

LESS IS MORE: TAKING A SUFFICIENCY APPROACH IN EU TEXTILES POLICY

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SUMMARY OF KEY RECOMMENDATIONS

Carbon emissions from clothing and footwear are more than double the level compatible with the Paris Agreement 1.5-degree target. These emissions are projected to rise even further as the textile industry plans more production of new items every year. Textile brands' voluntary commitments have so far focused on efficiency gains and are not enough to meaningfully reduce the environmental impact of the sector. We need to recalibrate the textiles sector to reduce its environmental footprint from a sufficiency perspective.

Reducing the material footprint is essential to not only decrease greenhouse gas emissions, but to also make the sector more circular and reduce the pressure on primary resources, energy use, pollution, and waste generation.

Recalibrating the system towards sufficient levels of resource use should go hand in hand with a just transition. Reducing the material footprint of the sector should not result in the loss of jobs or livelihoods for workers in the textile value chain. Living wages, reduced working hours, and improved social protection and benefits should be at the heart of the transition.

Sufficiency logic is about ensuring well-being for all, within planetary boundaries. This report takes a first step towards reimagining a textiles industry that uses fewer resources but promotes more creativity and collaboration, ensuring dignity and social justice for all.



Textile value chains are global: from the production and extraction of raw materials and textile manufacturing, to where textile products are used and where textile waste is finally dumped or managed. All these steps may happen on different continents, even for a single product. Yet the EU is one of the biggest importers/markets of textile products in the world, including clothing and footwear. While the context and sufficiency theoretical framework presented in this report are valid globally, our policy recommendations focus on the EU. These recommendations, however, could be adapted for other regions, especially in countries with a high consumption of textile products, such as the US and the UK.

In the EU context, we propose four pillars for sufficiencyoriented policy measures to tackle overproduction, overconsumption, overdisposal, and reduce inequalities within the textiles sector.



Living with fewer but loved clothes has been shown to enhance well-being and creativity.

SUFFICIENCY MEASURES TO ADDRESS



Our specific recommendations to EU policymakers include:

Overproduction

- Adopt EU legislation on sustainable resource management, with clear, binding material footprint targets for 2030, 2040, and 2050 that cover textiles, including footwear.
- Adopt ecodesign requirements on the durability of products, as well as repairability and availability of spare parts.
- Adopt information requirements to communicate precise product measurements, month and year of production, and the number of garments produced in the batch of that style.
- Adopt reporting requirements on total production volume.
- Define and limit the number of collections per year.
- Effectively ban the destruction of unsold textile products with limited exceptions.

Overconsumption

- Limit advertisements and discount sales and ban free returns.
- Introduce education programmes on the environmental impacts of clothes, footwear, and accessories and available solutions.
- Raise consumer awareness on sufficient consumption.
- Incentivise repair business models as well as local reuse through repair bonuses and VAT reductions on repair services and reused textiles.

Overdisposal

- Modulate EPR fees based on a volume criterion.
- Introduce preparation for reuse as well as waste prevention targets.
- Introduce stringent end-of-waste criteria for textiles and increase the share of EU textile waste processed in Europe.

Redistribution

- Adopt redistributive policies among value chain actors.
- Ensure that less affluent consumers can exercise their right to adequate clothing.



UNSUSTAINABLE AND UNFAIR STATUS QUO

Too big to be sustainable

The global textile sector is growing at an unprecedented pace. Its material throughputⁱ has almost doubled from 58 million tonnes of textile fibres in 2000 to 116 million tonnes in 2022.¹ Carbon emissions from the combined garment and footwear industries' value chains were estimated at 2.1 billion tonnes in 2018², and though the exact production volumes (units/garments) remain unclear³, carbon emissions of the garment and footwear value chains are driven by the production of new units using virgin or other materials that are not sustainably sourced.²

If business as usual continues, global fibre production is expected to grow to 147 million tonnes in 2030¹ and the garment and footwear carbon emissions will reach 2.7 billion tonnes. To be compatible with the 1.5-degree target of the Paris Agreement – garment and footwear's carbon emissions need to come down to 1.1 billion tonnes or lower.²

In other words, the garment and footwear sectors are already too big for planetary boundaries – yet they continue to grow.

While the context and the sufficiency theoretical framework presented in this report are valid globally, the policy recommendations focus on the EU, as many of the examples of environmental impacts of textile consumption that will be presented below. This is due to the EU being one of the biggest markets for textile companies and one of the biggest importers of textile products in the world, including clothing and footwear.⁴ Nonetheless, the policy recommendations could be adapted to fit the reality of other jurisdictions, especially in countries where there is a high level of consumption of textile products.

