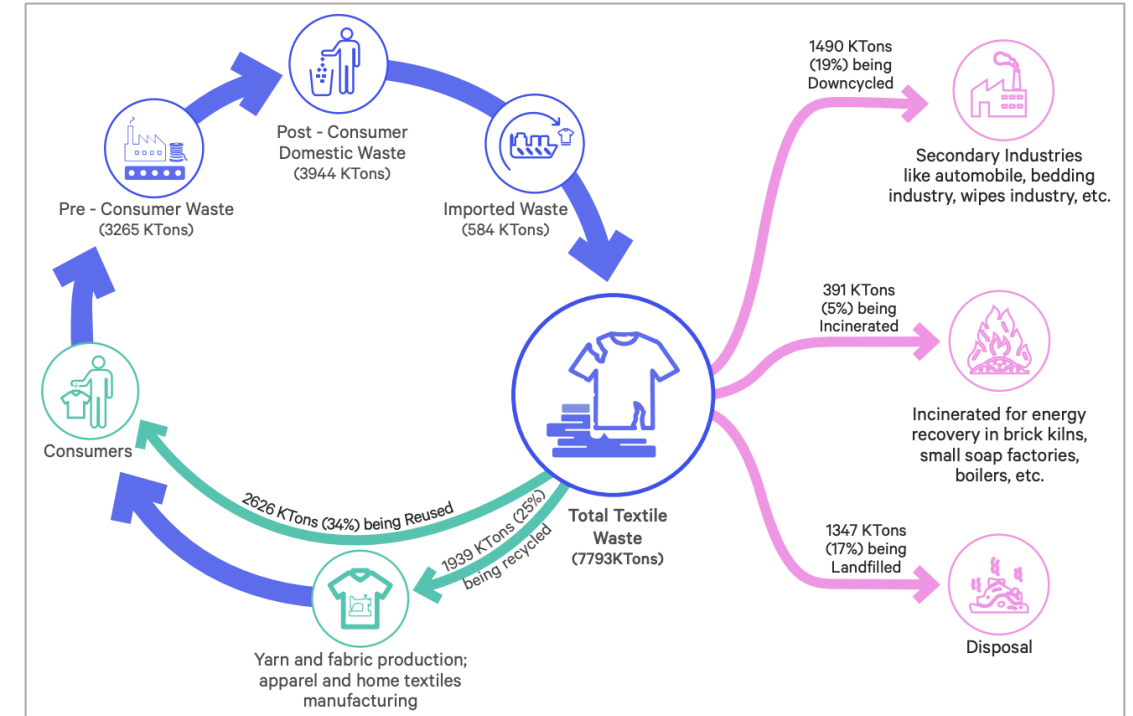
## Strategic Waste Aggregation

Establishing waste aggregation points is essential in most waste supply chains, with recyclers having the potential to create them if a robust business case exists.



