

# Unlock the potential of the sewage sludge directive

through the full exploitation of the value in water for a  
green and sustainable Europe

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# UNLOCK THE POTENTIAL OF THE SEWAGE SLUDGE DIRECTIVE

## Water Europe Vision

Water Europe has set out a blueprint for a society in which the true value of water is recognised and realised, and all available water sources are managed in such a way that water scarcity and pollution of water are avoided, water and resource loops are largely closed to foster a circular economy and optimal resource efficiency, while the water system is resilient against the impact of climate change events.



Multiple Waters



Digital Water



Value in Water



Grey-Green Infrastructure

## Sewage Sludge Directive

The Sewage Sludge Directive (SSD) has performed well in its objective to encourage the safe use of sludge, while complying with high environmental standards and providing beneficial side effects, such as improving effluent and water quality, soil organic matter and

water retention. However, thirty years since its inception, new challenges have arisen that the Directive is not fit to address, namely contaminants of emerging concern, digitalisation and circular economy.

**Water Europe welcomes the conclusion of the European Commission to update the SSD** aligning it with the Green Deal and the digitalisation of Europe to address today's challenges. A well-designed revised Directive must be cohesive and coherent with the EU's current sustainability objectives, and particularly with the Circular Economy Action Plan, the Zero-Pollution, the Pharmaceutical and Farm2Fork strategies. Therefore, WE suggests a holistic management of sewage treatment that achieves the following objectives:

### 1 FULLY EXPLOIT THE VALUE IN WATER BEYOND AGRICULTURAL USE

**This revision should consider a holistic approach of the reused sewage sludge.** So far, the reuse of sludge has been focused on the agricultural sector and has not resulted in exploiting the full potential of these resources. Only 40% of the sewage sludge is recycled in agriculture.

We need to unlock the full potential opening up the markets for reused sewage sludge opportunities such as Biogas (e.g. thermal hydrolysis and anaerobic digestion), construction but also extracting the raw materials embedded in it. Reuse of sewage sludge contributes to the exploitation of the Value in Water.

Additional support to research & innovation should be encouraged towards affordable and feasible innovative solutions for resource recovery.

Lastly, some outdated aspects of risk management in the SSD hinder the full reuse of sludge, such as anaerobic digestion of mixed sludge which includes organic products.

We have the possibility to:

**Reinforce the European autonomy**, particularly for by-product on the fertilizers' market. The EU target of 25% organic farms will need low carbon source of organics, N, P and K, it would be a circular opportunity to include domestic sources.

**Reduce the environmental footprint** by reducing importation and supporting energy efficiency (reduction of Co2 emission).

**Achieve European goals set in the European Circular Economy Action plan.** It would also work in synergy with the EU's forthcoming climate legislation.

**Provide a source of additional income** by having the possibility to produce green energy.

## 2 DIGITALISATION FOR EFFICIENCY AND FAST RESPONSE

**Supporting the implementation of cost-effective digital technologies** is key to address both the monitoring of contaminants and the transition towards a circular economy. Digital tools (e.g Artificial intelligence) can guarantee both health and environmental concerns and security, as spreading of sewage sludge from wastewater treatment plants only represents 1 to 2% of spreading on farmland.

## 3 UPDATE THE SSD ON SPECIFIC MEASURES TO ADDRESS CONTAMINANTS OF EMERGING CONCERN (CECs)

**Specific measures and investment are needed to address CECs** which were not considered when the SSD was drafted. It matters for our legacy contaminants for the future. Enforcing strict monitoring and filtering CECs would greatly improve the SSD's alignment with the Zero-Pollution Action Plan, Green Deal, Circular Economy Action Plan and Farm2Fork objectives. Investments in this endeavour are a key aspect for a fully functional circular economy, to eliminate health and environmental risks for European citizens.



Figure explanations: Sewage sludge can be reclaimed into water and recovered into energy, but the raw materials embedded in it can also be extracted. Thanks to affordable and feasible technologies, these raw materials can, for example, be used as fertilizer in agriculture or as critical metals in new markets.