Fast, disposable fashion

Textile consumption has changed significantly since the early 2000s. The mentality of fast fashion transformed how consumers buy, use, and dispose of garments.^{5.6} In 2016, it is estimated that purchases of clothing and footwear accounted for respectively 107 billion units and 14,5 billion pairs globally – 13 new pieces of garment and two pairs of shoes per person.⁷ In the EU, consumers buy 14.8 kg of textile products annually, including 6.0 kg of clothing – approximately 24 new garments per year^{ii 8} - yet a study conducted in the UK showed that 26% of garments in our wardrobes are not used.⁹

Consumers regularly buy clothes with the intention to keep them for a short time⁹ while the quality of garments has dropped significantly, leading to earlier disposal.¹⁰ For instance, **16 kg of textile waste was generated per capita** in Europe in 2020, including clothing and footwear.¹¹ Combined with an increase in synthetic fibres (65% of the global fibre production)¹, the culture and production of fast fashion have created mountains of non-biodegradable textile waste that is primarily exported out of Europe and the US - mainly to countries in Africa and Asia.^{12,13}

Behind these numbers lie stark inequalities. Per country, the largest carbon footprints can be attributed to the wealthiest 20% of the national population¹⁴, as purchasing frequency increases with a rising income.⁹ The negative environmental impacts of the textile industry are much broader than carbon emissions¹⁵ and they fall disproportionally on vulnerable stakeholders throughout the value chain globally. In fact, over 80% of the environmental impacts caused by Europe's textile consumption occur outside Europe.¹⁶



Consumers buy 14.8 kg of textile products annually



16 kg of textile waste was generated per capita



26% of garments in our wardrobes are not used

i Material throughput is the material flows that enter (input) and exit (output) a given system from the point of view of

the industrial metabolism (Luks, 1999). Material input is a typical measure of the material throughput (Hinterberger & Seifert, 1997).

ii Based on an estimate of four garments per kilogram (Maldini et al., 2017).

Enablers of unsustainable consumption

Clothing is not just fashion, it also covers basic, fundamental human needs, e.g. protection from the weather. However, between 80 and 150 billion garments are produced each year globally³ - enough clothes to dress the global population for several generations. The demand for clothing is not driven by "needs" but instead by "wants" or "desires" created by marketing and advertising industries.¹⁷ The supply is driving the demand for more clothes and footwear.

Overproduction and overconsumption are a critical obstacle to a sustainable textile sector. It is essential to acknowledge, however, that the dominant business model is an underregulated textile sector that relies on overproduction and actively encourages, enables, and benefits from unsustainable consumption patterns. There are three fundamental enablers of overconsumption across the global clothing and footwear system:

- Gambling on consumer demand.
- Artificially low retail prices.
- Relentless marketing and sales.

We will now dive into each of them separately.

Gambling on consumer demand

Clothing and footwear brands routinely produce more than they intend to sell. This overproduction is fuelled by practices that rely on trend predictions - essentially gambling on what will sell the following season.

Brands routinely over-order and then destroy unsold merchandise (so as not to decrease the value of their products).¹⁸ Some brands use more efficient management of trend predictions and produce in small batches to increase the percentage of units sold per batch.^{19,20} Efficiency gains alone cannot be considered a solution unless combined with measures to decrease overall volumes of production.

Artificially low retail prices

Compared to the end of the last century, consumers now buy many more textile products while paying much less. These artificially low prices have a detrimental effect on consumer perception of clothing value, acquisition, care, and disposal practices, i.e. the "disposable fashion" mentality.

The clothing and footwear sectors are known for significant power imbalances between the brands and retailers on one side, and the manufacturers on the other side. Unfair trading practices have been documented in many countries, including in the EU.²¹ Companies offer cheaper and cheaper products to consumers but the social conditions and environmental consequences of producing them are not always transparent to consumers and civil society. Dropping prices are often the result of externalising the environmental and social costs of production and disposal. The demand for clothing is not driven by "needs" but instead by "wants" or "desires" created by marketing and advertising industries.

Relentless marketing and sales

Trends have long been the driver of fashion consumption, but in the digital age the reach of marketing and advertising is particularly profound. Through **non-traditional channels like social media**, consumers are pushed 24 hours a day to buy more clothing.²² Through "influencers", brands promote novelty-seeking behaviour – as exemplified by "haul videos".ⁱⁱⁱ

Free returns enable impulse purchases even more. We see evidence of this in the skyrocketing return rates for online purchases of clothes - 20% in Europe²³ and 24% in the USA.²⁴ Recent research suggests that over 30% of returned clothes bought online are destroyed²³ and further research shows that **23%-46% of returned products never reach another consumer**.²⁵ There is no clear answer what happens to the remaining returned garments, but investigations show that some end up in landfills, unworn.²⁶

iii Video shared online of people talking about the price and experience of recently bought products.

REFRAMING THE ISSUE TOWARDS SUFFICIENCY

From efficiency gains to sufficient levels of material throughput

To address its climate and sustainability impacts, the textile industry has devised voluntary climate commitments, sustainability strategies, and non-binding initiatives (including the UNFCCC Fashion Industry Charter for Climate Action and the Fashion Pact). They are mostly focused on recycled or innovative materials with lower carbon footprint per unit, as well as on the first-tier emissions reduction or enhanced use of technology including artificial intelligence (AI) to predict sales more accurately and avoid obsolete inventory.²⁷

Switching to innovative or more sustainable materials or reducing the emissions intensity represent efficiency gains



that focus on reducing environmental impacts, including carbon footprint^{iv}, per unit of production. This, however, overlooks the fact that the overall carbon footprint of the sector largely depends on production volumes. Efficiency gains, while crucial, are not enough and can create a rebound effect. Using AI for sales predictions, for example, may produce more accurate demand forecasts thus decreasing deadstock. Yet, as practice shows, this does not correlate with reducing production volumes.

