

SIWI

The price of consumption: who pays?

Everything we buy has a price. None so more than in the form of water. But who is really paying the price and where does the responsibility of consumers and companies lie? At World Water Week 2019 several sessions will focus on consumption-related topics in an attempt to answer these burning questions.

Global consumption has risen sharply over several decades, allowing for many to enjoy goods, services and higher standards of living previously unattainable. But the flip side of this is the ever mounting pressure on scarce water resources.

How to strike the right balance is already a hot topic. It will be an even more pressing issue in years to come as the world's population may reach 10 billion, and both the climate crisis and the ongoing degradation of the environment will continue to worsen.

Current global value chains and trade patterns mean that decisions about consumption and production in one part of the world can have serious and un-

foreseen consequences in another. To quantify this, the concept of water footprints is increasingly used in order to measure the amount of pressure being exerted on local water resources. Consumers in relatively water rich parts of the world such as Europe can place a considerable burden on water resources in more water-stressed regions through their consumption and travel. Many consumers are still oblivious to this.

In the Netherlands, 95 per cent of the water footprint from consumption is located outside their borders, compared to just 3 per cent in India. Tourists from the Global North put considerably more pressure on water resources in the Global South, since they often use much more water than the local population. There can also be positive effects as an influx of tourists can for example benefit local communities through the provision of better wastewater treatment.

There is an urgent need for both consumers and companies to gain a better understanding of how water plays a role in both consumption and production processes, and this topic will be featured extensively at World Water Week. It is also important to understand the situation for particularly vulnerable groups, who are

also at the heart of this year's theme Water for Society – including all. How are they affected by decisions around consumption and production in countries thousands of kilometers away? The topic will be explored for example in the session entitled Leaving no one behind – the World Water Development Report.

Here is a snapshot of other interesting discourses that will be featured during World Water Week:

Do we need all that plastic?

With the rise in both population growth and consumption, the problem of waste is an ever pressing problem as already scarce freshwater sources and oceans are affected by the scourge of pollution, especially from plastic. Consumers are becoming increasingly aware of the issues as more and more countries begin to implement bans on certain plastics and companies ramp up their efforts to find sustainable solutions in dealing with waste. This topic will also be highlighted during World Water Week. The role of recycling will be investigated in the session entitled Plan for plastics – the circular solution while other future opportunities will be discussed under the theme of Preventing plastics in our waters: more than banning straws and Innovative Plastic Leakage Action: From source to sea.

How healthy is our medicine?

The same characteristics that make pharmaceuticals so impor-

tant to cure human illnesses can also be dangerous when they end up in the wrong place. The linkage between water and pharmaceuticals is now increasingly recognized and World Water Week will discuss the topic in detail in several sessions.

OECD will launch a report "Pharmaceutical residues in freshwater: hazards and policy" which looks at the effects of residues emitted into freshwater: psychiatric drugs have been found to alter the behaviour of fish, while endocrine disrupting pharmaceuticals can cause reproduction toxicity in fish as well as breast or prostate cancer in humans. This can have detrimental effects on populations relying on fish as their major food staple. Other similar sessions will look at the role of: Emerging pollutants in water: Invisible threats to health and ecosystems and Reducing emissions from antibiotics production: Supply and demand side collaboration.

What can companies do?

The growing number of companies who attend World Water Week have a unique opportunity to learn from leading scientists and other experts about the most pressing water challenges as well as the most promising solutions. Inspirational examples of companies and businesses that have become more financially sustainable through smarter water use will be featured, such as the Sweden Textile Water Initiative's work showcased under the headline of Monetizing Sustainability in the Fashion and Textile Industry.

European Heat Pump Summit

First-class heat pump expertise

The European Heat Pump Summit – powered by Chillventa – will deliver professional expertise at its finest on 22 and 23 October 2019, focusing on professional knowledge-transfer at the highest level. Over the two days of the event at the Nuremberg exhibition venue, heat pump experts from around the world can enjoy in-depth, wide-ranging professional exchanges, discuss research results, and find out about the latest trends and developments in a compact format. The accompanying Foyer Expo, which is of an equally high standard, provides the appropriate practical context.

