

WOOL AND EXTENDED PRODUCER RESPONSIBILITY

WHAT IS EXTENDED PRODUCER RESPONSIBILITY?

Extended producer responsibility (EPR) is an approach to environmental policy in which producers, such as brands, have responsibility for the disposal and management of their products when they reach the end of their primary life (Figure 1).

Mandatory EPR schemes for textiles have already been implemented in some countries, such as France, Sweden and the Netherlands, and the European Union (EU) is looking to implement an EPR scheme for textiles across its member states in 2025.



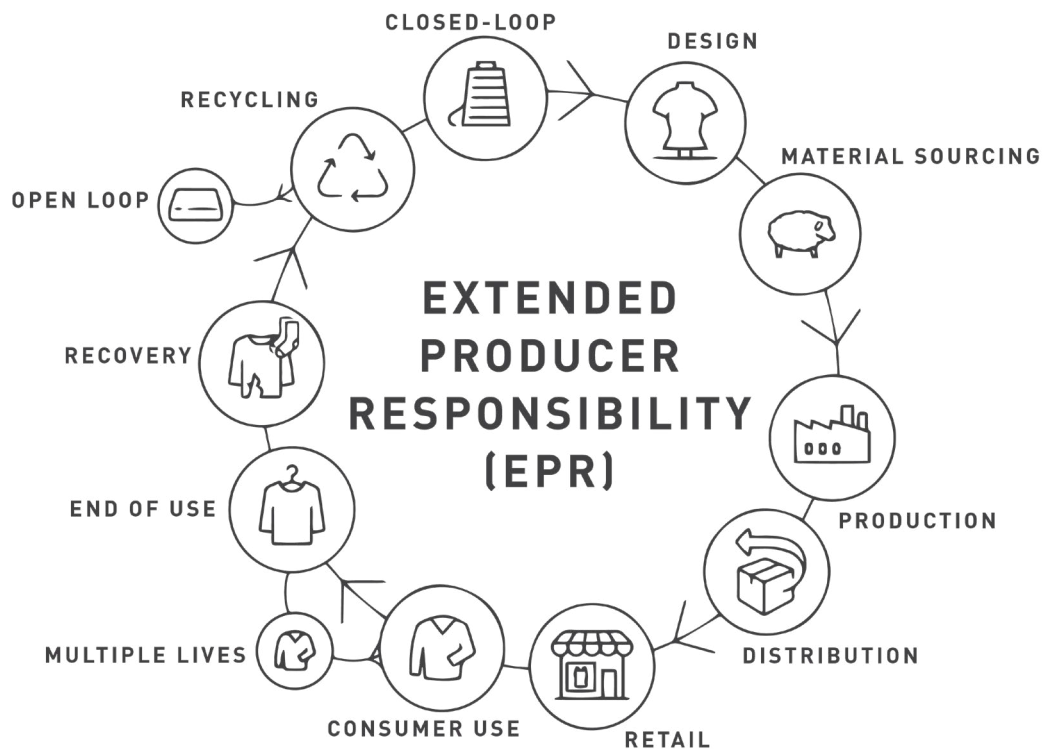
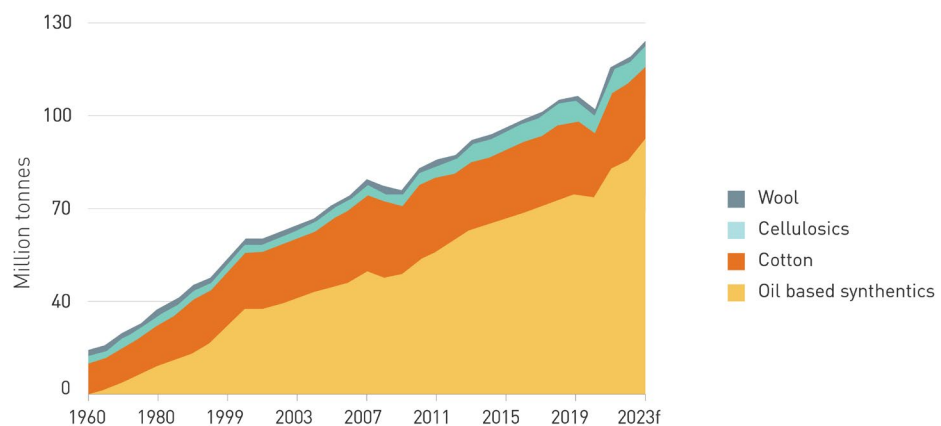


Figure 1: Extended producer responsibility aims to create a system that minimises waste

WHY IS EPR BEING INTRODUCED?

