MAKE THE LABEL COUNT

Product Lifetime

Why Getting it Right Matters for EU Textile Policy

1. What does product lifetime mean?

In everyday terms, product lifetime is simply how long a garment is kept in use before it is discarded. Product lifetime, or longevity, is not the same as durability, which relates to the physical strength of a product. A piece of clothing may be physically strong enough to last for years but still be thrown away after only a few wears. Single use products might be very strong; more of textile waste and unworn garments are in perfectly good condition.

Researchers distinguish between the two as:

- Durability – an intrinsic property of materials (resistance to wear, shrinkage, pilling, etc.)
- Lifetime / longevity – the length of time a product remains in use before disposal. This is also often expressed as Duration of Service (DoS) and might be measured in how long or how many times a product is used.

This difference matters because mitigating any damage to the environment can only occur if products remain in use for longer, not simply if they are more physically durable.

2. Why lifetime matters for the environment

The common Circular Economy narrative is that making products more durable will automatically lower impacts. The idea is simple:

- If products last longer, people will buy less.
- If people buy less, companies will produce less.
- Less production means lower emissions and waste.

But the evidence shows this logic does not hold for clothing:

- Most garments are discarded while still in good condition.
- Only a small share of purchases are true replacements for worn-out items. Many new garments are bought or acquired despite a full wardrobe - not as replacements - which makes the garments already in the wardrobe redundant or at least used less.
- Brands often overproduce beyond demand (Maldini, I. et al. (2025)), for reasons such as market expansion, competition, or maintaining supplier relationships. Studies (EEA, (2024)) show that overproduction creates large volumes of unsold inventory at every stage of the supply chain.
- Accumulation matters – wardrobe studies show many garments are simply stored and rarely used. Extending lifetimes may add to this stockpile rather than reducing production.

In short: producing garments deemed physically durable does not automatically reduce production volumes. Unless production and consumption levels are addressed directly, the potential environmental gains of durability will not be realised.

3. The policy risks of misunderstanding lifetime

If the EU continues to assess product lifetime as durability in form of physical strength:

- Synthetic fibres will be rewarded for their high tensile (physical) strength, despite being fossil-based and the main source of microplastic pollution.

- Natural fibres will be penalised, even though wardrobe studies (Laitala & Klepp (2020)). show they are kept and used longer in real life.
- Overly high durability test thresholds will bias policy towards synthetics - the toughest (plastic) fabrics - rather than supporting garments that actually deliver long service lives.
- Emissions will not fall because overproduction will continue, with consumers discarding durable-but-undervalued clothing and the industry producing more than they sell.
- The EU risks missing its sustainability goals and promise to put fast fashion out of fashion by giving policy legitimacy to a system that still produces too much, too quickly.

4. What is needed instead

To align EU policy with reality, product lifetime must be measured and addressed holistically:

- Base lifetime on real-world data – Use waste audits, wardrobe studies and the Digital Product Passport (DPP) to measure how long garments actually stay in use and why they are discarded, instead of relying on assumptions such as stronger as a proxy for longer.
- Acknowledge consumer behaviour – Clothes are often not acquired as replacement. Policies must link durability to quantities and discourage overproduction and -accumulation.
- Address overproduction directly – Durability on its own will not reduce emissions. Policies must also curb production volumes, e.g., through extended producer responsibility, inventory transparency, and marketing restrictions.
- Reward real longevity, not just material strength – Recognise fibre types and business models that demonstrably extend use, such as natural fibre garments, repair, reuse, and second-hand systems.
- Invest in more research – Current policy rests on untested assumptions. More evidence is needed on how clothing is used, why it is discarded, and what drives brand production volumes. Without this, policy risks being ineffective or even counterproductive.

5. Why this matters for EU goals

Every extra year a garment stays in use, its environmental footprint is reduced significantly – but only if it prevents something being produced.

If EU policy relies on the wrong definition of durability, it risks incentivising fossil fuel derived fast fashion and failing on many of the goals of the European Green Deal, namely:

- Reversing overproduction and overconsumption;
- Addressing the release of microplastics from synthetic textiles;
- Reducing waste; and
- Incentivising circular business models.

By grounding policy in measured lifetimes and addressing both consumption and production (e.g. by looking at the role of marketing, pricing and consumer behaviour), the EU can deliver on the goals of the European Green Deal and the Commission's 2030 vision for textiles.

Supporting Research Studies

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- Laitala, Kirsi & Boks, Casper & Klepp, Ingun. (2015). Making Clothing Last: A Design Approach for Reducing the Environmental Impacts. International Journal of Design. 9. 93-107
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