



European green tech associations' joint position on the revised Drinking Water Directive (DWD)

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The European Drinking Water Directive (DWD) has until now been a great success. Never before so many EU-citizens have had access to safe drinking water. Nevertheless after 20 years in effect, the Drinking Water Directive needs to be revised so it is fit for purpose on the road to achieving the 2030 Agenda, especially SDG 6 (water). As green-tech associations representing the environmental and/or water technology sectors of the Netherlands, Sweden and Denmark, we suggest:

1. A broadened scope of the directive addressing SDG 6 and the transition to circular economy by more focus on resource efficiency aspects such water and energy efficiency. It should be clear that securing the drinking water resource base is a prerequisite to obtain better access to affordable drinking water (article 1).
2. Full transparency on water leakage and energy performance in 2020 and application of reduction schemes by 2025, where appropriate (article 4 and 14).
3. Better incentives for risk-based monitoring systems for assessment of contamination (Article 7-11).

Broadened scope: Combat water leakage

We firmly believe that the scope of the directive should be widened with a renewed focus on the protection of the available resources of drinking water and the most cost-effective technology solutions for producing and supplying clean and affordable drinking water.

Climate change and droughts are increasing while the demand for clean drinking water is rising. The best answer is to provide more resource efficient solutions. The new proposal shows the right direction and will increase transparency in the drinking water sector, asking suppliers to inform the public about their energy use and water losses. But as a proposal under the umbrella of the overall EU strategy for circular economy, it needs focus on resource-efficiency, clear targets and fixed timelines for implementation.

Full transparency: Water loss and Energy consumption

Full transparency on water loss and energy consumption is key in order to protect the drinking water resource base and secure healthy and affordable drinking water for all Europeans. According to the International Energy Agency (IEA), water losses in public supply are estimated at 24% at average 13 billion cubic meters. In some areas of Europe more than 60 % of the drinking water (abstracted and produced) in a supply zone is lost, mainly because of outdated infrastructure and leaking pipes. This is bad business and waste of precious resources. The best way to create better access to safe and clean drinking water is to stop wasting it.

The loss of drinking water equals the loss of all the energy used for the production and distribution of drinking water. Reducing water leakage rates thus leads to significant energy savings. The energy consumption of the EU's water sector is equivalent to 3.5% of the EU' electricity consumption and typically represents 30 – 50 % of the local authority's electricity consumption.

Since no regulation in the EU addresses water leakage, there have so far been no formal regulatory incentives to alleviate water leakage. Without provisions in EU-regulation, it is difficult to obtain EU-funding to support this type of infrastructure projects. New provisions in the DWD related to water leakage would create better EU-funding possibilities, reducing water leakage and helping to close the enormous infrastructure investment gap in some parts of the EU.

Solutions are available. In a recent case from Teplice in Czech Republic, water leakage rates were reduced with more than 40 % with a return of investment on less than a year [DHI 2018]. In relation to the health aspect of DWD, there is also a clear correlation between water leakage and contamination of drinking water. If clean water is leaking out, contamination can access into the pipe. Higher leakage rates thus pose higher risk for the consumer. As the WHO points out, leakages often arise when water pressure is low, which is also a moment when hazardous substances or microbes can enter the pipes. Reducing leakage thus also leads to reduced pollution of drinking water.

Better incentives for applying risk-based monitoring systems

The risk-based approach, as promoted in the new proposal is a very positive new addition, facilitating more "up-to date" monitoring such as continuous monitoring of drinking water in the EU. However, the Commission's proposal is rather unclear on how it will actually deliver on the REFIT-evaluation, especially when it comes to more efficient monitoring of the EU drinking water quality.

Further, the Commission's proposal does not suggest new mechanisms or incentives to implement the best available online continuous monitoring technologies. Currently, the DWD monitoring regime is based on time consuming physical sample-tests of specific parameters with a fixed ratio of controls. In some cases, it could take several weeks from the occurrence of a contamination until it is detected. Contamination could even remain undetected when occurring in-between two fixed control-events.

In line with the proposed risk-based approach, we suggest to add more online continuous monitoring as it will significantly increase consumer-safety and ensure that sample tests are taken only when there is an actual indication of contamination. Including this approach in the revised drinking water directive will lead to more efficient detection of contaminated drinking water. It would also facilitate more support for the EU-REFIT-policy, since water utilities will be able to reduce risk more accurately, based on real-time data.

Investments in new sensing and monitoring methods, such as real-time bacteria counting, creates a better understanding of the dynamics in between the water works and the supply system. Where such technology is already applied, it serves as an important tool to optimize the daily operations and secure better infrastructure investment strategies [Aarhus Water 2018]. Over time, these investments reduce operational costs.

Fellow European technology associations and other stakeholders with mutual interests are kindly invited to join our position paper before the 13th of June.

Facts:

- EU cohesion policy will invest €14.8 billion in the water sector between 2014-2020, providing an additional 12 million people with improved water supply (EU-Commission).
- Water scarcity affects at least 11 % of the European population (EU-Commission).
- The water losses in public supply are estimated at 24% in the EU, amounting to 13 billion cubic meters (International Energy Agency (IEA)).
- The energy consumption of the EU's water sector is equivalent to 3.5% of the EU's electricity consumption and typically represents 30 – 50 % of local water authorities' electricity consumption (International Energy Agency (IEA)).

More information (not for publication):

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