

100% cotton or a polyester/cotton blend?

The environmental impact of your workwear

Including polyester in workwear garments can reduce greenhouse gas emissions!

Workwear made from a blend of cotton and polyester or 100% polyester is less burdensome on the environment than 100% cotton workwear:

- **Polyester is stronger and more resistant to chemicals** than cotton. Polyester fabric therefore has a longer overall product lifetime. Incorporating polyester into workwear garments means they need to be replaced less frequently.

- **Polyester requires less energy to dry** than cotton. This is due to lower moisture regain in polyester (moisture regain of cotton after centrifugation is 40-50%, moisture regain of polyester is only 10-15%). Therefore, laundries processing polyester blend workwear can reduce energy consumption for drying.

- **Polyester is recyclable** and has 'a second life'. Part of polyester fabric is produced from either recycled polyester bottles or other polyester materials. Less production of new polyester results in less energy use and lower greenhouse gas emissions.



This brochure is based on a comprehensive Life Cycle Assessment published by the Danish Technical University.



*Source: 'Life Cycle Assessment - Berendsen Profile Workwear.' Master Thesis by Morten Sørensen Hansen and Jesper Krarup Holst, 2002, Danish Technical University, in cooperation with Berendsen.

Polyester/cotton blends mean longer garment lifetime

A worker wearing polyester/cotton blend workwear requires approximately 25% fewer new clothes than a worker wearing 100% cotton workwear.

	<u>Trousers*</u> Per worker per year	<u>Jackets*</u> per worker per year
100% cotton fabric	1,81	0,80
65% polyester / 35% cotton fabric	1,37	0,67

A polyester/cotton blend means workwear needs to be replaced less frequently.



Polyester/cotton blends need less energy to dry

Laundries drying polyester/cotton blends will consume 50% less gas than when processing 100% cotton workwear.

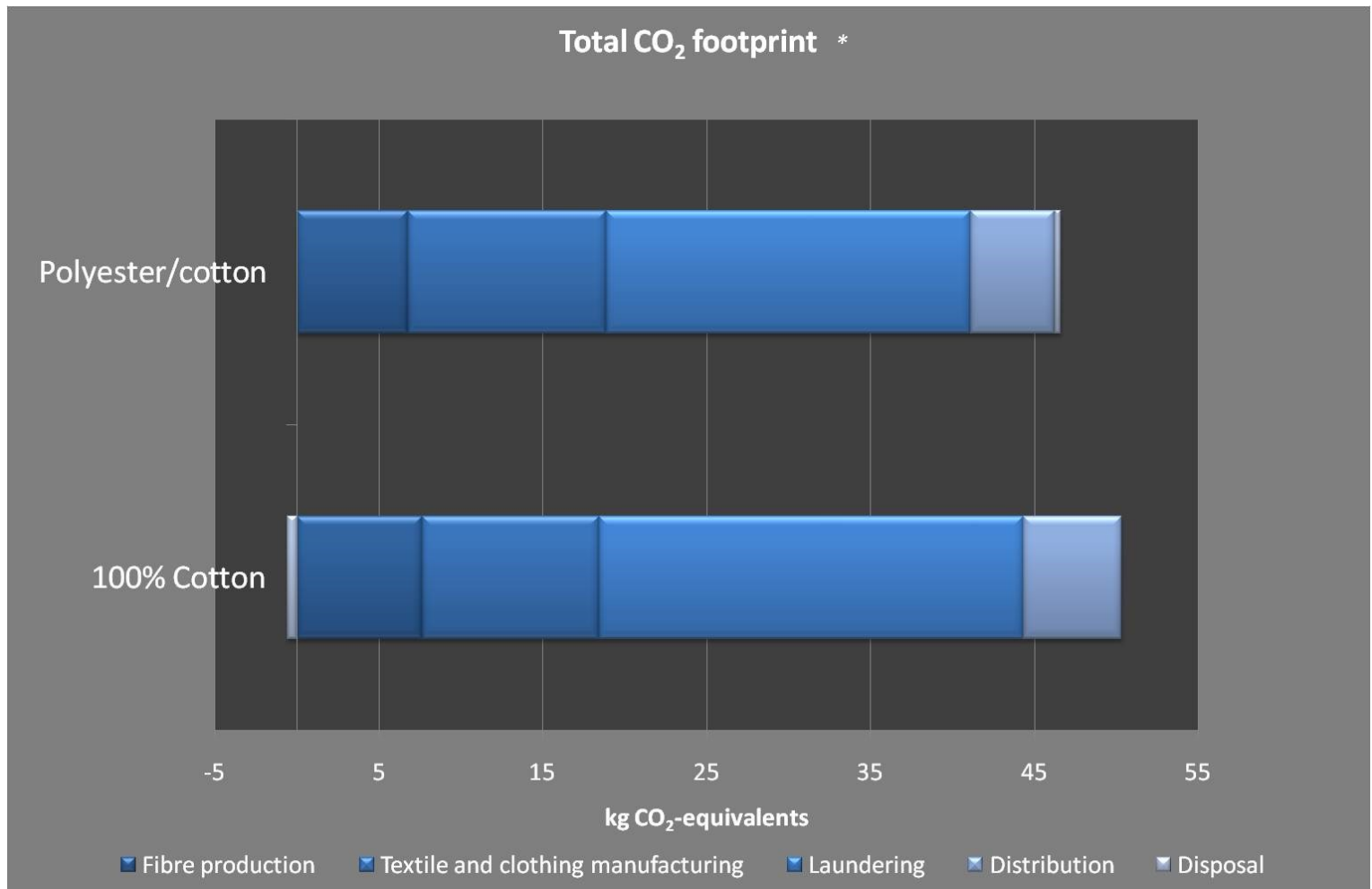
	Average gas consumption* (m3/kg textile)
100% cotton fabric	0,09
65% polyester / 35% cotton fabric	0,05

This table presents natural gas consumption when tumble drying 100 % cotton garments compared to polyester/cotton blends.

Polyester/cotton blends have a lower CO₂ footprint

When measuring the CO₂ footprint from cradle to cradle, workwear made of a polyester/cotton blend emits 10% less CO₂ than 100% cotton workwear. The figures below take the following into account: fibre production, production of fabric and garments, use and laundering, distribution and disposal.

Total CO₂ footprint of workwear used by one worker



Introducing polyester into workwear garments is good for the environment

- Laundering polyester is more energy efficient than cotton
- Polyester production is less burdensome on the environment than cotton
- Polyester is lighter than cotton, therefore distribution has a less significant environmental impact
- The polyester/cotton blend garment has a longer lifetime.

The textile services industry is committed to a sustainable business model which exercises the greatest possible concern for the environment. Introducing more polyester/cotton blends for workwear reduces greenhouse gas emissions, thus contributing positively to a sustainable future.