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

With fast fashion, the quantity of clothes produced and thrown away has boomed. Find out more about the environmental impact and what the EU is doing about it.

Fast fashion is the constant provision of new styles at very low prices.

To tackle the impact on the environment, the EU wants to reduce textile waste and increase the life cycle and recycling of textiles. This is part of the plan to achieve a circular economy by 2050.

Find out about the circular economy's definition, its importance and benefits
Overconsumption of natural resources

It takes a lot of water to produce textile, plus land to grow cotton and other fibres. 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.
The textile sector was the third largest source of water degradation and land use in 2020. In that year, it took on average nine cubic metres of water, 400 square metres of land and 391 kilogrammes (kg) of raw materials to provide clothes and shoes for each EU citizen.

Water pollution

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

A single laundry load of polyester clothes can discharge 700,000 microplastic fibres that can end up in the food chain.

The majority of microplastics from textiles are released during the first few washes. Fast fashion is based on mass production, low prices and high sales volumes that promotes many first washes.

Washing synthetic products leads to the accumulation of more than half a million tonnes of microplastics on the bottom of the oceans every year. In addition to this global problem, the pollution generated by garment production has a devastating impact on the health of local people, animals and ecosystems where the factories are located.

Greenhouse gas emissions

The fashion industry is estimated to be 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 2020 generated about 270 kg of CO2 emissions per person. That means textile products consumed in the EU generated greenhouse gas emissions of 121 million tonnes.

Textile waste in landfills and low recycling rates

The way people get rid of unwanted clothes has also changed, with items being thrown away rather than donated. Less than half of used clothes are collected for reuse or recycling, and only 1% of used clothes are recycled into new clothes, since technologies that would enable clothes to be recycled into virgin fibres are only now starting to emerge.
Only 1%
of used clothes are recycled into new clothes

On average 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.

The rise of fast fashion has been crucial in the increase in consumption, driven partly by social media and the industry bringing fashion trends to more consumers at a faster pace than in the past.

The new strategies to tackle this issue include developing new business models for clothing rental, designing products in a way that would make re-use and recycling easier (circular fashion), convincing consumers to buy clothes of better quality that last longer (slow fashion) and generally steering consumer behaviour towards more sustainable options.
The EU strategy for sustainable and circular textiles

As part of the circular economy action plan, the European Commission presented in March 2022 a new strategy to make textiles more durable, repairable, reusable and recyclable, tackle fast fashion and stimulate innovation within the sector.

The new strategy includes new ecodesign requirements for textiles, clearer information, a Digital Product Passport and calls companies to take responsibility and act to minimise their carbon and environmental footprints.

In June 2023, MEPs set out proposals for tougher EU measures to halt the excessive
production and consumption of textiles. Parliament’s report calls for textiles to be produced respecting human, social and labour rights, as well as the environment and animal welfare.

EU measures to tackle textile waste

The EU has an EU Ecolabel that producers respecting ecological criteria can apply to items. This gives more visibility to products that include fewer harmful substances and cause less water and air pollution.

In 2018, the waste directive was approved by the Parliament. The Commission strategy also includes measures to tackle the presence of hazardous chemicals, while it calls on producers to take responsibility for their products along the value chain, including when they become waste, and aims to help consumers to choose sustainable textiles.

The Parliament put forward ideas for changes to textile waste rules in March 2024. The revision of the waste directive will introduce extended producer responsibility schemes. This means in practice that producers of textiles, such as clothing, footwear hats, accessories, as well as other companies that put such products on the European single market, will have to cover the costs for the separate collection, sorting and recycling.

While the Commission proposed that the extended producer responsibility schemes should be introduced 30 months after the directive enters into force, MEPs pushed for 18 months. In addition, EU countries would be obliged to collect textiles separately by 1 January 2025 for re-use, preparing for re-use and recycling.

“We request a textile waste reduction target, with an oversight of exported used textiles,” said Anna Zalewska (ECR, Poland), the MEP responsible for steering the rules through Parliament. She also called for better infrastructure for separate collection of textiles and more efficient sorting of municipal waste, so that items which can be recycled are extracted before being sent to the incinerator or landfill.

Next steps

The negotiations with the Council will be done by the next Parliament, which will be elected during the European elections on 6-9 June 2024.

More about waste in the EU
• Waste management in the EU: facts and figures
• New EU rules for more sustainable and ethical batteries
• E-waste in the EU: facts and figures (infographic)
• The EU strategy to reduce plastic pollution
• How to reduce packaging waste in the EU (infographics)
• Food waste reduction: what EU actions are there?

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
Check out the progress on the revision of the EU waste framework