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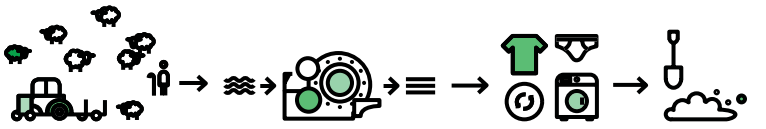
Wool's Use Phase



The life cycle of a wool product goes through four main phases:

- the production of wool on farm
- the process of turning the wool into fabric and then into an item of apparel or another textile
- the period the product is worn or used
- end of life, when the product is disposed of or recycled into another product.

To understand the true environmental impacts of wool textiles the use phase must be considered. In this fact sheet you can learn how wool's environmental benefits come to play during the use phase. The use phase is the time a consumer owns, wears, washes and cares for a garment or other textile item. Research shows that how we use a garment differs depending on the fibre the garment is made of.

Wool garments naturally lend themselves to reducing environmental impacts as they need to be washed less often, are washed at lower temperatures and last longer.

Wool is Washed Less Often

An analysis of the number of times a garment is worn before it is washed found that wool is worn more times prior to washing than other fibres. A wool sweater for example is worn on average 10 times before being laundered while a cotton sweater will be worn on average only 5 times[1,2].

Wool needs less washing due to its natural properties of being odour and stain resistant as well as refreshing itself easily through hanging in fresh air.

Having to wash wool garments less often reduces environmental impacts by saving water, washing detergents, and energy.

Wool is Washed at Lower Temperatures

The longer garments are worn, the fewer resources we have to use for new ones.

A German consumer behaviour study comparing the washing temperatures of garments made of different fibres showed that wool is washed on a cool wool cycle of 30.3°C whereas other fibres such as cotton are washed on an average temperature of 41.1 °C[1,2]. Washing wool on lower temperatures means less energy use per washing cycle.

Wool is Air-Dried

When it comes to drying clothes there are the options of line-hanging or tumble drying. Tumble drying uses quite a lot of energy, even more than a washing machine. For wool garments a tumble dryer is not recommended as the mechanical fraction is not good for the fibre. Most wool garments are line dried and therefore use no extra energy.

Wool Garments Have a Longer Life Span

The longer clothing (or another textile item) is used, the less impact it has on the environment.

Wool garments often last longer than others due to the quality and strength of the fibre. Researchers analysed several studies looking at garment lifespans in years. The analysis showed that the average wool t-shirt lasts 6 years compared to 3.8 years of a comparable cotton t-shirt.

A Norwegian closet study asked participants what their oldest garment in use was and the average age of such garments was 15.8 years. Some garments were over 30 years old, and of these "vintage" clothes still in use, many were made of wool[4].

Wool Does Not Contribute to Microplastic Pollution

Another important factor to consider in measuring the environmental impacts of textile garments is the shedding of microfibres. While all textile garments shed fibres during wear as well as during washing, it is important if these microfibres can biodegrade or not. Wool microfibres readily biodegrade in water as well as landfill and are therefore not an environmental threat, unlike microfibres from synthetic garments[3,4].

About IWTO

With a world-wide membership encompassing the wool pipeline from sheep to shop, the International Wool Textile Organisation represents the interests of the global wool trade. By facilitating research and development and maintaining textile industry standards, IWTO ensures a sustainable future for wool. To learn more about IWTO and its activities, visit www.iwto.org.

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