The impact of textile production and waste on the environment (infographic)

Clothes, footwear and household textiles are responsible for water pollution, greenhouse gas emissions and landfill. Find out more in our infographic.

Fast fashion - the constant provision of new styles at very low prices - has led to a big increase in the quantity of clothes produced and thrown away.

To tackle the impact on the environment, the EU wants to speed up the move towards a circular economy.

In March 2020, the European Commission adopted a new circular economy action plan, which includes an EU strategy for textiles, aimed at stimulating innovation and boosting reuse within the sector.

In February 2021, the Parliament adopted a resolution on the new circular economy action plan demanding additional measures to achieve a carbon-neutral, environmentally sustainable, toxic-free and fully circular economy by 2050, including tighter recycling rules and binding targets for materials use and consumption by 2030.

As part of the proposals, MEPs asked for new measures against microfiber loss and stricter standards on water use.
"Circularity principles need to be implemented throughout all stages of a value chain to make the circular economy a success. From design to production, all the way to the consumer."

Jan Huitema (Renew Europe, the Netherlands)
Lead MEP on the circular economy action plan

Find out about the circular economy’s definition, its importance and benefits.
Water use

It takes a lot of water to produce textile, plus land to grow cotton and other fibres. It is estimated that the global textile and clothing industry used 79 billion cubic metres of water in 2015, while the needs of the EU's whole economy amounted to 266 billion cubic metres in 2017. To make a single cotton t-shirt, 2,700 litres of fresh water are required according to estimates, enough to meet one person’s drinking needs for 2.5 years.
Water pollution

Textile production is estimated to be responsible for about 20% of global clean water pollution from dyeing and finishing products.

Washing synthetics releases an estimated 0.5 million tonnes of microfibres into the ocean every year.

Laundering synthetic clothes accounts for 35% of primary microplastics released into the environment. A single laundry load of polyester clothes can discharge 700,000 microplastic
fibres that can end up in the food chain.

**THE ENVIRONMENTAL IMPACT OF TEXTILES**

10% of global greenhouse gas emissions are caused by clothing and footwear production.

This is more than all international flights and maritime shipping combined.

*Sources: EPRS (2017), UN (2018)*

**Greenhouse gas emissions**

It is estimated that the fashion industry is responsible for 10% of global carbon emissions – more than international flights and maritime shipping combined.

According to the European Environment Agency, textile purchases in the EU in 2017 generated about 654 kg of CO2 emissions per person.
Textile waste in landfills

The way people get rid of unwanted clothes has also changed, with items being thrown away rather than donated.

Since 1996, the amount of clothes bought in the EU per person has increased by 40% following a sharp fall in prices, which has reduced the life span of clothing. Europeans use nearly 26 kilos of textiles and discard about 11 kilos of them every year. Used clothes can be exported outside the EU, but are mostly (87%) incinerated or landfilled.

Globally less than 1% of clothes are recycled as clothing, partly due to inadequate technology.

Tackling textile waste in the EU

The new strategy aims to address fast fashion and provide guidelines to achieve high levels of separate collection of textile waste.

Under the waste directive approved by the Parliament in 2018, EU countries will be obliged to collect textiles separately by 2025. The new Commission strategy also includes measures to support circular material and production processes, tackle the presence of hazardous chemicals and help consumers to choose sustainable textiles.

The EU has an EU Ecolabel that producers respecting ecological criteria can apply to items, ensuring a limited use of harmful substances and reduced water and air pollution.

The EU has also introduced some measures to mitigate the impact of textile waste on the environment. Horizon 2020 funds RESYNTEX, a project using chemical recycling, which could provide a circular economy business model for the textile industry.

A more sustainable model of textile production also has the potential to boost the economy. "Europe finds itself in an unprecedented health and economic crisis, revealing the fragility of our global supply chains," said lead MEP Huitema. "Stimulating new innovative business models will in turn create new economic growth and the job opportunities Europe will need to recover."

More about waste in the EU

- Waste management in the EU

Find out more

Environmental impact of the textile and clothing industry
Changing how we produce and consume
Fact sheet: circular economy action plan
Circular economy action plan