We need a holistic approach that combines efficiency gains with measures to curtail overproduction.

Defining sufficiency

Sufficiency is defined as a set of policy measures and daily practices^v that avoid the demand for energy, materials, land, water, and other natural resources, while delivering well-being for all within planetary boundaries.²⁸ Sufficiency logic is about recalibrating our consumption and production systems to respect the physical limits of the planet based on a fair share (per capita) distribution of the available resources. Sufficiency may manifest through both demand-side and supply-side interventions that reduce the overall material throughput of the economy. Material throughput consistent with the logic of sufficiency ensures that the less economically advantaged parts of the global population have enough for a decent life, while the most advantaged do not use more than their fair share of the global resources.

Switching to more sustainable materials or reducing emissions intensity represent efficiency gains. While crucial, they are not enough.

iv Reducing carbon emissions alone is insufficient to bring the textile industry within the planetary boundaries. The negative impacts of textile production and consumption also include water, soil heath, biodiversity, animal welfare, communities, and people's livelihoods.

 As drivers and creators of market demands businesses are influential in shaping consumption. (Heikkurinin et al. 2019). The uptake of sufficient consumption patterns therefore heavily relies on business practices that enable such changes (Freudenreich and Schaltegger, 2020).

Demand-side and supply-side measures – two sides of the same coin

We need both demand-side and supply-side interventions to transform the textile system. Demand-side measures impact consumption patterns while supply-side measures focus on production systems (see Table 1). Applying the efficiency/sufficiency distinction logic, it is important to differentiate between demand-side efficiency measures that help consumers consume better, and demand-side sufficiency solutions that enable consumers to buy fewer textile products. Similarly, supply-side efficiency measures that help producers make better products differ from supply-side sufficiency measures that help manufacture fewer overall products.

Demand-side interventions are critical for transitioning the textile industry towards sustainability. To scale up more responsible production practices we need consumer "buy-in" and their demand for better products, along with strict environmental and social standards (no matter the country of origin). Placing the burden on consumers alone is neither fair nor enough. Upstream and downstream, the textile industry enables and benefits from unsustainable consumption patterns and drives the growing demand for more textile products worldwide.



For a fair and structured transformation of the textile industry, supply-side measures are needed to level the playing field and to eliminate harmful and exploitative industry practices, as well as scale up environmentally and socially beneficial ones.

Historically, supply-side measures focused primarily on industry standards and international trade rules. Yet, without supply-side sufficiency measures targeting the volumes of production, the three other types of measures will fall short of achieving meaningful change, considering the urgency of global triple planetary crisis.^{vi} The textile industry's plan for continued growth is directly linked to an increased use of primary resources.

 Table 1
 Demand- and supply-side interventions aligned with efficiency and sufficiency.

EFFICIENCY

DEMAND-SIDE

CONSUME BETTER

e.g. Legislation that supports substantiated green claims and empowers consumers with information. Initiatives such as labelling and certifications schemes, or awareness-raising campaigns that teach consumers about better materials, provide information about social aspects of production.

SUFFICIENCY

CONSUME LESS

e.g. Awareness-raising campaigns that directly encourage consumers to buy fewer new clothes by swapping, renting, or buying second-hand.

SUPPLY-SIDE

PRODUCE BETTER

e.g. Product legislation including ecodesign, industry standards, and certification schemes that ensure production practices respect environmental and social standards and waste is reduced and treated efficiently.

PRODUCE LESS

e.g. Legislation to reduce volumes of production, and reduce material footprint.

vi For more information on the triple planetary crisis, please refer to: https://unfccc.int/news/what-is-the-triple-planetary-crisis.

Inequalities and sufficiency – there is work to be done

Today's textile industry produces in excess and relies on exploitative practices throughout its value chain. Recalibrating the system towards sufficient levels of resource use should go hand in hand with a just transition and redistribution of wealth.

From raw material production to the disposal of textile products, vulnerable stakeholders should not be left behind. Achieving well-being for all should make special provisions for these stakeholders – we therefore need to radically reconsider how costs and benefits are allocated in the system. Reimagining a system in which profits are more appropriately and fairly distributed among stakeholders is essential for sufficiency, justice, and well-being for all. Producing fewer, environmentally friendly garments should not result in the loss of jobs or livelihoods for workers in the textile value chain. Maintaining current levels of employment, with a living wage, reduced working hours, and improved social protection and benefits should be at the heart of the transition.

This will likely drive up the price of clothes. Sufficiency logic does not simply mean consumers spend less on clothes or shoes, but rather that they reduce the number of items bought. Instead of buying many inexpensive, short-term, low-quality garments - sufficiency logic means buying fewer, higher-quality and fairly priced items that are durable and kept and used for longer.

