



The Nordic Swan Ecolabel reduces climate impact



15% CO₂

savings by choosing a Nordic Swan Ecolabel sports t-shirt.

The Nordic Swan Ecolabel's criteria for textiles, hides/skins, and leather result in savings in greenhouse gas emissions due to requirements for the recycled content of synthetic textiles in a sports t-shirt in polyester.

An analysis of the climate effect by choosing a Nordic Swan Ecolabel polyester sports t-shirt rather than a comparable average non- Nordic Ecolabel market alternative has been carried out. The analysis is based on a cradle-to-gate life cycle assessment that focused solely on CO₂. Then the saving relates to the raw material extraction and production of the sports t-shirt.

The calculation is based on a conservative approach, including only the requirements that directly affect greenhouse gas emissions for the sports t-shirt, and where it is deemed that the effect of the requirements is quantifiable.

The study only includes requirement O28 concerning content of 100% recycled material but with up to 10 % new elastane allowed (in this case 100 % rPET) if not biobased in a sports t-shirt of polyester. The market average t-shirt contains 14% rPET and 86% newly produced PET.

The analysis showed that there is 15% CO₂ savings by choosing a Nordic Swan Ecolabel sports t-shirt rather than a comparable average non-Nordic Swan Ecolabel market alternative. This is equivalent to saving 210 gram CO₂ per t-shirt.

Other requirements that also benefit the climate and the environment

The Nordic Swan Ecolabel sets several other requirements which may be relevant in relation to the total greenhouse gas emissions such as energy efficient production processes. Also, requirements on quality might lower the life cycle CO₂ emissions per use, as they allow for the sports t-shirt to potentially be used more times, just as restrictions on chemicals might make it more attractive to recycle the textiles.

These are not included in the calculation as the effect compared to the market average are difficult to quantify or obtain data on. However, they may still have an impact on the overall climate and environmental impact – and they are likely to result in even greater overall CO₂ reductions than the analysis shows.

Among the mandatory requirements that are not included in the analysis are:

- Recycled fibres, test for environmentally harmful substances
- Tear strength
- Dimensional changes during washing and drying
- Implementation of BAT for energy and water consumption
- Prohibition of CMR substances and other substances

The calculation is carried out by Viegand and Maagøe and is based on the Nordic Swan Ecolabel criteria for textiles, hides/skins, and leather, generation 5.0.

[Download the full survey here.](#)