A thorough revision is much needed

The Danish Environmental Technology Association (DETA) welcomes the road map for EU's Urban Waste Water Treatment Directive.

Environmental and health related effects of pollutants in the water environment are well documented, efficient technologies for wastewater treatment are available, and we see changing precipitation patterns due to climate change. Therefore, a thorough revision of the Directive, including ambitious goals and specific time frames, is highly needed.

A revision shall include measures supporting the waste water sector's great potential in regard to SDG 6, EU's New Green Deal, the Circular Economy Action Plan, the 2030 Biodiversity Strategy, the EU climate goals of CO_2 neutrality, as well as the implementation of the Water Framework Directive and the Marine Strategy.

Water must be cleansed for harmful chemistry

The Water Framework Directive's goal of good ecological and chemical status in the European water environment is far from achieved. This applies especially to the chemical status. Therefore, all discharged wastewater should be treated for both nutrients and pollutants with harmful effects on environment and health.

DETA recommends that all treatment plants within a realistic time frame must include a tertiary level of purification. This will significantly reduce the presence of amongst other plasticizers, drug residues, heavy metals and chloritized dissolvents in the water environment. Besides, it will contribute to a decrease in the discharge of phosphorus and nitrogen, which contribute to the eutrophicating of coastal waters.

Reduction of overflows

Climate change has led to a significant increase in cases of overflows from treatment plants and thus an increase in discharge of untreated wastewater. The consequences are major damages to biodiversity in water streams, an increase in eutrophication, and a deteriorated bathing water quality.

Action plans for climate change adaptation should contain concrete goals and time frames to measure, monitor and significantly reduce overflows. Intelligent monitoring is the key to reduce combined sewer overflows in the most cost-effective way. To secure best practice and peer learning more transparency is needed and uniform data collection on overflows at EU level is a first step. A revised Directive should also support the reduction of infiltration in water pipes and thereby improve the efficiency of the water treatment plants.

A reinforced effort for improved treatment of wastewater and limitation of overflows will provide a significant contribution to the achievement of the 2030 Biodiversity Strategy.

The water sector has great potential in achieving energy and climate neutrality

It is crucial that a revision of the Directive supports the great potential of the water sector in achieving the goal of EU climate neutrality by 2050 at the latest. The potential of energy efficiency at water treatment plants, digitalization, reduction in water loss, increased use of heat pumps in the

outlet of water treatment plants, reduction in emissions of nitrous oxide, and increased production of biogas is substantial and well documented.

Advanced treatment plants should be conceived as modern resource facilities capable of utilizing the resources in wastewater - and thus contribute to a more circular economy – and at the same time they are capable at producing more energy than they use. The Danish Parliament has recently as part of achieving a 70 % CO_2 e reduction decided that the Danish water sector shall be energy and climate neutral by 2030. Normally water facilities account for the largest part of the use of electricity at utilities. Besides, calculations have shown that 20 % of Danish households can be heated by using heat pumps on outlet from wastewater facilities.

An energy and climate neutral European water sector should be promoted by targets and regulation at the EU level.