Circular economy and sufficiency – an impactful duo

The circular economy logic of managing material throughput (managing waste, optimising material flows) is more aligned with the cyclical nature of ecosystems than the linear "makebuy-dispose" model. Material loops, however, are not "free" of environmental costs and resource use - they should be combined with sufficiency logic to bring about meaningful change.^{29,30}

Current circular economy strategies in the textile sector focus on the bottom tiers of the hierarchy (Fig.1), and include selling second-hand, rental, repair, and recycling. Recycling, including fibre-to-fibre textile recycling, attracts significant attention as a technological solution for clothing and footwear overproduction², but the technology and infrastructure are limited in terms of actual deployment and scaling. As a result, less than 1% of clothes were recycled fibre to fibre in 2022.³¹ Recycling is not a solution to overproduction due to its two prominent shortcomings:

- It requires energy for shredding, melting, and depolymerisation, which has its own carbon footprint.³¹
- It is associated with significant loss of material quality, especially for some fibres, for example cotton.³¹ This limits the number of times textiles can be recycled, a similar issue for recycling other materials, like PET plastic.³²

Highly disadvantageous trade-offs exist with chemical recycling: high energy and chemical use, high GHG emissions, petrochemical lock-in, and waste generation.

To achieve meaningful progress, the textile industry needs to adopt circular economy strategies that are consistent with the top of the circular economy hierarchy – refuse, rethink and reduce.





A ROADMAP FOR EU TEXTILES FOUR PILLARS THAT WILL GET US THERE

Sufficiency in the EU Strategy for Sustainable and Circular Textiles

Textiles were recently identified as the fourth highest impact consumption category in Europe.^{16,8} Mobility, household energy use, and food were identified fifteen years prior,³³ meaning we have had more time to advance debate and research in these areas and pilot possible policy interventions. There is an urgent need for further research and experimentation with policy instruments tailored to the textile sector that reduce its material footprint.

In the 2022 EU Strategy on Sustainable and Circular Textiles,³⁴ we find some wording consistent with sufficiency logic, though not explicitly referred to as such. "Making fast fashion out of fashion" addresses broadly harmful practices along the textile value chain, including consumption and disposal. Reducing overproduction is addressed by encouraging brands to reduce the number of collections produced per year but without defining what constitutes a collection.

The vision and ambition of the EU Textile Strategy are promising, but more needs to be done to effectively address overproduction. Apart from two regulatory measures – Ecodesign for Sustainable Products Regulation (ESPR) and Extended Producer Responsibility (EPR) schemes – the EU Textile Strategy initiatives addressing overproduction mainly consist of guidelines, coordination, and consumer awareness campaigns. Yet both the ESPR and the EPR schemes need to be designed adequately to tackle overproduction:

- Ecodesign rules to extend garment lifespan are a positive first step but will not automatically translate into a reduction of product volume sold or a reduction of the industry's material throughput. On the contrary, more durable products may have a higher material footprint.³⁵
- EPR schemes make brands responsible for the endof-life treatment of their products. They can help limit overproduction if the fees that producers are due are modulated based on the quantity of products placed on



the market – the more products, the higher the fee. For instance, EPR schemes for consumer electronics did not result in absolute volume reductions of material use in the sector because they were not designed to do so.³⁶

The European Parliament and the Council have already stressed the need to reduce the material footprint of the textile sector including the unsustainable amount of resources it uses. In June 2023, the European Parliament addressed overproduction and reductions of the material footprint explicitly in its Resolution on the EU Textile Strategy,vii calling for binding EU targets for 2030 to significantly reduce the EU's material and consumption footprints through a back-casting approach to ensure that policy objectives are on a credible path towards achieving a carbon-neutral, environmentally sustainable, toxic-free and fully circular economy within planetary boundaries by 2050 at the latest. The June 2024 Environmental Council Conclusions on the Mid-term Review of the 8th Environmental Action Programme urged the Commission to launch a comprehensive and effective process for the transition to a circular economy and sustainable resource use and invited the Commission to assess the establishment of an overarching legal framework, with the introduction of new legislative acts if needed.viii

Despite this progress, measures and targets to reduce the overall global material footprint of the textile industry are still missing and need to be included in the circular economy indicators and methodology as well as success indicators in the ESPR.

vii See https://www.europarl.europa.eu/doceo/document/TA-9-2023-0215_EN.html

viii See https://data.consilium.europa.eu/doc/document/ST-11326-2024-INIT/en/pdf

Four pillars for sufficiency policies in textiles

Fig. 2 Sufficiency policies for the textile sector.

SUFFICIENCY MEASURES TO ADDRESS



PILLAR I - Overproduction

Objective: reduce production volumes of textiles

- Adopt ecodesign requirements on durability of products, as well as repairability and availability of spare parts.
- Adopt EU legislation on sustainable resource management, with clear, binding material footprint targets for 2030, 2040, and 2050 that cover textiles and footwear.

Measures to reduce material throughput of the sector at the production phase should first and foremost focus on legally binding targets for absolute reductions in material use primary or recycled materials. Decisions around product design are central to how much material is used, how the product will be used, how long it will last, how easy it is to take care of or repair it, and what happens to it at the end of life.

The Ecodesign for Sustainable Products Regulation (ESPR) offers the possibility to set design requirements on durability, as well as design for repairability and availability of spare parts. Textile brands must sell durable, toxic-free, functional, adaptive garments that can be used and loved for a very long time.

