

## INCEPTION IMPACT ASSESSMENT

Inception Impact Assessments aim to inform citizens and stakeholders about the Commission's plans in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities. Citizens and stakeholders are in particular invited to provide views on the Commission's understanding of the problem and possible solutions and to make available any relevant information that they may have, including on possible impacts of the different options.

<b>TITLE OF THE INITIATIVE</b>	Revision of the Urban Waste Water Treatment Directive
<b>LEAD DG (RESPONSIBLE UNIT)</b>	DG ENV C.2 Marine Environment and Water Industry
<b>LIKELY TYPE OF INITIATIVE</b>	Legislative proposal
<b>INDICATIVE PLANNING</b>	Q1 2022
<b>ADDITIONAL INFORMATION</b>	<a href="https://ec.europa.eu/environment/water/water-urbanwaste/evaluation/index_en.htm">https://ec.europa.eu/environment/water/water-urbanwaste/evaluation/index_en.htm</a>

The Inception Impact Assessment is provided for information purposes only. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by the Inception impact assessment, including its timing, are subject to change.

### A. Context, Problem definition and Subsidiarity Check

#### Context

The 1991 Urban Waste Water Treatment Directive (UWWTD) has as its main objective the protection of the environment and human health from the adverse effects of urban waste water discharges. It does so by requiring the collection and treatment of waste water in urban areas with above 2 000 population equivalents (p.e.). The [evaluation of the UWWTD](#) demonstrated the Directive's effectiveness to reduce pollution coming from urban sources, thereby protecting human health and the environment. In particular, its implementation supported the Member States' efforts in working towards reaching the Water Framework Directive's and the Marine Strategy Framework Directive's objectives (to achieve good status), also to the benefit of biodiversity. It also helped moving towards achieving the objectives of other key directives such as the Bathing Water Directive allowing EU citizens to benefit from clean and safe bathing waters. As confirmed by the evaluation, the UWWTD is a simple and clear legal instrument, whilst being flexible enough to respect boundaries set by the EU's **subsidiarity principle**. Nevertheless, there is room for improvement, as elements of the Directive are not as clear as they could be. There is also a need to address today's societal challenges, including climate change, contaminants of emerging concern and the need to better unleash the Directive's potential to contribute to a cleaner and more circular / resource-efficient economy.

With the 2019 [European Green Deal](#), the Commission announced the ambition to steer the EU towards zero pollution, by better tackling all remaining sources also of water pollution, including from the urban context, that are not yet well addressed by existing legislation. The impact assessment will provide the basis for securing a better alignment of this Directive to the new policy objectives as defined in the Green Deal, in particular its zero pollution ambition. In addition, the 2020 [Circular Economy Action Plan](#) announced that the Commission would consider the review of the Directive in light of its potential to contribute better to the clean and circular economy. The [2030 Biodiversity Strategy](#) stresses the crucial importance of stepping up the protection of aquatic and marine ecosystems, also by reducing pollution. Additionally, the recently published [EU strategy for Energy System Integration](#) calls for the exploration of energy efficiency and energy production potentials in the waste water sector.

The **ongoing COVID 19 pandemic**, triggered by the coronavirus outbreak, further underpins that the water sector plays an essential role in protecting human health and the environment. It has been demonstrated that the virus is present in urban waste water, but it is no longer infectious if the waste water is adequately treated in the treatment plants. Tracking the presence of the COVID 19 in waste water can also help identifying contaminated areas. The importance to have a **strong, sustainable and energy efficient EU** water sector and to ensure its long-term financial sustainability needs to be recognised when assessing options to improve a key Directive governing this sector.

#### Problem the initiative aims to tackle

The evaluation identified a number of issues, including a number of **remaining sources of pollution**, which are either not well addressed by the Directive or not within its scope:

- Storm water overflows and untreated surface runoff, which reach water bodies often without appropriate treatment. In times of changing rainfall patterns related to climate change, the importance of these sources

may increase.

- Small agglomerations (e.g. cities, villages) below 2 000 p.e., that are often not a priority to be equipped with waste water infrastructure, and that often rely on individual systems (see next point),
- Badly designed, managed and/or unmonitored individual systems, used in large and small agglomerations.

In addition, agglomerations in which the Directive has not been fully implemented also pollute water bodies.

