NUDIE JEANS

Methodology for product calculations

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This document presents the most important methodological choices, assumptions, and estimates made for the product calculations at Nudie Jeans.

GENERAL COMMENTS

We at Nudie Jeans have mapped the total emissions of our business since 2018. We follow the Greenhouse Gas Protocol (ghgprotocol.org) as a method for the calculations and map, therefore the emissions in all three scopes. We based our total emissions for the year 2020 on 75% primary data, e.g., actual data from suppliers in Tier 1, Tier 2, and Tier 3.

Based on the data collected, we have, together with the climate consultants at 2050 (2050.se/en/), calculated the average emissions for specific product styles based on its specific supply chain, fiber composition, and weight.

This is the first time we have published our climate impact on the product level. We do it with an explorative mindset, staying humble before the complexity of emission calculations and the rapid development within this field. The purpose of making the product calculations is to break down the emissions from the supply chain of Nudie Jeans to make it more understandable for our customers and users. We hope this increased awareness of our products' climate impact will drive consumption and garment use in a more responsible direction.

We present the methodology below as bullet points to describe the calculations' system boundaries and methodological choices.

- We measure climate impact in kg CO2e, and we measure water use in liter.
- We base our calculations on the weight of a size medium for each product group.

SYSTEM BOUNDARIES

Below are the system boundaries we have followed making the product calculations.

Emissions and water use in the product calculations include:

- Production processes from raw material to the final product (fabrics, trims, lining).
- The packaging material used in the supply chain.
- Transports in between suppliers in the supply chain.
- Inbound transports from tier 1 suppliers to Nudie Jeans warehouse in Borås.
- E-commerce packaging.

Emissions and water use in the product calculation do not include:

- Outbound transport, e.g., distribution.
- Use of sold products.

— Reuse or repair of sold products.

— End-of-life treatment of sold products.

We didn't include the above emissions in the product calculation as we worked with a cradle-to-gate approach. We also excluded emissions and water use connected to the distribution, the user phase, and the product's end of life since they vary widely based on how and where the products are used and shipped.

The product calculations did not include other indirect emissions and water use related to Nudie Jeans' organization, such as electricity and heating in offices, business travel, and waste management in their operations.

CALCULATION METHODOLOGY

Production data:

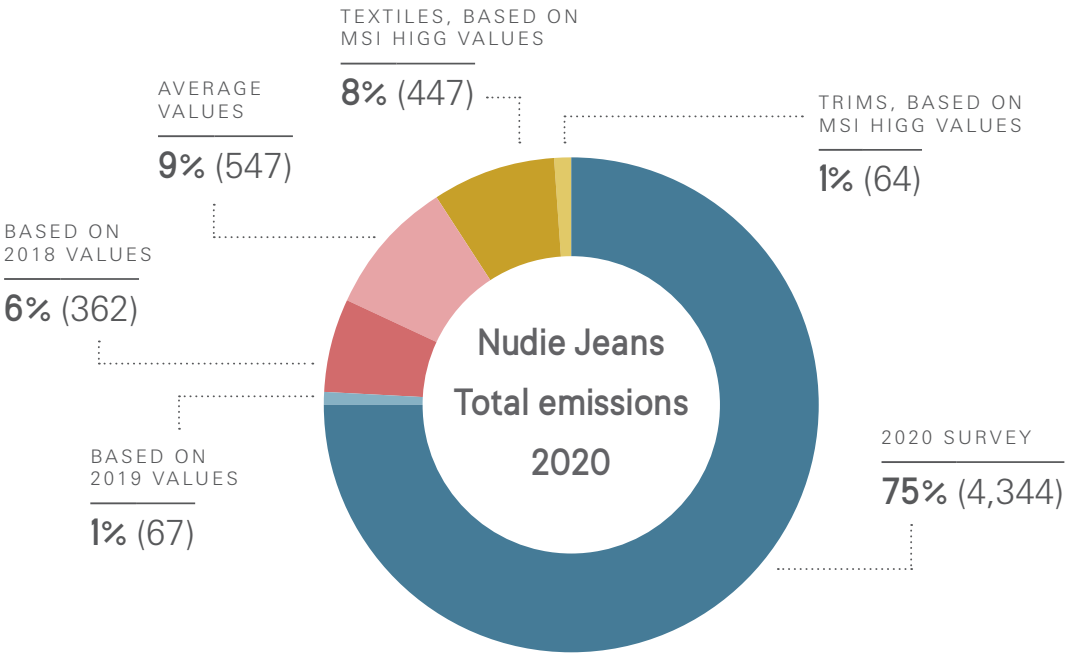
— The primary supplier data that creates the basis for 75% of Nudie Jeans' total emission in 2020 was used for the product calculations when available for the relevant suppliers in the supply chain of the specific product.

— If a supplier in the supply chain of a specific product had not reported their actual data, we used secondary data.