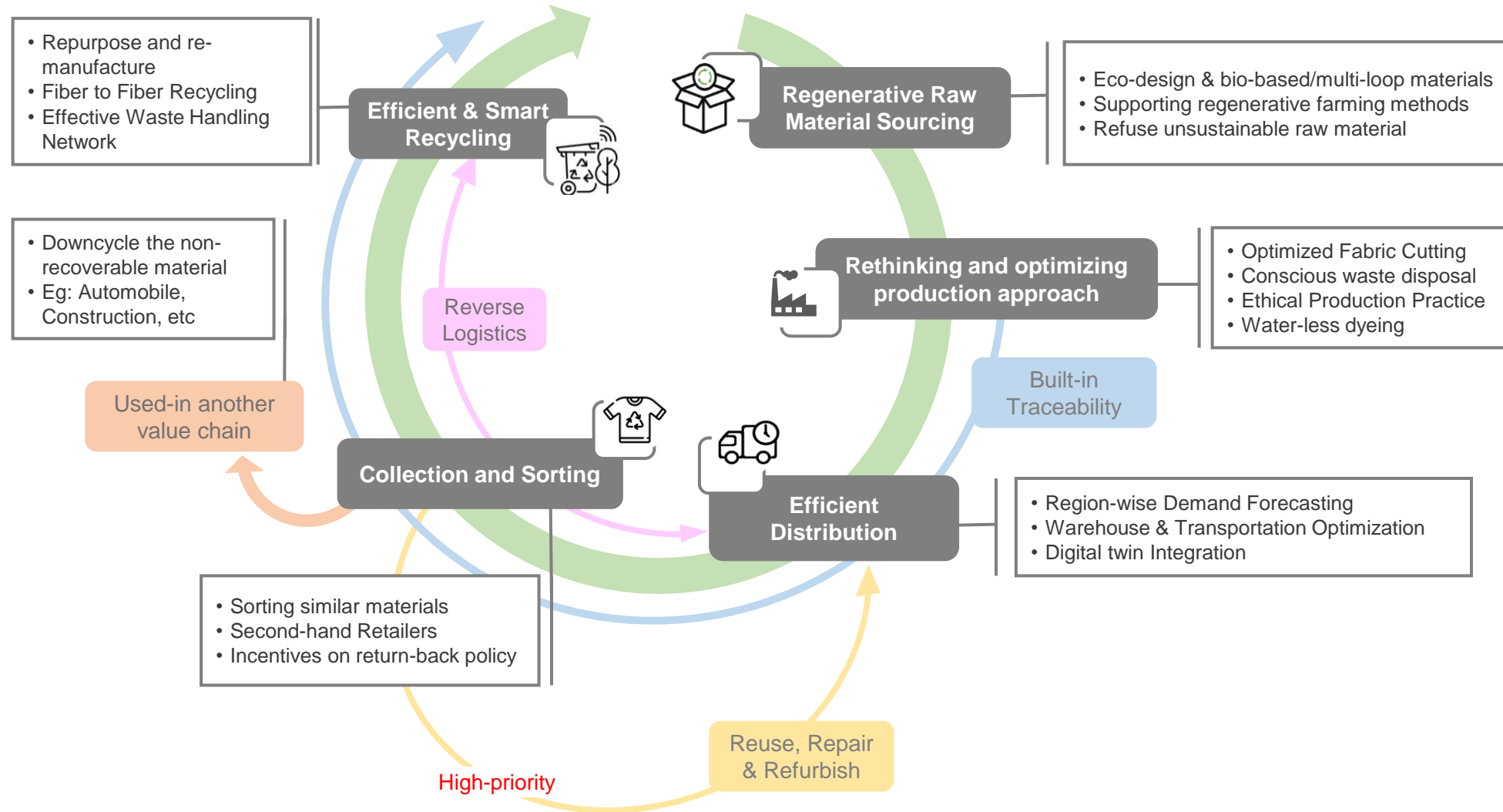
## Industry Collaboration

Factories/Suppliers require increased benefits and brand support  
Factories/Suppliers could be incentivized to collaborate with recyclers



[FASHION FOR GOOD](#)

# Revolutionizing Textile Supply Chain System - Our Solution



Bio-based Materials

Efficient Use of Utilities

Traceability

Conscious Waste Management

Reverse Logistics

Sustainability Certification

## Role of Digitalization



### Regenerative Sourcing

- Blockchain
- GIS mapping
- IoT
- Precision Agriculture



### Recycling post-consumer Garment

- Automated Fabric Sorting (NIR Spectroscopy, Imaging)
- Traceable Fiber Tech(RFID, 2D Barcode)
- Predictive Analytics
- 3D Virtual Prototyping



### Sustainable Manufacturing

- Automation, Robotics, & Digitalization
- Big Data & Cloud
- Digital Twin
- AR & VR



## Digital Product Passport

The Digital Product Passport is a European Union (EU) mandatory requirement to create a “**digital product passport to electronically register, process and share product-related information amongst supply chain businesses, authorities and consumers.**”

## IDENTIFY: GS1 Standards for Identification

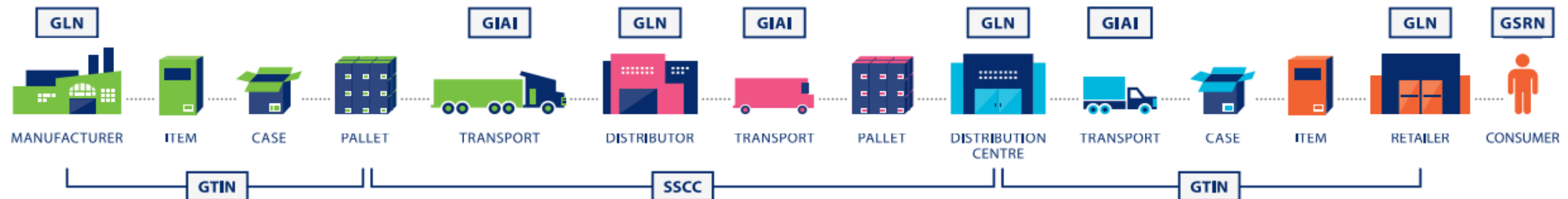
**GLN** Global Location Number

**GTIN** Global Trade Item Number

**SSCC** Serial Shipping Container Code

**GIAI** Global Individual Asset Identifier

**GSRN** Global Service Relation Number



# Business Model Canvas

## KEY PARTNERS



- FabScrap - recycling and reuse SERVICE
- FiberShed - producing sustainable fibers
- Recover Textiles - upcycling post-consumer textiles into new materials
- Non-profit organizations or government agencies promoting sustainability

## KEY ACTIVITIES



- Designing and manufacturing clothing using sustainable materials
- Operating recycling or upcycling facilities
- Collaborating with suppliers to ensure sustainable sourcing

## KEY RESOURCES



- Access to sustainable materials suppliers
- Design and manufacturing facilities
- Recycling and upcycling infrastructure

## VALUE PROPOSITION



- Affordable yet stylish clothing made from recycled or sustainable materials
- Transparency in the supply chain and commitment to ethical labor practices
- Convenience of returning old clothing for recycling or upcycling

## CUSTOMER RELATIONSHIPS



- Digital Sustainability awareness campaigns about new collections and recycling programs
- Bonus points and discounts for recycling and purchasing sustainably produced clothes

## CUSTOMER SEGMENTS



- Consumers seeking sustainable and environment-friendly clothes
- Businesses looking for sustainable clothes for their corporate attire needs

## CHANNELS



- Online platforms, applications, and e-commerce websites.
- Physical retail stores with a focus on sustainable practices.
- Partnerships with other sustainable fashion brands or retailers

## COST STRUCTURE



- Higher R&D and manufacturing cost for sustainable materials
- Maintenance and recycling of upcycling facilities
- Investments in digital and new-age technologies

## REVENUE STREAMS



- Sales revenue from clothing purchases
- Subscription models for recurring purchases or rental services
- Revenue from recycling or upcycling old clothing



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