EPR aims to help address the overproduction and consumption of textiles, commonly referred to as fast fashion (Figure 2), and to motivate brands to produce high quality, long-lived clothing that is readily recycled.

EPR schemes are used by legislative bodies to encourage producers to adopt sustainable and circular principles of product design and thereby reduce the environmental footprint of their products. Responsibility for product disposal might be physical, or financial such as via fees or taxation.



World Consumption of Major Textile Fibres (mill consumption – all end products)

Source: IWT0, January 2022

Figure 2: World consumption of major textile fibres

CAN WOOL BENEFIT FROM EPR?

Wool has many advantages in an EPR-mandated textile world. It's valuable for recycling because of its high price and long fibre length as well as its inherent attributes such as fire and odour resistance and thermal insulation.

The benefits can further increase wool's value to brands as EPR legislation evolves in a world that is rapidly transitioning to a circular economy (see Wool in the Circular Economy factsheet). Demand for virgin wool may well increase if the EPR tax rises to a level that influences brand behaviour.

WOOL HAS A LONG HISTORY OF RECYCLING AND RE-USE

Unlike synthetic fibres which present financial and operational challenges to recyclers, a commercially profitable wool recycling industry has existed for more than 200 years. Post-consumer wool is demanded by recyclers for the production of new clothing (closed-loop recycling) as well as for bedding, insulation and industrial products (open-loop recycling). No other fibre type has such a well-established, commercially viable mechanical recycling pathway.



RECYCLED WOOL PRODUCES HIGH-QUALITY YARNS

High quality apparel fabrics can be made with yarns containing as much as 80% recycled wool. Blending recycled wool with virgin wool, or other fibres, has long been used to produce a quality yarn while reducing the costs and impacts of acquiring raw materials. Such use of recycled wool aligns with the proposed aims of the EU relating to mandatory recycled content for textile products.

RECYCLED WOOL CAN PROVIDE FINANCIAL INCENTIVES

The introduction of EPR schemes in France has allowed brands that use post-consumer recycled fibres (such as wool), reclaimed through closed-loop recycling, to receive a 50% reduction in the EPR tax. Wool's commercially profitable recycling industry provides a good example of the tangible benefits that are gained by manufacturers and brands using the fibre.

THE ISSUE WITH RECYCLED POLYESTER (rPET)

It is important to note the difference between recycled fibres and recyclable fibres. The use of recycled polyester (rPET) content in textiles may be scrutinised by the EU. rPET is largely made by recycling PET bottles, taking these bottles out of an established closed-loop system. Clothes made from rPET fibres cannot generally be recycled and so enter a linear model, rather than a circular one. Clothes made from rPET also shed microplastics during the use phase. Wool, on the other hand, is a biodegradable fibre and has been confirmed to not contribute to microplastic pollution. See [Wool is Biodegradable](#) factsheet.



WOOL AND EXTENDED PRODUCER RESPONSIBILITY

EPR IN FRANCE

France introduced a mandatory EPR scheme for textile products in 2007. This scheme encourages brands to adopt circular and sustainable principles in textile product design by implementing a tax on producers based on the:

- quantity of material used
- incorporation of recycled material
- use of renewable resources
- durability
- repairability
- possibility of being reused.

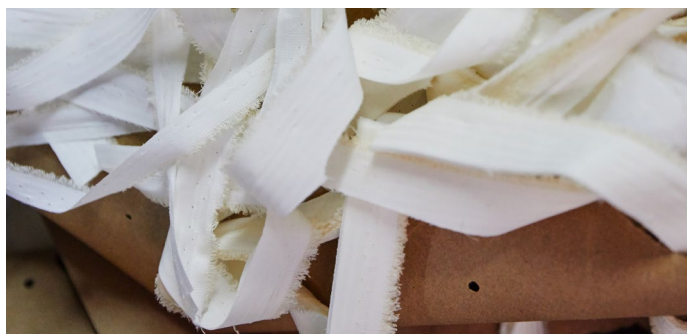
The level of tax varies (eco-modulated – a system of penalties and rewards) depending on the product's size, the number of items sold as well as the design of the product. The tax levels in the scheme are modest, with only a small number of textile items reportedly receiving an eco-based discount or bonus. However, the implementation of the textile EPR scheme in France has resulted in increased collection rates for end of life (EoL) clothing, diverting textile waste from landfill or incineration.

