Designing for a circular textiles economy

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Visualising a greener Harmonised System symposia series
THE LINEAR ECONOMY

Take - make - waste
1/3 of all food produced globally – worth USD 1 trillion – is thrown away each year.
Plastic flows into the ocean are projected to nearly triple by 2040.
What this looks like for textiles

>97% virgin feedstock
PLASTIC (63%)
COTTON (26%)
OTHER (11%)

53 million tonnes annual fibre production for clothing

USE

73% landfilled or incinerated

12% losses in production

0.5 million tonnes microfibre leakage

Since 2000, clothing production has doubled, while clothing utilisation has decreased by a third.


1 Average number of times a garment is worn before it ceases to be used

Every second, one garbage truck full of textiles gets landfilled or incinerated

The circular economy is designed to:

- Eliminate waste and pollution
- Circulate products and materials
- Regenerate natural systems
THE CIRCULAR ECONOMY DELIVERS ON CLIMATE GOALS, WHILE OFFERING NEW AND BETTER GROWTH OPPORTUNITIES

TOTAL CURRENT GLOBAL GREENHOUSE GAS EMISSIONS

- 55% Energy
- 45% Products and food

HOW THE CIRCULAR ECONOMY HELPS TACKLE CLIMATE CHANGE

- Design out waste and pollution to reduce GHG emissions across the value chain
- Keep products and materials in use to retain the energy embodied within them
- Regenerate natural systems to sequester carbon in soil and products

In a circular fashion industry, products (apparel, footwear, accessories) are:

- used more,
- are made to be made again,
- and are made from safe and recycled or renewable inputs

Read the full vision and definitions here
THE JEANS REDESIGN
The Jeans Redesign Guidelines

1/ Jeans are used more

- Ability to withstand a minimum of 30 home laundries

- Provide **care information on the garment:**
  - Reduce washing frequency
  - Wash cold
  - Avoid tumble drying

- Offer **incentives for reuse, repair services, take-back, or collection** programmes.
2// Jeans are made to be made again

● Include a minimum of 98% cellulose-based fibres, by weight, in the total textile composition
  ○ Cellulose-based threads

● Ensure any components added to the fabric are easy to disassemble:
  ○ Removable buttons
  ○ Removable zippers
  ○ Rivet elimination

● Enable easy identification of recyclable jeans during collection and sorting
3/// Jeans are made from safe recycled or renewable inputs

- Jeans are made with chemicals that comply with ZDHC MRSL Level 1 as a minimum
- **Prohibited use** of PP, stone washing, sand blasting, conventional electroplating
- Fabric Mills implemented **ZDHC wastewater guidelines**
- Water volume used for denim fabric is a **maximum of 30L/m**

- Source cellulosic fibres that have been produced using **regenerative, organic or transitional methods**
- Include a **min 5% recycled content** on average by weight in the total textile composition
The Jeans Redesign
Insights from the first two years
2019-2021

80%
Participants made fabric or jeans in line with the guidelines

0.5M
Redesigned jeans put on the market by brands

Rivet elimination

Chemical and process safety

Durability criteria based on home laundries


Credit: Weekday, Frame, and DEMCO
Innovation or investment required to scale

**Post-consumer** recycled content

Recyclable **threads**

**Organic** cotton

Removable **buttons**

**POST-CONSUMER RECYCLED CONTENT**

Credit: MUD Jeans

Little or no solution found yet

Recyclable stretch

Regenerative sourcing

Removable zippers

Building on insights from The Jeans Redesign, businesses and policymakers must take bold action to create a circular economy for fashion.

Looking ahead

PRODUCT & TRADE POLICIES
To deliver a harmonised approach across markets, while supporting uncontaminated material streams that are safe to circulate.

INCENTIVES FOR CIRCULAR BUSINESS MODELS
To make the economics work for business models that reduce their dependence on the production of new clothes and the use of virgin resources.

FUNDING FOR INFRASTRUCTURE
To scale and harmonise collection and sorting systems, while mobilising investments in research and development.