

Everlane Carbon Calculation Methodology - Tread-Bare Sneaker

Purpose

Everlane, in partnership with its enterprise climate platform, Watershed Technology, Inc. (Watershed), has calculated the greenhouse gas emissions associated with the Tread-Bare Sneaker. The purpose of this document is to provide transparency as to the methodology Watershed uses to calculate these emissions¹. This document details the current methodology used to calculate emissions, the data sources used to inform those calculations, and future improvements that we hope to make to further refine emissions estimates.

Methodology

Everlane has calculated the carbon emissions associated with its Tread-Bare Sneaker in kilograms (kg) of carbon dioxide equivalent (CO₂e). Our calculations reflect the total greenhouse gas emissions (including carbon dioxide, methane, nitrous oxide, and other greenhouse gasses) associated with the production of each pair of shoes. Other greenhouse gasses were converted to carbon dioxide equivalents in accordance with global warming potential values provided in the Fifth Assessment Report (AR5) by the Intergovernmental Panel on Climate Change (IPCC). The assessment does not include environmental impacts beyond carbon such as water, land use change, and biodiversity.

We have calculated the cradle-to-grave emissions associated with each pair of shoes. This includes emissions from sourcing raw materials such as cotton fibers or tapped latex, processing those raw materials into finished materials such as textiles or natural rubber, assembling the shoe, transportation, and disposal of the shoe.

To calculate emissions from each pair of shoes, we multiply the weight of each processed material in the shoe by the material's associated emissions factors, to derive the carbon footprint of each individual component in the shoe. This calculation includes generic loss rate assumptions for material processing and uses a representative loss rate based on Everlane products for the cutting of the fabric upper. We calculate the total emissions for assembly based on typical energy requirements of shoe manufacturing² and emissions

¹ Different companies may calculate emissions differently. Emissions provided by Everlane are not meant to be used for comparison between different brands.

² Lynette Cheah, Natalia Duque Ciceri, Elsa Olivetti, Seiko Matsumura, Dai Forterre, Richard Roth, Randolph Kirchain, 2013

factors for these energy sources. We have corroborated this number with our supplier. We aggregated all of the components in a shoe and the emissions from manufacturing to calculate the total cradle-to-gate carbon footprint of the shoe.

To calculate transportation emissions, we used a combination of industry average and primary data to model transportation from manufacturing to distribution centers. This analysis does not include transportation from the distribution center to customers. To calculate the end of life, we used the weight and type of shoe and have conservatively assumed that shoes will be landfilled. As we do not recommend washing of the shoe, we have assumed no product usage emissions from washing and drying of the shoe.

We use a variety of sources for our emissions factors and have selected sources that we feel most accurately represent the emissions associated with each component based on available information. In cases where it is not possible to match an exact emissions factor, we have opted to select more conservative (higher emissions) alternatives. Sources for our emissions factors include: ecoinvent (v3.8), Higg MSI (July 2022), Cheah et al (2013), and DEFRA (2022).

The per-product emissions provided do not include emissions from operating Everlane locations, corporate operations, or packaging. These emissions are included in Everlane's corporate carbon footprint, which is measured separately.

Future Improvements

Climate science is continually evolving with improvements in methodology and granularity, and thus our carbon calculations will also continually improve. Our aim is to inform our customers, as reliably as possible given the methodology available to us, of the carbon impact of their choices when purchasing from Everlane, but we also want to recognize existing limitations of data and methodologies, such as the use of global industry averages in some of our emissions factors. In the future, we seek to make the following improvements:

- Increase the specificity of our emissions factors by encouraging our suppliers to provide granular emissions data. For suppliers for whom we have not received granular emissions data, we continue to use emissions factors based on industry averages.