



functional and creative textiles

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## Environmental impact of textiles for healthcare, hospitality and industry

### Intro

In the field of flatwoven laundry textiles, many initiatives are underway to develop textiles with the lowest possible environmental impact. Both the environmental impact of production and the use of textiles are involved. By use is meant the cycle between laundry and customer.

Wevotex supplies the laundry industry with conventional laundry textiles of 100% cotton, as well as more sustainable textiles that include polyester (recycled or non-recycled) and recycled cotton. In addition, options with the use of organic cotton are also supplied. See also Wevotex organic! for explanation OCS and GOTS certification.

The question is: what is the environmental impact of the conventional articles, which are made of 100% cotton, compared to articles that use (recycled) polyester. The comparison with articles that contain recycled cotton is also interesting.

The Ecotool has been developed in collaboration with the FTN (Federatie Textielbeheer Nederland – the dutch laundry organization). With this web application, the environmental impact of the production and use of laundry textiles can be calculated.

Wevotex has commissioned the FTN to compare conventional 100% cotton items with items further developed by Wevotex. GOTS options are also compared.

### Awareness

Cotton cultivation is bad for the environment. In addition to fertilizer and insecticide, an average of 8,000 liters of water is used for 1 kg of cotton. The Aral Sea in central Asia has practically dried up.

A lot of water and energy is used for industrial washing.

How can the textile contribute to a better environment?



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## Calculation

The Ecotool takes into account the following parameters:

- Origin of the grown cotton
- Spinning process
- Weaving system
- Bleaching/dyeing method
- Transport method → container with sea freight or truck
- Transport distance from producer to Wevotex warehouse
- Washing process: a process has been assumed in which the max. washing temperature is 60 degrees.
- Washing equipment: the calculation is based on a laundry tunnel with counterflow and gas-fired dryers with temperature regulation
- Assumption for distance between the laundry and the customer: 75 km.

## Conclusions

- Both the use of polyester and the use of recycled cotton (GRS) lead to a significant reduction of CO<sup>2</sup> water and energy consumption
- The use of polyester leads to savings on water consumption and land use
- Application of GOTS leads to savings on water consumption and land use

## Interested? Get in touch:

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