For the sixth time now, the European Heat Pump Summit – powered by Chillventa – will offer heat pump experts an interesting, high-calibre congress programme. It will focus on the commercial and industrial use of heat pumps and provide detailed descriptions of the applications involved. In addition, there will be an in-depth exploration of the markets in Europe and worldwide. As well as looking at innovative technologies in component manufacture and the specific use of heat pumps in commerce and industry, the

summit will also explore topics such as refrigerants, the use of hybrid systems, and high-temperature heat pumps. The congress is aimed at researchers, technicians, product developers, decision-makers and consulting engineers, component manufacturers and suppliers, designers and architects, and operators of heat pumps in industrial and commercial environments.

"The European Heat Pump Summit has become established as a major event in Europe on the topic of heat pumps. The dynamic interplay between the theoretical, highly technical knowledge transfer in the congress, the chance to expand your international network at the get-together and the practical context provided by the Foyer Expo is what makes this event such a special highlight for the international heat pump community," says Daniela Heinkel, Senior Manager European Heat Pump Summit, NürnbergMesse.

First-class congress programme – professional expertise at its finest!

The two-day congress offers a wealth of presentations in an extensive programme that is available to download now. More than 30 prominent German and international speakers will be available to answer questions about the status quo and importance of the heat pump. A broad range of topics will be covered:

- Information about the challenges and opportunities in the heating and refrigeration sectors will be provided directly by the European Partnership for Energy and Environment (EPEE), which will provide an overview of Eu-

ropean and global developments.

- The Swedish association of research institutes RISE will report on the use of heat pumps in humid climates, while the University of Rapperswil in Switzerland will show how heat pumps can be integrated into nZEB (nearly zero energy buildings). The University of Maryland in the USA will explore the options for "low GWP" refrigerants for use in heat pumps.
- Among other things, presentations by component manufacturers will show how heat exchanger design is moving towards the use of small refrigerant charges in line with safety classes A2L and A3. The use of refrigerants in hot water heat pumps will also be discussed.
- The Austrian Institute of Technology (AIT) will explore the successful use of industrial heat pumps for industrial drying at temperatures of up to 160°C, while the French research institute EDF will examine their application in a high temperature district heating network. The industrial drying process is an especially effective use of heat pumps, as the University of Ghent in Belgium is demonstrating through the use of a test bench. For further details of all lectures and speakers please go to:

Foyer Expo offers a high-calibre complement to the congress

The lectures are complemented by the accompanying Foyer Expo with product presentations by renowned companies and associations from the international heat pump sector. For details of exhibiting companies and organisations please go to: www.hp-summit.de/en/participation/foyerexpo

Ticket prices for the European Heat Pump Summit 2019

The early bird discount ends on 13 September 2019, so act quickly to benefit from a reduced ticket price of EUR 490 compared with the standard ticket price of EUR 545. The price includes participation in the summit, congress catering including lunch, the get-together at the end of the first day of the event and access to the Foyer Expo.

Strong partners guarantee heat pump expertise

NürnbergMesse organises the European Heat Pump Summit in close collaboration with sponsors and partners from industry and the research community, including AREA, bwp, DKV, ehpa, EPEE, HPT TCP Heat Pump Centre, IZW, VDKF and ZVKKW.



Hansgrohe

From Harsh Lighting to Foggy Mirror

The bathroom is the place to wake up in the morning or wind down after an exhausting day. It should be a welcoming, feel-good space — but there are a few things that put a damper on people's good mood when using the bathroom. A representative population survey conducted by Hansgrohe, the globally active manufacturer of faucets, showers and shower systems, reveals what bothers Germans most when it comes to the bathroom environment.

For the majority of Germans, lack of hygiene and stuffy air are the two most frustrating factors. Be it hair in the washbasin, dingy towels or a dirty bathroom — the majority of people in Germany say that lack of hygiene in sanitary facilities is the thing that bothers them most. Dirt, limescale and mould are particularly off-putting to 89 percent of Germans. Another major source of annoyance is a lack of ventilation options. Whether they are in a hotel, at a friend's house or at home — four out of five Germans (80 percent) don't like fogged up mirrors and clouds of steam that make it difficult to see after a shower or a bath.

