Factsheet: Hairspray

Analysis of the Life Cycle
This factsheet shows the results of the life cycle analysis. It shows which Hairspray products are most climate friendly. The greenhouse gas emissions have been analysed and evaluated.

Product Information
The following products of the three categories were compared:

Normal hold:
- I AM Strong aerosolspray
- Strong pump spray
- Golden Hair Professional (GHP) Normal aerosolspray
- Normal pump spray
- M-Classic Hairspray Normal aerosolspray

Strong hold:
- I AM Power Volume Aerosolspray
- Glamorous Shine aerosolspray
- Golden Hair Professional (GHP) Volume & Shine aerosolspray
- Volume & Shine pump spray
- Color Protection aerosolspray
- Color Protection pump spray
- M-Classic Hairspray Extra Strong pump spray

Extra-strong hold:
- I AM Ultra Strong aerosolspray
- Ultra Strong pump spray
- Dynamic aerosolspray
- Golden Hair Professional (GHP) Extra Strong aerosolspray
- Extra Strong pump spray
- M-Classic Hairspray Extra Strong aerosolspray

Functional unit: 1 kg Hairspray formulation

The comparison
The climate impact of the hairspray products were summed up over the whole life cycle, e.g. from the winning of the raw material to the production and the transportation to the disposal. A hairspray formulation consists of hold-giving ingredients and dissolver (e.g. alcohol and water). Aerosols contain in addition blowing agent. To have a fair comparison, the hairsprays were compared on the basis of the same amount of hairspray formulation. For the comparison the hairspray products were divided into three categories: normal hold, strong hold and extra strong hold. Within that group, the same amount of hairspray formulation is used to get a comparable result.
The climatop certification
The product comparison shows, that all pump sprays are significantly more climate friendly than sprays with blowing agent (aerosols). They cause about significant less environmentally unfriendly emissions. The reason for it is the blowing agent, which is only contained in aerosols.

The results
All of the tested AE-sprays cause more than 4 kg CO2e per functional unit. Comparing with the worst NAE-sprays: Even the worst case of NAE causes less, 3 kg CO2e per functional unit, than the best AE spray. The best product in the category „normal hold“, I AM Hairspray strong NAE, causes just 2.14 kg CO2e, the best product in the category „strong hold“, M-Classic extra strong, causes NAE 2.58 kg CO2e and the best product in the category „extra strong hold“, I AM Hairspray ultra strong NAE, almost the same with 2.60 kg CO2e. The comparison demonstrates considerably the better achievement of the NAE sprays which are more climate friendly: they cause at least 30% less climate-damaging emissions than aerosolsprays.

The following bar chart shows where the climate impact occurs, using the example of sprays of the category „normal hold“. It shows that pump sprays perform better than aerosols. The reason for the higher emissions is, that blowing agents are extracted from crude oil. Not using any blowing agent leads to a lower consumption of fossil raw material. The aerosol can also be made of aluminium or tinplate to resist the pressure of the blowing agent. These materials cause higher carbon emissions than the materials of the pump sprays.

In all the other parts such as transportation, production and disposal the carbon emissions are of a low relevance or, in case of dissolver, about the same.

Validity: