

EDWIN

**LCA
REPORT**



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Latest Achievements

We calculate LCAs for all our products.

Through Rekut we provide employment to people with different abilities and donate masks to protect the health of our customers and those around them.

We set new goals.

LCA Methodology

Life Cycle Assessment (LCA) is a methodology for assessing the environmental impacts of a product, in our case the life cycle of EDWIN USA jeans. We measure the environmental impact from raw material and processing (cradle), manufacturing to distribution. The goal of an LCA is to provide the groundwork for sustainability or CSR strategy within a company to facilitate better sustainable decisions. For the 2019 LCA of EDWIN USA, we focused on measuring the water, energy and CO2 impact of our jeans. The methodology of LCAs done by EDWIN USA follows the ISO 14040 standard.

The first step is to look at the environmental inputs and outputs of a product or service. It is essentially the data collection phase of our LCA. There can be:

1. Raw materials and resources such as fuels
2. Different types of energy
3. Water
4. Waste and emissions

Company level emissions are then divided into process and product level, and each of them has to match.

Whenever possible we use direct data such as energy bills, however, sometimes industry averages have to be used, for instance to know the impact of a button made of a specific material.

The output of an LCA is a list of values for several impact categories:

- Global warming potential (kg CO2)
- Use of net fresh water, water (m3)
- Land use
- Net use of non-renewable energy (MJ)
- Human toxicity potential (1,4-DB-equivalent in kg)
- Acidification
- Eutrophication





Where does most of the impact come from?

In a pair of jeans, the biggest impact comes from the fabric, followed by the processing emissions. The fabrics chosen by EDWIN USA are mainly cotton-based, with a small percentage of manmade fibers to ensure comfort. During the processing, EDWIN USA utilizes the most resource-efficient techniques and technologies to reduce the impact. Each wash will have a different look and impact.

Comparison with the average pair of jeans

Carbon Emission equivalents

All steps of the supply chain will contribute to global warming, which is calculated in kg CO2 equivalent – meaning that the effects of all greenhouse gases are converted into carbon emissions, which is the main contributor.

CO2 of an average pair of jeans: 21.305 kg

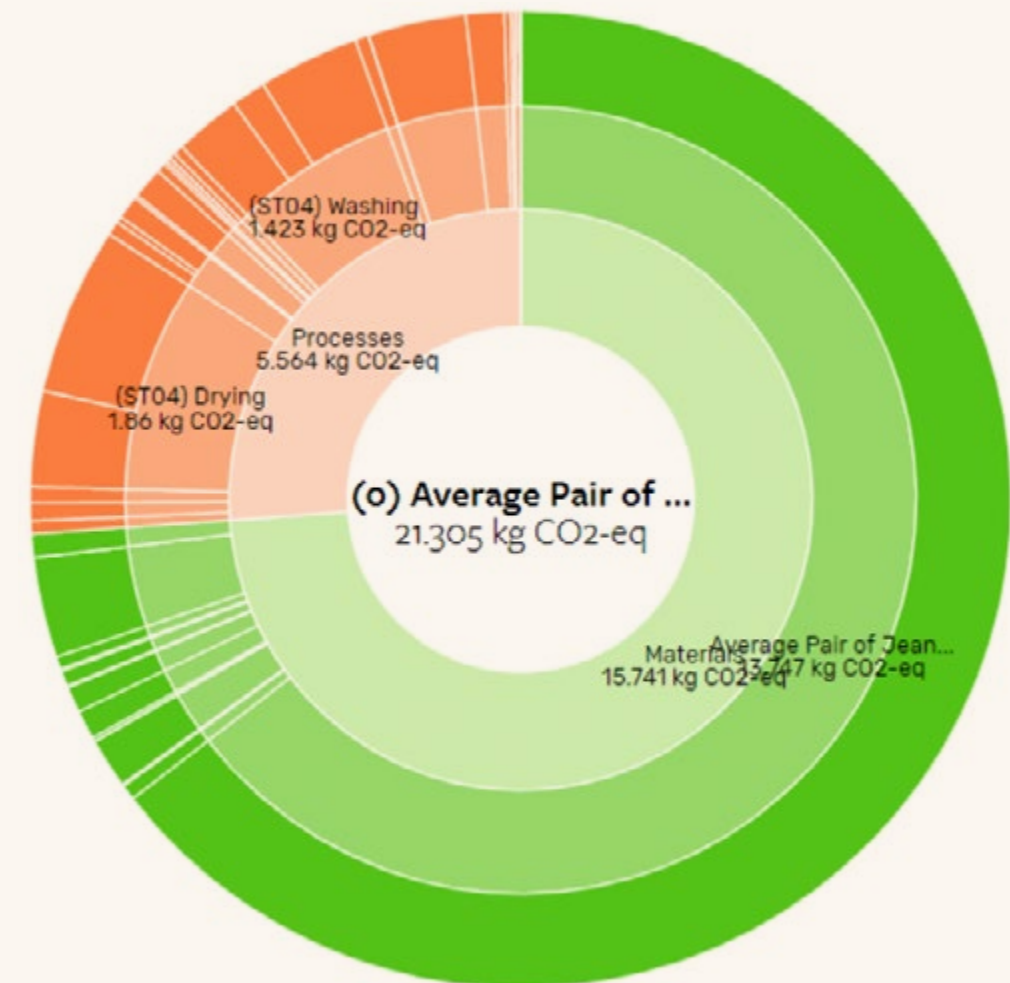
CO2 average of EDWIN Product: 8.018334402 kg CO2-eq

The average pair of Edwin jeans has Global Warming impact 62% lower than the average pair of jeans.