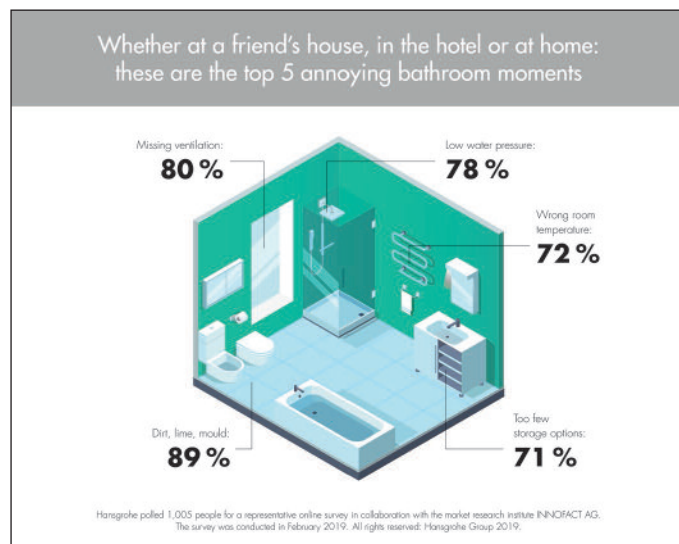
Aggravations Lurk

"Our goal is to always make sure the bathroom experience is in line with people's needs and wishes. That's why we have to find out what the sources of discontent are. Only in this way can we introduce innovations that create the very experiences that provide relaxation," says Jan Heisterhagen, Vice President Product Management at Hansgrohe SE. This is precisely the kind of relaxation many people in Germany experience when taking a shower —

or at least it should be. But, just turning on the water is already a source of aggravation for more than three-quarters of Germans — 78 percent are annoyed by low water pressure. And many Germans aren't very patient when they are in a hurry and want an invigorating shower: 70 percent of the survey's respondents are angered by having to wait for water to reach the desired temperature. Another problem, especially prevalent in hotel showers, infuriates about two-thirds of Germany's men and women: 64 percent would like to decide for themselves whether they want to get their heads wet or not; they therefore dislike fixed showerheads that are mounted either too low or too high. Many encounter another annoyance when they step out of the shower: 72 percent of Germans find room temperatures that are either too cold or too warm very unpleasant.

Bathroom Sharing and Fixtures Rarely Pose a Problem

Of those surveyed, less than half reported being dissatisfied with the bathroom's furnishings and fixtures. Forty-three percent feel frustrated when the bathroom's lighting doesn't match their mood or when they are greeted by harsh lighting early in the morning. Another 43 percent need peace and quiet to relax and are annoyed when their time in the bathroom is disturbed by unpleasant noises. On the other hand, 70 percent of Germans find the lack of shelf space for towels, soap and other things very annoying. But when it comes to sharing the bathroom with their



partners or family members, only 20 percent mind using the bathroom with their loved ones at the same time.

The Ten Biggest Annoyances in the Bathroom

What bothers you most when you use a bathroom (at home, at a friend's house or in hotels)?

- 1st place 89.4%
Dirt, limescale, mould
- 2nd place 79.5%
Lack of ventilation (no windows or vents)
- 3rd place 78%
Low water pressure
- 4th place 72.3%
Uncomfortable room temperature (too cold / too warm)
- 5th place 70.7%
Not enough shelf space
- 6th place 69.5%
Waiting for the right water temperature in the shower

- 7th place 66.4%
Dripping faucets
- 8th place 63%
Showerheads that are either too low or too high
- 9th place 55.7%
Squeegeeing the shower walls after taking a shower
- 10th place 53.2%
A shower spray that is either too strong or too gentle

About the survey

This survey was conducted by the Hansgrohe Group together with INNOFACT AG, a marketing research institution. A total of 1,005 people between the ages of 18 and 69 were surveyed. The distribution of age and gender of respondents in this sample is representative of the German population. The independent online survey was conducted in February 2019.