EPR IN SWEDEN

Sweden introduced an [EPR scheme](#) for textiles on 1 January 2022, and producers are obligated to comply from January 2024. The responsibility for the collection of textile waste will require textile producers to ensure that their EoL products are dealt with by licensed collection operators.

EPR IN THE NETHERLANDS

The [Extended Producer Responsibility for Textiles Decree](#) (the Dutch EPR Decree) came into effect on 1 July 2023, requiring producers to take responsibility for the recycling and re-use of textile products placed on the Netherlands market from 2025. The Dutch EPR Decree has set 2030 targets, requiring that 75% of textiles placed on the market must be prepared for re-use, or recycled, whereby, 33% of the recycled amount must be fibre-to-fibre. Therefore, by using wool, producers may incur reduced barriers to operating in the Netherlands textile market.



PROPOSED EPR IN THE EUROPEAN UNION (EU)

The European Commission formally adopted the [Strategy for Sustainable and Circular Textiles](#) (EU Strategy) in 2022, which includes a proposal for member states to set up separate collections for EoL textiles by January 2025, as part of a commitment to comply with EU Waste Legislation.

A fundamental part of the strategy is the implementation of a harmonised EPR scheme for textiles. The proposed scheme involves “binding product specific eco-design requirements” for textile products focused on their:

- durability
- reusability
- repairability
- fibre-to-fibre recyclability
- mandatory recycled fibre content
- minimisation and tracking of substances of concern.

The scheme will require recycling of end-of-life, or post-consumer, textiles back into products of relatively high value, with the aim of achieving much higher resource efficiency.

The [Eco-design proposal](#) is yet to be formally adopted and its content is subject to change.

REFERENCES

Extended producer responsibility (EPR) is an approach to environmental policy in which producers, such as brands, have responsibility for the disposal and management of their products when they reach the end of their primary life.

- OECD (2016), Extended Producer Responsibility: Updates Guidance for Efficient Waste Management, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264256385-en>

Figure 2: World consumption of major textile fibres

European Man-made Fibres Association, 2021 <https://www.cirfs.org/statistics/key-statistics/world-production-fibre>

Unlike synthetic fibres which present financial and operational challenges to recyclers, a commercially profitable wool recycling industry has existed for more than 200 years

- European Outdoor group and Greenroom Voice, "Recycled Wool: A Primer for Newcomers & Rediscoverers," 2018.

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Clothes made from rPET fibres cannot generally be recycled and so enter a linear model, rather than a circular one.

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Wool, on the other hand, is a biodegradable fibre and has been confirmed to not contribute to microplastic pollution. See Wool is Biodegradable factsheet

- Hodgson A, Leighs SJ, van Koten C. Compostability of wool textiles by soil burial. Textile Research Journal. 2023;93(15-16):3692-3702

- Brown, R. The Microbial Degradation of Wool in the Marine Environment. University of Canterbury, 1994.

This scheme encourages brands to adopt circularity and sustainability principles in textile product design by implementing a tax based on the:

- quantity of material used
- incorporation of recycled material
- use of renewable resources
- durability
- repairability
- possibility of being reused.

- Article L-541-10-3 of the Code de l'Environnement (2007 Environmental Code amendment) https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000041599069/2020-02-12

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- Swedish Government, "Extended producer responsibility for textiles – part of the circular economy," Stockholm, 2020. <https://scienceparkboras.se/wp-content/uploads/2021/01/Extendedproducerresponsibilityfortextiles.pdf>

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- 2008 Waste Framework Directive <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098>

A fundamental part of the proposal is the implementation of a harmonised EPR scheme for textiles. This will involve "binding product specific eco-design requirements" for textile products focused on their:

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The Eco-design proposal is yet to be formally adopted and its content is subject to change.

- Proposal for establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC (EU Sustainable Products Regulations Proposal) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52022PC0142>