This is because of multiple measures put in place to reduce carbon emissions:

- Use of renewable energy sources
- Heat recycling to reduce steam use
- Air drying to reduce dryer use
- Transport by boat instead of air freight

AVERAGE PAIR OF JEANS
GLOBAL WARMING POTENTIAL



Water

Denim manufacturing requires a very large amount of water, because cotton is the thirstiest fiber. Additionally, water is needed in the processing to give special effects to your garments.

Water use of an average pair of jeans: 1477 m³

Water use in the processes of an average pair of jeans: 423 m³

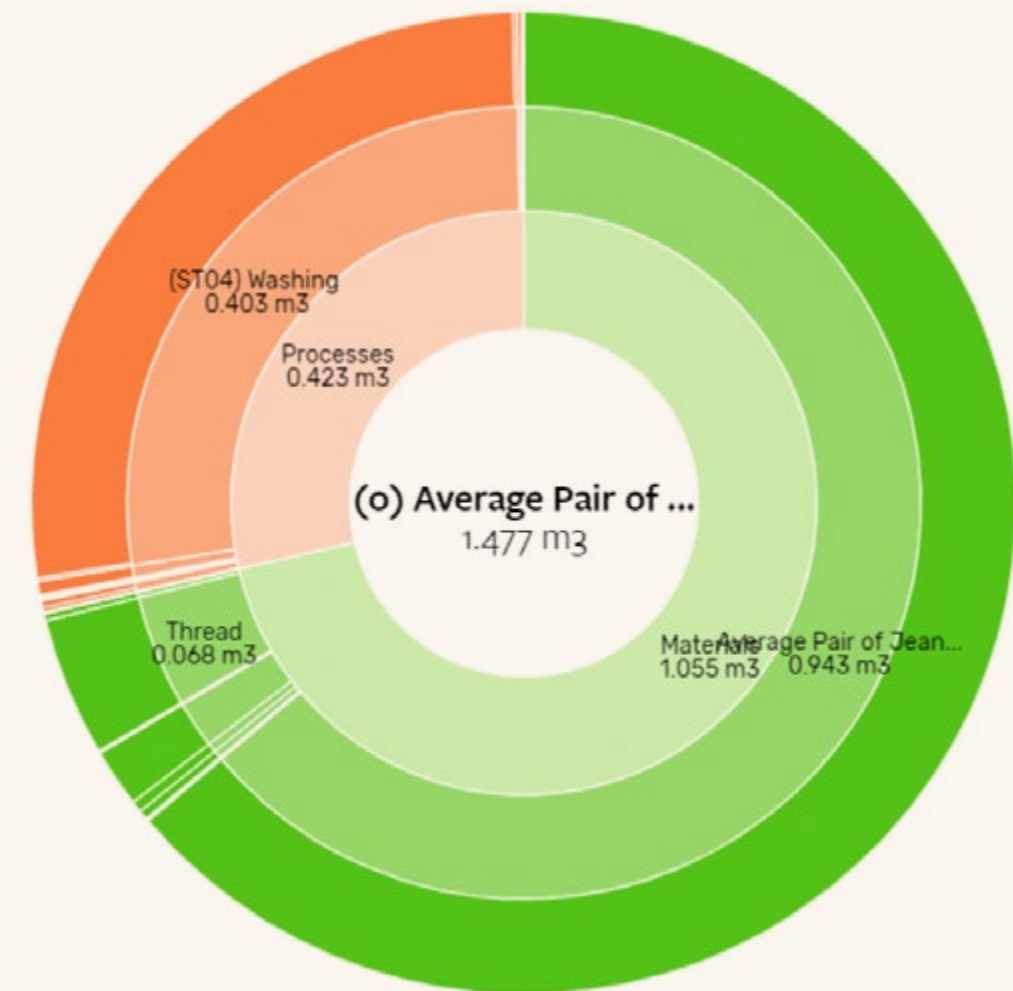
Water use of the average EDWIN product: 1.051 m³

The average pair of Edwin jeans has a water use impact 29% lower than the average pair of jeans overall.

Water use in processing of the average EDWIN product: 0.115 m³

The average pair of Edwin jeans has a water impact 73% lower than the average pair of jeans in the processing.

AVERAGE PAIR OF JEANS
USE OF NET FRESH WATER



Energy

Energy can either be coming from renewable or non-renewable resources, which are much more harmful to the environment and are not sustainable in the long term.

EDWIN USA, in collaboration with Saitex, sources all its steam from renewable resources such as biomass, instead of using fossil fuels.

The average pair of jeans uses 331.195 MJ worth of non-renewable resources.

The EDWIN average product uses 102.7576396 MJ.

The average Edwin product uses 69% less energy than the industry average.

AVERAGE PAIR OF JEANS
 TOTAL USE OF NON-RENEWABLE
 PRIMARY ENERGY RESOURCES