Not addressing these remaining sources may offset efforts and investments made so far to collect and treat waste waters falling directly under the scope of the Directive:

Other issues that need to be addressed are the following:

- The current Directive does not directly address **contaminants of emerging concern (CECs)**, e.g. micro pollutants, including pharmaceuticals and micro-plastics. These contaminants can transit through the urban waste water systems, and thus arrive in water bodies. This is problematic as society consumes increasing quantities of pharmaceuticals, household chemicals etc.
- There are still some environmental issues to be addressed, such as **eutrophication** in parts of the EU waters.
- The waste water sector uses 1% of all energy consumed in the EU. The Directive does not address this, whilst across the EU there are already cases of energy neutral or producing treatment plants.
- The Directive also needs to be better embedded in the **clean and circular economy** (e.g. as regards sludge management, nutrient recovery).
- Technological progress means that **monitoring** and **reporting** requirements of the Directive are out-of-date and thus full transparency is not ensured in all relevant aspects. **Access to justice** remains also an issue in several Member States.
- **Governance** can be improved through better planning of the investments needed (including substantial re-investments) combined with solid financing strategies taking into account **affordability** and the need to alleviate energy poverty.

The revision will affect Member States and more particularly the competent authorities in charge of waste water collection and treatment and those responsible for energy and climate protection (national, regional and local administrations), the waste water sector, citizens in general.

### **Basis for EU intervention (legal basis and subsidiarity check)**

Article 192(1) TFEU Environment – Revision of Directive 91/271/EEC based on Article 130s EC Treaty (Maastricht consolidated version). No specific review clause.

The evaluation confirmed that the subsidiarity principle was respected by the UWWTD: EU-level action was and is necessary to tackle the issue of pollution from urban waste water nationally but also as a cross-border issue, as Member States would not have achieved the same results individually. Ensuring that waste water is tackled across the EU to the same level and within a coordinated EU-wide framework for action ensures that downstream action to protect EU fresh and sea-waters is not jeopardised by upstream inaction. The UWWTD has also led to improved levels of protection for human health in the EU, and improved quality at bathing water sites (supporting recreation and tourism). It has also been instrumental in the development of a strong, resilient and globally competitive EU water industry. Without this Directive, only few Member States would have achieved the level of protection we have today and the outlined common benefits would have not been attained.

## **B. Objectives and Policy options**

This initiative aims at strengthening existing EU legislation for reducing the adverse effects of waste water and making the existing legislation fit for decades to come. This will further help to support reaching the objectives of the Water Framework Directive and the Marine Strategy Framework Directive, next to contributing to the wider Health agenda, the Zero Pollution Ambition for air, water and soils, the 2030 Biodiversity Strategy and the new Circular Economy Action Plan. The impact assessment will form the basis of the Commission's decisions to take legislative and/or non-legislative action.

The business as usual scenario until 2035 and 2050 will consist in a 'no policy change' scenario and will assume that the implementation of the current UWWTD continues. It will consider external factors such as changes in demographics, urbanisation, climate change, digitalisation, other technological developments and potential for innovation.

Policy options to address the **remaining sources of pollution** (storm water overflows, urban runoff, small agglomerations and IAS) could consider a range of approaches such as:

- Preventive measures aiming at reducing pollution at source and limiting quantities of water in the collection systems via improved spatial planning;
- Revised and new EU fixed objectives notably for dealing with pollutions coming from overflows, urban run-off and small agglomerations, but also to further reduce nutrient pollution where justified;
- Improved planning of the investments combined with solid financial strategies;
- Additional monitoring obligations combined with a modernisation of reporting;
- The use of risk-based approaches to allow for the implementation of cost-efficient measures;
- The development of new guidance and standards.

To address **emerging challenges** (contaminants of emerging concern, waste water surveillance in the context of pandemics) and aligning the sector with new EU ambitions (nutrients recovery, energy efficiency and production), policy options could consider:

- On top of preventive measures, step-wise implementation of further treatment requirements to remove contaminants of emerging concern (incl. pharmaceuticals) from waste water, as also suggested in the [European Commission's Strategic Approach to Pharmaceuticals in the Environment](#),
- Recovery of raw materials from sludge (incl. considering the interplay with the [Sewage Sludge Directive](#)).
- Energy audit requirements for waste water treatment facilities, followed by recommendations and measures to improve energy efficiency, reduce energy consumption and foster renewable energy production for collection and treatment,
- The role of waste water treatment to contribute to climate neutrality by 2050 through mitigation of non-CO2 greenhouse gases, its potential to contribute to EU energy efficiency and clean energy production should be explored,
- The role of waste water surveillance as an early warning and management of the pandemic in the context of the spread of the novel coronavirus and other potential pathogens, including viruses where and when it makes sense.

It is crucial to also consider the consequences for sludge, namely its treatment (including decontamination) and subsequent use as fertiliser. It will be explored whether additional treatment requirements as well as preventive measures could be supported by applying extended producer responsibility, as it is already the case in the solid waste sector. The uptake of digitisation and overall improved transparency requirements will be assessed to ensure that the sector overall better aligns with technological progress and that all interested citizens, organisations etc. have access to good quality information. Additional initiatives to improve access to justice and effective remedies, in case of damage, will be considered.