Nevertheless, rules on product design will not automatically reduce the volume of products sold, nor reduce the industry's resource use. The ESPR will only bring the sector back within planetary boundaries if we see a dramatic reduction in resources used by the sector, diminishing the total material footprint of the textile industry.

As stated in the 8th EU Environmental Action Programme, we urgently need an EU legislation on sustainable resource management, with clear binding EU targets for 2050 (and intermediate targets for 2030 and 2040), to significantly reduce the EU's material footprint for the textile sector.⁴⁵

- Adopt information requirements to communicate precise product measurements, month and year of production, and the number of garments produced in the batch of that style.
- Adopt reporting requirements on total production volume.
- Define and limit the number of collections per year.

To reduce the volumes of returns, companies should be required to disclose precise measures of garments and products, as well as offer consumers better tools to aid fitting decisions, including photos of the same style on different body shapes to ensure the best fit before the purchase.

Textile value chains are complex and opaque. Traceability requirements and increasing transparency on textile production and products will benefit manufacturers, consumers, society, and the environment at large.

To advance sufficiency policies, textile product labels should include the month and year of production as well as information on the number of garments produced in the batch of that style.³⁵ This obligation could be introduced in ecodesign requirements or under the Revision of the Textile Labelling Regulation.

Mandatory reporting on the total production volume (both weight and number of products sold), as well as number of collections per year, will facilitate transparency and data collection on production volumes, frequency of collection renewals, and the discard rate of products. Ultimately, this will contribute to defining in a more precise way what constitute a collection, with the objective of limiting the number of new yearly collections.

• Effectively ban the destruction of unsold textile products and limit the use of exceptions to such ban.

If we are to realise a truly circular economy, perfectly good products, such as unsold products, returns, deadstock, and inventory, must not be destroyed. The **destruction of unsold products represents the most wasteful scenario in any economy** – circular or linear. The EU has already identified this as a priority in the EU Textile Strategy.

The ban on destroying unsold textiles, including footwear, introduced in the ESPR, is a critical milestone. Possible exemptions are subject to interpretation, and we need strict definitions to avoid loopholes. The definition of unsold consumer products must include all products that companies

PILLAR II - Overconsumption

Objective: enable consumers to reduce their consumption of new products

 Limit advertisements and discount sales and ban free returns.

Marketing and advertising are one of the main drivers of unsustainable consumption patterns, enabling overproduction. Consumers are constantly bombarded and pushed to buy more textile products. Harmful and unsustainable practices, based on a quick turnaround of collections, are fuelled by manufactured consumer desire to continuously buy new products to replace perfectly functional items. Practices promoting perceived obsolescence of functioning products should be heavily restricted – both by brands themselves¹⁷, and by policies and regulations.

Municipalities could create bans that prevent companies (which sell volumes above a certain threshold) from advertising in public spaces or public transport. These companies could also be subject to higher taxes for their operations and annual limits could be set for collections displayed in window displays. Discount sales should be heavily restricted, with the objective of banning them completely in the long run.

Priority measures for online marketing should limit the number of new products displayed on brand and retailer websites in a certain amount of time, aligned with the limits for new collections displayed in window displays. Hauls of clothing should be regarded as harmful practices. cannot sell through traditional sales channels, regardless of their final destination. Products sold to external outlets or jobbers, for example, must be included – this share can vary across Europe, e.g. 65% in France or 17% in Norway.²³

 Fair carbon pricing of imported goods and stronger enforcement of sustainable development chapters in Free Trade Agreement and the EU Generalised Scheme of Preferences.

Extending the scope of the Carbon Border Adjustment Mechanism to cover the textile sector will help prevent externalised environmental costs linked to textile production outside the EU. Three quarters of greenhouse gas emissions from producing textile products that are consumed in the EU, are emitted outside of the bloc.³⁷ It is imperative to ensure stronger enforcement of social and environmental provisions in EU trade tools, e.g. Free Trade Agreements and the EU Generalised Scheme of Preferences.



Regulating clothing returns is another possible area for intervention. Banning free returns and setting a fee for a return package could help reduce consumer appetites driven by uncontrolled e-commerce and social media commerce.

 Introduce education programmes on the impacts of clothes, footwear, and accessories and available solutions.

Education is critical for enabling sustainable lifestyles – sufficiency in textiles is no exception.

Adding modules in schools about the impacts of clothes and footwear, as well as the available solutions, is an important first step to raising awareness. Besides participatory and active learning methods at schools, pupils can learn, for example, how to create a capsule wardrobe^{ix} or focus on fewer but better-matching garments, basic sewing and textile repair techniques, and other skills for sufficient lifestyles. Living with fewer but loved clothes has been shown to enhance well-being and creativity.^{38,39}

ix A small collection of clothes that can be styled together in different ways and includes everything you normally need to wear.

enhances one's subjective well-being.40

Raise consumer awareness on sufficient consumption

garments on the market may be perceived as a restriction on self-expression and creativity. Research shows, however,

Promoting sufficient lifestyles and limiting the number of new

that finding a personal style - as opposed to chasing trends -

Policies to mainstream sufficient consumption of textile products through awareness raising campaigns should focus on positive links to subjective and objective well-being and mental health. At a city level, for example, governments could harness the power of existing social media campaigns to target the right consumers. The main overconsumers of clothing and footwear are generally within the upper 40% of income distribution.¹⁴ Awareness raising campaigns should produce nuanced messaging to avoid shaming less affluent consumers whose consumption patterns are more in line with their fair share.