— We prioritized secondary data as follows:
1. Reported data from the specific supplier from the previous year(s) but recalculated based on the production volumes for the entire year of 2020.
2. Average data based on reporting suppliers in Nudie Jeans' supply chain carrying out similar production processes within the same tier.
3. We used global standard values from the Kering environmental KPIs or Higg MSI when secondary data was unavailable based on the above premises.

— This means that we ranked the data sources according to the following system:
1. Actual data reported for 2020
2. Actual data reported for 2019, adjusted for production amount in 2020
3. Actual data reported for 2018, adjusted for production amount in 2020
4. Averages per tier, based on values from reporters 2018-2020
5. Material weight and Kering environmental KPIs or MSI Higg standard values.

This figure shows the split of data types used for Nudie Jeans' total emissions for the entire year of 2020.



- Primary supplier data include fuel, energy, and water use in production processes, packaging material used, and production waste from the procedures performed in the supply chain.
- We based the raw material data on the weight of the materials used in fabrics, trims, and lining, including any sustainable attributes related to the production of each product.
- We expect an increase in primary and good secondary data coverage and data quality to improve in the coming years.
- Based on where the suppliers were located, the corresponding national grid mixes for electricity consumption were applied.
- Some suppliers conducted several processes in-house, but not all processes applied to all products produced at the specific factory. Energy and water data per process for these factories were not in all cases collected; in these cases, we broke down aggregated supplier data to different processes based on reported information from other suppliers or by looking at studies and relations between MSI emission factors. Studies used include, e.g., Mistra Future Fashion's report Environmental assessment of the Swedish Clothing Consumption and Quantis' report Measuring Fashion in WRI's report Roadmap to Net-Zero.

Transport data:

- An RFI of 2.7 was applied for all air transports to account for the increased greenhouse effect from high altitude cloud formation. The scientific conclusions on the impact regarding the RFI value vary, but IPCC recommends using 2.7.
- The transport data included in the product calculations were emissions from transport between suppliers in the supply chain and Nudie Jeans' inbound transports.

- We calculated transport emissions from the supply chain based on average transport emissions for all products purchased in 2020.
- We calculated inbound transport emissions based on the specific supplier's standard transport mode and the distance from the supplier to Nudie Jeans' warehouse in Borås.
- Publishing data split into process steps:
- We hoped to communicate the emissions per process steps following the same setup of production processes used in our product transparency. This has only been possible in the cases where we could use Kering's environmental KPIs for the raw materials, but not for the cases where we used MSI Higg standard values. This depends on the communication guidelines of MSI, preventing the users of the data from communicating specific process step emissions.
- We used MSI Higg standard values when the specific raw material was not represented in Kering's environmental KPIs.

WATER DATA

Our calculated water use per product is seemingly low compared to general water use in the textile industry. We have assessed the water calculations and have not been able to identify the exact reason for this, but comparing our result with the previous LCA study "Comparative Life Cycle Assessment of Jeans – A case study performed at Nudie Jeans" by Emma Åslund Hedman, the results do not differ significantly. We recognize the risk of errors in the reported supplier data, even though we made a plausibility analysis on an individual supplier basis.

As noted by Åslund Hedman in the LCA, one reason for the low water use might depend on the common rain-fed organic cotton cultivation practices. Differences in methodologies for how to calculate the amount of water added to the soil through rainfall might explain the low water use seen in our data, compared to the general water use statement in the textile industry, where it's common to focus on water scarcity. The two different methods are related to measuring actual water use, as we have done, and the water scarcity, which analyzes all water flows in the specific area, including rainfall.

Åslund Hedman also compared her results of the water use from production processes in Tier 3, Tier 2, and Tier 1 to a study made by Levis Strauss (2015) and a study made by Roos et al. (2015) and the water use data from the same process stages in the supply chain do not differ significantly. Based on these findings, we consider our calculations reliable, but we are open to reassessing the situation if new facts are introduced.

We calculated water use according to the setup below:

- Water use for tier 4, raw material production, was calculated based on Kering's environmental KPIs. Kering's environmental KPIs are in turn, based on water data for the specific fiber and country of origin. In the cases where the country of origin of our used fibers were known, we used the same KPIs; in cases where the country of origin of the specific fiber was unknown, we used a global average.

- To calculate water, we used Kering's environmental KPIs to calculate actual water use and not water scarcity, which is another method for calculating water use. MSI Higg standard values use water scarcity as a method for water calculations.
- For water use in processes at suppliers in Tier 3, Tier 2, and Tier 1, we have based the calculations on primary supplier data from our supply chain.
- In cases where we missed primary supplier data for specific suppliers, an average based on reporting suppliers in Nudie Jeans supply chain carrying out similar production processes within the same tier was used.

For further questions on methodology, please send us an email sustainability@nudiejeans.com