## C. Preliminary Assessment of Expected Impacts

### Likely economic impacts

The likely economic impacts of the policy options will affect the following stakeholders groups :

- Local actors/ municipalities: costs related to the transposition of the new requirements, in particular those related to new investments. Among others, benefits are expected to occur from energy savings, e.g. through the use of smart technologies and processes.
- Waste water industry: costs related to the installation of equipment to achieve new treatment standards, up-to-date data and asset management techniques. Benefits are expected to occur from reductions in energy use and production of renewable energy. Waste water industry is also expected to benefit from the update of the directive by keeping a worldwide leadership thanks to modernised standards.
- Member States: national budgets are still drawn upon to cover parts of the investments needed particularly when affordability issues prevent an increase of water tariffs.
- Citizens: increase in cost of waste water services, affordability, and improved water quality (relevant for touristic activities, bathing etc.) as well as protected nature and biodiversity.
- Industry and businesses: Those that fall under the UWWTD would contribute to the implementation by paying additional costs and benefit from the availability of clean water.
- Tourism industry: The tourism industry will continue to benefit from clean (bathing) waters and well as drinking water industry when surface waters are used to produce drinking water.
- Research & Development, SMEs: opportunities for the development of new technologies and enhanced planning and management systems.

The economic analysis will include how the consistent application of the polluter pays principle can counteract the burden on citizens of increased treatment costs.

### Likely social impacts

Depending on the option, the main social impacts are likely to include:

- Increased transparency thanks to better information available to consumers e.g. in their bill to strengthen consumers' understanding of what they pay for, the possibility to align behaviour and act consciously.
- Improved well-being (e.g. through improved eco-system services, including bathing water quality and nature-based urban adaptation to climate change).
- Potential increase in employment during construction phase; potential increase in employment in the waste water sector and associated R&D sector; potentially shift towards highly skilled workforce, and the production of smart technologies and processes in the energy efficiency sector.
- Further improved access to sanitation in line with Sustainable Development Goal 6.

### Likely environmental impacts

The main environmental impacts of the policy options in the medium to long term are likely to be:

- Improved water quality (surface and groundwater).
- Improved general environmental (e.g. protected habitats and species) and human health protection.
- Contribution to mitigating climate change, through energy efficiency improvements, reduction of energy consumption and benefits from renewable energy production (such as renewable district heating &

cooling from waste water).
<b>Likely impacts on simplification and/or administrative burden</b>
The assessment will quantify as far as possible the costs and benefits of the options in terms of the administrative burden e.g. reporting requirements will be assessed in light of decreasing administrative burden.
<b>D. Evidence Base, Data collection and Better Regulation Instruments</b>
<b>Impact assessment</b>
An impact assessment will be prepared to support this initiative and to inform the Commission's legislative proposal.
<b>Evidence base and data collection</b>
<p>The main information and data used is:</p> <ul style="list-style-type: none"> <li>- The information reported by Member States under Article 15 and 17 as part of the 10<sup>th</sup> reporting exercise (2016) data.</li> <li>- The UWWTD evaluation, SWD (2019) 700 final.</li> <li>- The supporting studies for the Evaluation, the Joint Research Centre's Science for Policy report, the OECD study on investment needs in the EU water sector.</li> <li>- The OECD will establish, in cooperation with the European Commission, a benefit methodology to be used as part of the impact assessment.</li> <li>- An impact assessment study to be conducted by external consultants.</li> <li>- Stakeholder consultations online and in workshops/conferences.</li> <li>- Further cooperation with the European Environment Agency and the Joint Research Centre with the further development of a modelling exercise aiming at assessing the main impacts of the identified options.</li> </ul>
<b>Consultation of citizens and stakeholders</b>
<p>A consultation strategy will ensure appropriate consultation activities towards all relevant stakeholders. The main identified stakeholders are the private or public waste water sector representatives, local authorities, authorities responsible for the energy sector, authorities in charge of social policies, citizens, experts from the Member States responsible for the implementation of the Directive, the scientific community and non-governmental organisations. Further stakeholder groups may be identified in the development of this strategy.</p> <p>In the context of the evaluation of the UWWTD, several stakeholder consultation activities were carried out that will also give useful input for the impact assessment. The consultation strategy for this initiative will identify the additional evidence required for which stakeholders may provide useful input in relation to the problem definition and the possible policy options, "who is affected", and preliminary impacts. A number of consultation activities are foreseen: (1) A 12-week open public consultation will be carried out beginning 2021. (2) Targeted stakeholder consultation activities are likely to take the form of technical stakeholder meetings. (3) Other consultations will be specified in the consultation strategy, which will be published <a href="#">here</a>.</p>
<b>Will an Implementation plan be established?</b>
The current UWWTD is already well implemented and implementation structures are in place i.e. urban wastewater treatment system operators and relevant authorities are implementing the current UWWTD together for nearly 30 years, there is probably no need to establish an implementation plan for this revision. The usefulness of an implementation plan will be further considered in the impact assessment.