 Incentivise repair business models as well as local reuse through repair bonuses and VAT reductions on repair services and reused textiles.

Promoting repair is crucial to prolong the life of products and prevent the purchase of new ones. Consumers should be able to easily access affordable repair services as well as spare parts and repair instructions. Ecodesign requirements

and the revision of the Textile Labelling Regulation will be instrumental in ensuring the repairability of products and the availability of spare parts.

In some instances, the slim price difference between buying a new product and repairing it may disincentivise people from keeping their clothes for longer.

There are many proven approaches to incentivise repair, e.g. eliminate or reduce VAT for such services. Repair bonuses, repair funds, tax breaks, and reduction of VAT rates should be extended to cover other business models that prevent the purchase of new products, such as product-service systems. Yet it is important to ensure that the resell of used clothes and the new business models actually contribute to decreasing the overall consumption of textile products and are not merely an additional revenue source for companies that continue to profit from old business models.

To transform the current system towards sufficiency, it is imperative to increase local reuse of textiles and strengthen local circular economies: reduced or zero VAT on reused textile products, preparation for reuse and reuse targets, or introducing a reuse and repair fund as part of future EPR schemes, for example.* It has long been known that local reuse activities, especially those carried out by social enterprises deliver environmental and social benefits to society.⁴¹

PILLAR III - Overdisposal

Objective: disincentivise disposal of clothing and footwear

Modulate EPR fees based on a volume criterion

EPR schemes aim to make brands responsible for the endof-life treatment of their products. However, the existing EPR schemes for consumer electronics did not reduce material use in the sector.³⁶ The fees that producers must pay to the EPR schemes must therefore be adapted in a way that incentivises both better design of products and a reduction of total volumes placed on the market. The contribution to the EPR schemes should be linked to the number of new items placed on the market by a producer each year.

 Introduce preparation for reuse as well as waste prevention targets.

The EU has the responsibility to handle the unsustainable volume of discarded textiles, including footwear, without amount of waste.

A short-term target for 2030 should be set at 10-15% and based on the volumes placed on the market, using 2020 as a base year since reliable waste data is scarce. In the long term,

the target should be raised to a 33% reduction by 2040.

In France 5% of the EPR fees go to a fund that finances reuse activities carried by social economy actors.



• Introduce stringent end-of-waste criteria for textiles and increase the share of EU textile waste processed in Europe.

Sorting infrastructure for separating unusable textiles and fibre-to-fibre recycling is essential to deal with waste locally and divert reusable textiles from waste. Policies such as compulsory sorting of separately collected textile waste in proximity to collection points limit transport emissions and could help improve the separation of waste from reusable pieces. Enhanced quality requirements for exported used textile products could help ensure that only good quality pieces in excellent wearable condition leave the EU. Companies exporting textile waste without complying with the requirements of the EU Waste Shipment Regulation must face strict penalties.

PILLAR IV - Redistribution

Objective: leave no one behind in the transformation

It is critical to ensure that demand- and supply-side reductions do not result in the loss of jobs and livelihoods – we therefore need to conduct further research to understand how the system can be recalibrated through wealth redistribution to achieve sufficiency levels and well-being for all.

• Adopt redistributive policies among value chain actors.

If companies must, by law, reinvest into their own value chains instead of funnelling money out to shareholders, workers could work fewer hours, produce fewer garments, and have access to healthcare, pension, and education opportunities.

Radical redistributive policies include:

 Cap the percentage of profits that could be redistributed to shareholders and a minimum percentage of profits to be reinvested into socially and environmentally beneficial projects along the value chain.



- Restrict financial incentives for top management that are contingent on sales of new products and instead offering bonuses based on sustainability KPIs.
- Maximum, legally permitted difference between the highest and the lowest wage in a company.

Policies that limit textile waste exports and ensure that low amounts of high-quality garments in good condition are shipped will likely increase the average price of secondhand textiles. To compensate for the price difference, EPR fees could fund redistribution policies. EPR fees should be redistributed globally, to reflect the reality of how and where waste is finally handled, build waste management infrastructure and account for the loss and damages that the existing system already caused. Policies need to be set in place (along with corresponding funds) to:

- Finance the clean-up of existing open landfills, as well as waterways and sea/ocean fronts, filled with unwanted textiles from Europe, among other places.
- Economically and socially support local retailers, who entered debts to buy bales of clothes that eventually contain much textile waste or clothes that cannot be sold second-hand.
- Ensure that less affluent consumers can exercise their right to adequate clothing.

