Factsheet: Shopping bags

**Lifecycle Analysis**

By means of a CO\(_2\) balance, the usage of a long-lasting shopping bag made of synthetic material was compared with the usage of paper shopping bags, to find out which of the two shopping bag types is more climate friendly. Both bags are sold at Denner:

Comparison / Life cycle assessment

Synthetic material is made of mineral oil and therefore it is principally more climate harming than paper. However, also paper bags are not free from fossil fuels such as mineral oil or natural gas, as those are consumed for the production of paper and for transportation.

The high-quality shopping bag made of synthetic material is more long-lasting than paper bags, amongst others because it is not susceptible for wetness. Therefore it was evaluated for how much longer such a synthetic bag has to be used until it becomes climate friendlier as a paper bag. It was also considered that the shopping bag of synthetic material has a larger capacity (29.9 litres) than a shopping bag of paper (22.3 litres).

The greenhouse gas emissions (expressed in CO\(_2\) equivalents) were summed up over the whole life cycle of the two shopping bags, i.e. from the production of the paper pulp from wood respectively the production of the synthetic material, the transportation, the production of the bags at the factory through to the waste combustion.

**Results**

If the shopping bag made of synthetic material is used five times more often than the paper bag, the CO\(_2\) balance of the two products is equalised. If the synthetic bag is used eight times as often, the reduction of CO\(_2\) emissions is of about 35%.

Shopping bags made of paper are often used up to two times – the synthetic bag can be used many dozen times without wearing. With potential economisations of 35% or more, from a climatic point of view the utilisation of such a shopping bag of synthetic material is preferable.
Climate friendly shopping

The long-lasting shopping bag allows you to carry your purchases home in a climate friendly way – and if you additionally choose a climate friendly means of transport, the benefit for the climate is even larger.

About 30% of all car drives are shorter than 3 km – distances that would be easily feasible by bicycle or on foot. At the same time, people do less exercise, what causes health problems. A chance to kill two birds with one stone: Your purchase by food or bicycle is not only more climate friendly, it is also good for your health.

And if you go by bus or tram instead of using your car, you save on average about 90% of the climate charge caused by car driving.

Validity: 01.11.2012-31.10.2013

New balance in the review process / climatop, 19.12.2013