

**TRANSLATION:**

The translation of this fact sheet is provided by *climatop* with the aim of reflecting in the most accurate way the original German text. In case of interpretation difficulties, please consult the original, valid German text.

**CO<sub>2</sub> Balance: Mixing nozzles and showerheads**

The CO<sub>2</sub> balance shows, which mixing nozzles for taps and showerheads are the most climate friendly. The following products were compared:

**Mixing nozzles for taps:**

- Normal flow (from 10 litres per minute)
- Flow with saving function (up to 7.5 litres per minute)

**Showerhead**

- Normal flow (from 16 litres per minute)
- Flow with saving function (up to 12.5 litres per minute)

**Comparison / life cycle assessment**

The climate relevant emissions (expressed in CO<sub>2</sub> equivalents) of mixing nozzles for taps and showerheads were summed up over the whole life cycle of the products, i.e. from the exploitation of the raw material, to production, transportation, through to the waste disposal. To have a comparable reference, an average water usage time of 5 minutes with a temperature of 40°C was regarded. Concerning the taps, additionally the supply of cold water was considered.

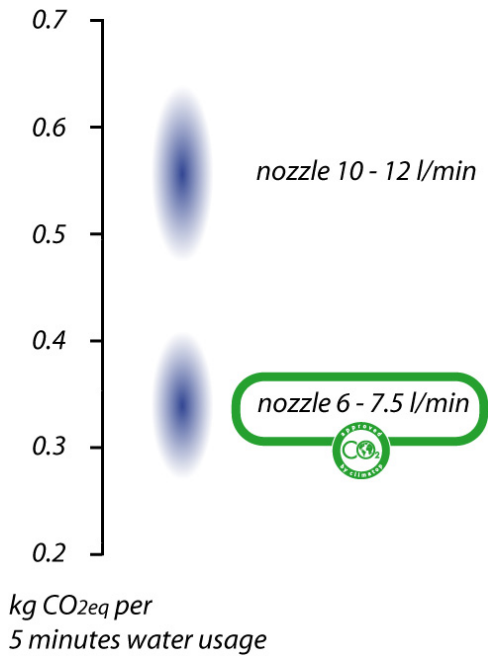
**Results**

The mixing nozzles and showerheads with saving functions cause 30% to 50% lower emissions than products without saving function. The main reason for this result is that there has to be less water heated. Using cold water, the energy consumption is also lower, because less drinking water and sewage has to be treated. The saving potential also depends on how much the tap is turned up (water volume). Production, transportation and waste disposal of the compared products do not have a major impact on the climate charge. An upgrade with a water saving product is always worthwhile, even if the old armature is still working. Looking at mixing nozzles and showerheads the consumers' buying decision and the usage are of fundamental importance.

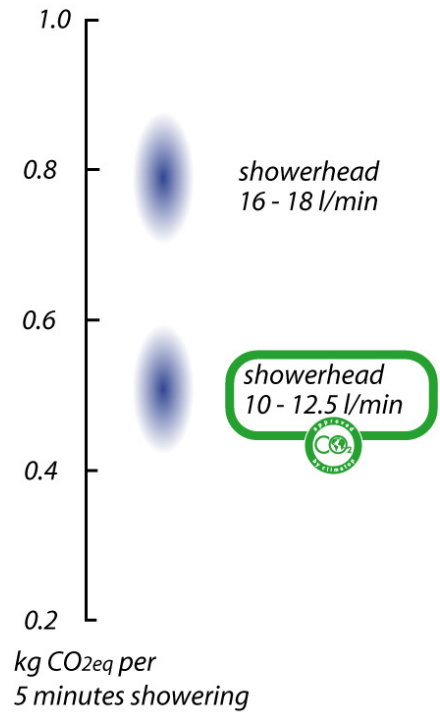
**Shower behaviour**

Everybody who buys a showerhead with saving function saves water and energy while the comfort stays the same. Also decisive for the CO<sub>2</sub> balance is the personal shower behaviour: A limitation of the shower time to 5 minutes (instead of 15 minutes) not only protects the environment but also saves drinking water. To take a cold shower is not only good for the environment (no energy for heating necessary) but is also good for your health. It stimulates your circulation and strengthens your immune system.

**Mixing nozzles for taps**

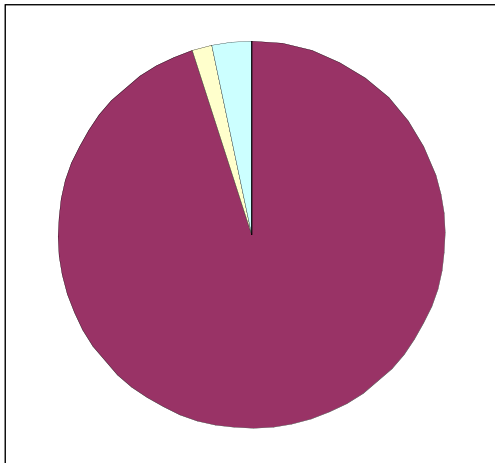


**showerheads**

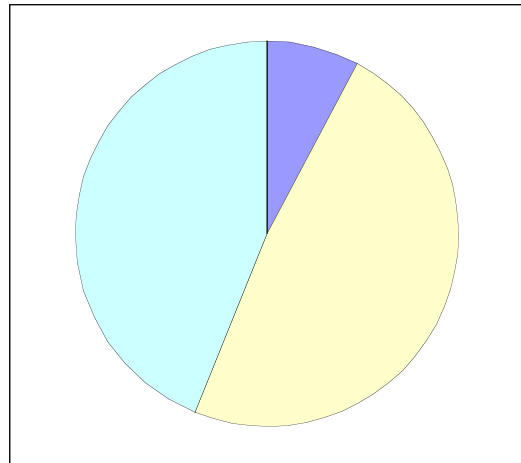


The figures above show the climate charge of products with and without saving function. The pie charts below show the relevance of the particular processes.

**5 minutes usage of warm water**



**5 minutes usage of cold water**



- Production, Transportation and waste disposal
- Water heating
- Treatment drinking water
- Treatment sewage

The Migros assortment includes 32 mixing nozzles and 20 showerheads with saving function. These products are approved by climatop.

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