In a global textile system that does not externalise the social and the environmental costs of clothing and footwear, the prices of textile products will inevitably increase. Wealthy consumers in the Global North are responsible for the majority of emissions associated with fast fashion overconsumption.¹⁴ Yet clothing poverty is still present in Europe.⁴² In a transition towards fairly priced clothing and footwear, it is essential that governments offer support mechanisms to ensure that less affluent consumers can exercise their "right to adequate clothing". The needs of these stakeholders must be met without maintaining artificially low prices reliant on human and environmental exploitation.

REFERENCES

- 1 Textile Exchange (2023). Materials Market Report 2023 https:// textileexchange.org/app/uploads/2023/11/Materials-Market-Report-2023.pdf
- 2 McKinsey & Global Fashion Agenda (2020). Fashion for Climate: How the fashion industry can urgently act to reduce its greenhouse gas emissions. https://www.mckinsey.com/industries/retail/ourinsights/fashion-on-climate
- 3 Chan, E. (2023). Billions Of Clothes Are Produced Every Year. Why Do We Still Not Know Exactly How Many? Vogue UK, 24-NOV-2023. https://www.vogue.co.uk/article/how-many-clothes-produced
- 4 WTO (2023). World Trade Statistical Review 2023.
- 5 Laitala, K. & Klepp, I. G. (2015). Age and Active Life of Clothing. Product Lifetimes and the Environment (PLATE) conference. Nottingham Trent University. https://www.researchgate.net/ publication/281034702
- 6 Pocinkova, L., Henninger, C. E., & Le Normand, A. (2023). Sharing Is Caring: The History of 'Sharing' New Interpreted. In The Garment Economy (pp. 175-189). Springer, Cham.
- 7 Common Objective CO Data (2018). Volume and Consumption: How Much Does The World Buy? 14 May 2018. Based on data from Euromonitor International. https://www.commonobjective.co/ article/volume-and-consumption-how-much-does-the-world-buy
- 8 European Environment Agency (2022). ETC/CE Report 2/2022: Textiles and the Environment - The role of design in Europe's circular economy.
- 9 WRAP (2022). Citizen Insights: Clothing Longevity and Circular Business Models Receptivity in the UK. https://wrap.org.uk/ resources/report/citizen-insights-clothing-longevity-and-circularbusiness-models-receptivity-uk
- 10 Laitala, K., & Klepp, I. G. (2015). Clothing disposal habits and consequences for life cycle assessment (LCA). In Handbook of life cycle assessment (LCA) of textiles and clothing (pp. 345-365). Woodhead Publishing.
- **11** European Environment Agency (2024). ETC/CE Report 2024/4: Textile waste management in Europe's circular economy.
- 12 European Environment Agency (2023). EU exports of used textiles in Europe's circular economy. Report.
- **13** United Nations (2024). Reversing direction in the used clothing crisis: Global, European, and Chilean perspectives.
- 14 Coscieme, L., Akenji, L., Latva-Hakuni, E., Vladimirova, K., Niinimäki, K., Henninger, C., Joyner-Martinez, C., Nielsen, K., Iran, S. and D´Itria, E. (2022). Unfit, Unfair, Unfashionable: Resizing Fashion for a Fair Consumption Space. Hot or Cool Institute, Berlin.
- 15 Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T., & Gwilt, A. (2020). The environmental price of fast fashion. Nature Reviews Earth & Environment, 1(4), 189-200.
- 16 European Environment Agency (2019). Textiles and the environment in a circular economy. Eionet Report - ETC/WMGE 2019/7.

- 17 UNEP (2023). The Sustainable Fashion Communication Playbook. https://www.unep.org/resources/publication/sustainable-fashioncommunication-playbook
- 18 Lee, G. (2023). Explainer: Why fast fashion brands destroy unsold clothes. Eco-Business News, May 30 2023. https://www.ecobusiness.com/news/explainer-why-fast-fashion-brands-destroyunsold-clothes/
- 19 Ortakales Dawkins, J. (2023). Shein's rise: How the wildly popular brand became the most feared fast-fashion retailer in the world and found itself embroiled in multiple lawsuits. Business Insider, 18-JUL-2023.
- 20 Public Eye (2022). Online fashion: How Shein, Amazon & Co. manipulate their customers. https://www.publiceye.ch/en/mediacorner/press-releases/detail/online-fashion-how-shein-amazon-comanipulate-their-customers
- 21 Ljarja A., Musiolek B. and Vanpeperstraete B. (2023). FAST FASHION PURCHASING PRACTICES IN THE EU. Unfair business relations between fashion brands and suppliers, Fair Trade Advocacy Office and Clean Clothes Campaign Europe.
- 22 Vladimirova, K., Henninger, C. E., Alosaimi, S. I., Brydges, T., Choopani, H., Hanlon, M., Iran, S., McCormick, H., and Zhou, S. (2023). Exploring the influence of social media on sustainable fashion consumption: A systematic literature review and future research agenda. Journal of Global Fashion Marketing, 1-22.
- 23 European Environment Agency (2024). ETC/CE Report 2024/4: Volumes and destruction of returned and unsold textiles in Europe's circular economy.
- 24 Coresight (2023). The True Cost of Apparel Returns: Alarming Return Rates Require Loss-Minimization Solutions. https://coresight. com/research/the-true-cost-of-apparel-returns-alarming-returnrates-require-loss-minimization-solutions/
- 25 Makov, T., Roichman, R., Sprecher, B. et al. (2023). The Hidden Environmental Costs of Consumer Product Returns, PREPRINT (Version 1) available at Research Square [https://doi.org/10.21203/ rs.3.rs-3355404/v1]
- 26 Tait, A. (2023). Buy. Return. Repeat ... What really happens when we send back unwanted clothes? The Guardian, 31-03-2023. https://www.theguardian.com/global-development/2023/mar/31/ what-happens-when-we-send-back-unwanted-clothes
- 27 Kotorchevikj, I. (2020). Al-driven retail: How H&M Group does it. https://towardsdatascience.com/ai-driven-retail-how-h-m-groupdoes-it-c9606597f7bc
- 28 Saheb, Y. (2022). Beyond Efficiency and Renewable: Sufficiency Matters to Limit Global Warming by the End of the Century to 1.5 C.
- 29 Bocken, N. M., Niessen, L., & Short, S. W. (2022). The sufficiencybased circular economy—an analysis of 150 companies. Frontiers in Sustainability, 3, 899289.
- 30 Villalba-Eguiluz, U., Sahakian, M., González-Jamett, C., & Etxezarreta, E. (2023). Social and solidarity economy insights for the circular economy: Limited-profit and sufficiency. Journal of Cleaner Production, 138050.

