



# CLIMATE CHANGE

## MEASURING IMPACTS OF DRINKING WATER



### The big shift of summer 2021

How are consumers drinking water? Glass, PET, single-use or even without packaging – via tap water or filtered tap water?

This question has become a burning hot topic of discussion as the summer of 2021 has clearly shown the negative impacts of climate change: heat waves, fires, floods and droughts. It has been brought to our attention that time is pressing to act with whatever means that have an immediate positive impact, and do not require a big carbon footprint when produced such as solar or wind power plants.

In fact, the climate change debate has to change its focus in order to be effective: while public interest was turned towards avoiding fossils, improving isolation of houses and energy savings, it is strongly swinging now into the “avoiding & reducing” phase. This is true for meat consumption, but also packaging in gen-

eral and especially avoidable packaging for water, a basic human need that is repeated daily by everybody.

And the answer is clear: in many countries, tap water can be used for hydrating the world’s population rather than buying water in bottles today. Filtration and sparkling can easily be found at reasonable prices. According to a recent study by Cristina Villanueva et al. published by the journal *Science of the Total Environment*, the bottled water impacts on the environment are 3,500 higher than tap water.

The impact is significant. Take Germany as an example. 83 million inhabitants use 47 million single-use plastic bottles for water and soft drinks per day. 2000 trucks are travelling the country each day in order to transport bottles of water. A shift of daily hydration habits from bottle towards tap water has an immediate impact on the carbon footprint of millions. Especially when you take into ac-



**Drinking water is the most underestimated factor when it comes to saving the planet. It is clear faster solutions need to be put in place, reliably, and for the good of the climate. Drinking habits of consumer and institutions are capable to evolve as sustainability data and insights are leveraged with modern technology.**

ŞENOL AĞAÇ, AUTHOR OF "KLIMASCHUTZ AUS DEM HAHN" AND WATER INDUSTRY CONSULTANT

RAMZI BOUZERDA, CEO AND FOUNDER OF DROOPLE

count that it is one of "the lucky" countries with a food grade tap water quality throughout the country.

Like consumers, schools and businesses are confronted with this inevitable change. The rise of water filtration and dispensing systems for every area of life, including public places like airports, train stations and shopping centres has created a pressure to implement them fast.

#### **You can't manage what you can't measure**

Habits will evolve when everyone realizes their own power of change. It is true that the shift from bottled water to tap water is "logically" necessary, but the topic is not new in itself and still has a long way to go. We need to nurture

that natural curiosity and the user experience will bring a larger shift for the long-term.

Take for example a water dispenser corner at the office, a tap at home, or a public water fountain at the shopping centre. Until now fountains were "just doing their job" providing water. It was unknown how much water was consumed, the impact on the climate, or how much money was saved.

#### **Water sensors & IoT are changing our habits**

The rise of IoT and its application to water assets have created a new momentum in the climate change debate. Droople smart water monitoring solutions provide actionable insights by eas-

ily adapting to indoor & outdoor water dispensing systems.

Drinkers automatically gain insight into how many plastic bottles they avoided, their bottle cost savings, and their reduction in carbon footprint. Vendors get real-time monitoring and set their tailored benchmarks according to affiliated organizations and their operations. The possibilities include pay-per-use business models, setting alarms for optimising water dispenser lifespan, and monitor water filter canisters or CO<sub>2</sub> cartridges to plan replacements accordingly.

Yes, drinking water habits have to change and IoT makes sure they change for the better.

**Droople smart water monitoring solutions provide actionable insights by easily adapting to indoor & outdoor water dispensing systems**