- 31 Textile Exchange (2021). Guide to Recycled Inputs. https:// textileexchange.org/app/uploads/2021/09/GRS-202-V1.0-Textile-Exchange-Guide-to-Recycled-Inputs.pdf
- 32 Enck, J. & Dell, J. (2022). Plastic Recycling Doesn't Work and Will Never Work. The Atlantic, 30-MAY-2022. https://www.theatlantic. com/ideas/archive/2022/05/single-use-plastic-chemical-recyclingdisposal/661141/
- 33 Tukker, A. (2005). Leapfrogging into the future: Developing for sustainability. International Journal of Innovation and Sustainable Development, 1(1/2), 65-84.
- 34 European Commission (2022). EU Strategy for Sustainable and Circular Textiles. Communication.
- 35 Klepp, I. G., Fletcher, K., Maldini, I., Berg, L. L., Tobiasson, T. S., Måge, J. & Hvass, K. K. (March 2023), Research briefing: Input for policy development based on understanding of clothing consumption, SIFO. https://clothingresearch.oslomet.no/researchbriefing-onclothing-consumption/
- 36 Shittu, O. S., Williams, I. D., & Shaw, P. J. (2021). Global E-waste management: Can WEEE make a difference? A review of e-waste trends, legislation, contemporary issues and future challenges. Waste Management, 120, 549-563.

Additional resources

- Luks, F. (1999). Throughput, scale, material input. Sustainability in Question: The Search for a Conceptual Framework. Aldershot: Edward Elgar, 119-134.
- Hinterberger, F., & Seifert, E. K. (1997). Reducing material throughput: i. A contribution to the measurement of dematerialization and sustainable human development. Chapters, in: Andrew Tylecote & Jan Van der Straaten (ed.), Environment, Technology and Economic Growth, chapter 5, pages 75-92, Edward Elgar Publishing.
- Maldini, I., Duncker, L., Bregman, L., Piltz, G., Duscha, L., Cunningham, ii G., Vooges, M., Grevinga, T., Tap, R. & van Balgooi, F. (2017). Measuring the Dutch clothing mountain: data for sustainabilityoriented studies and actions in the apparel sector.

- 37 Köhler, A., Watson, D., Trzepacz, S., Löw, C., Liu, R., Danneck, J., Konstantas, A., Donatello, S. and Faraca, G. (2021). Circular Economy Perspectives in the EU Textile sector. Publications Office of the European Union, Luxembourg.
- 38 Vladimirova, K. (2021). Consumption corridors in fashion: deliberations on upper consumption limits in minimalist fashion challenges. Sustainability: Science, Practice and Policy, 17(1), 102-116.
- 39 Kang, J., Martinez, C. M. J., & Johnson, C. (2021). Minimalism as a sustainable lifestyle: Its behavioral representations and contributions to emotional well-being. Sustainable Production and Consumption, 27, 802-813.
- 40 Gupta, S., Gwozdz, W., & Gentry, J. (2019). The role of style versus fashion orientation on sustainable apparel consumption. Journal of Macromarketing, 39(2), 188-207.
- 41 RREUSE (2021). Job creation in the reuse sector: data insights from social enterprises. https://rreuse.org/wp-content/uploads/04-2021job-creation-briefing.pdf
- 42 Graham, L. D. (2024). Reasserting the Right to Adequate Clothing in International Human Rights Law. Human Rights Law Review, 24(1).
- Heikkurinen, P., Young, C. W., & Morgan, E. (2019). Business for sustainable change: Extending eco-efficiency and eco-sufficiency strategies to consumers. Journal of Cleaner Production, 218, 656-664.
- Freudenreich, B., & Schaltegger, S. (2020). Developing sufficiencyv oriented offerings for clothing users: Business approaches to support consumption reduction. Journal of Cleaner Production, 247, 119589.

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