

Developing a holistic framework to help guide the EU towards zero pollution



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Source to Seas – Zero Pollution 2030

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Project description:

- The Source to Seas Zero Pollution 2030 (SOS-ZEROPOL2030) project aims to develop a **holistic and stakeholder-led zero pollution framework** to guide the EU towards achieving zero pollution in European Seas. The project focuses on four priority pollutants (nutrient inputs, contaminants, **marine litter**, and underwater noise), two case study pollutants (PFAS and **Tyre Wear Particles**), and three European regional seas (Black Sea, Mediterranean Sea and North-East Atlantic Ocean).
- Project coordination: University College Cork (UCC)
- Project duration: 2022 - 2026

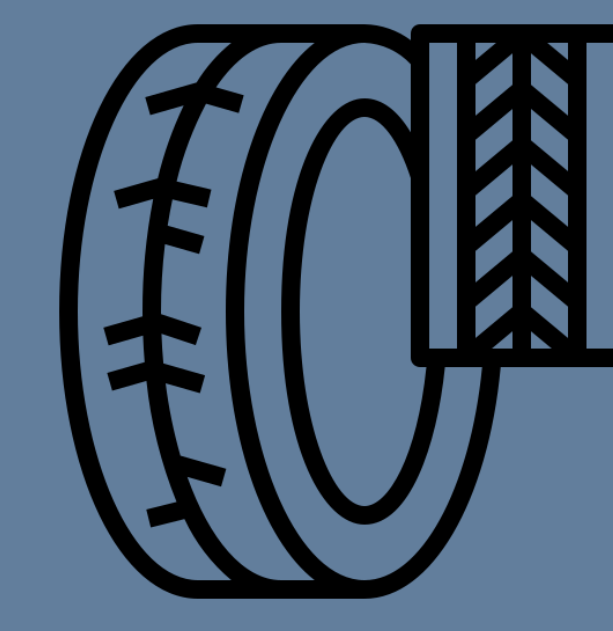


Image: Surang

Tyre Wear Particles (TWP):

TWP are an important source of microplastics (<5 mm), emitted due to friction on the road causing tyre wear and tear.

Source to Sea Approach and Zero Pollution Framework:

- The **Source to Sea Approach** considers the sources, pathways, and ecological effects of various pollutants, including TWP, in order to explore governance responses.
- The holistic **Zero Pollution Framework** builds on the inter- and transdisciplinary concept of the SOS-ZEROPOL2030 project, which includes **multi-stakeholder engagement, expert consultations, living labs and brings together expertise from different disciplines** (natural sciences, social sciences and human behaviour).
- An essential step is the **analysis of EU governance arrangements** (rules of the game, discourses, actors and power relations) in regard to e.g. TWP to identify the current gaps and challenges within marine pollution governance.

Objectives:



Provide an overview of zero pollution governance in the EU and identify best practices and opportunities for improving the implementation of EU policies and legislation.



Organise joint knowledge production with relevant stakeholder groups and formulate future pathways to achieve zero pollution for three EU regional seas in Living Labs.



Develop scientifically robust and transparent assessment methodologies for PFAS and TWP and apply them in close collaboration with the Living Lab process.



Deliver a successful transition towards clean European Seas through a truly ambitious framework, roadmap and user-friendly guidelines for multi-stakeholder, -sectoral and -level actions.

Preliminary Results:

- Applying a source-to-sea lens to marine pollution facilitates the rebalancing of power dynamics and the incorporation of a broader range of stakeholders in the formulation of comprehensive policy responses.
- Policy developments focusing on land-based emission sources take place in largely autonomous governance arrangements with the risk of contradictions or conflicts to emerge between EU regulations addressing TWP and tyre life cycle stages.

Production	Use	End-of-life	End-of-pipe
<ul style="list-style-type: none"> Euro 7 Regulation to ban the most environmental harmful tyres Ecodesign for Sustainable Products Regulation to reduce TWP abrasion (upcoming) Other relevant legislation: REACH Chemical Legislation, Industrial Emission Directive, Tyre Labelling Regulation and Type Approval Legislation 	<ul style="list-style-type: none"> Tyre Labelling Regulation to include parameter for TWP abrasion rate Euro 7 Regulation to apply tyre abrasion measurement method 	<ul style="list-style-type: none"> Infill ban under REACH Chemical Legislation to reduce secondary TWP Other relevant legislation: Landfill Directive, Waste Framework Directive 	<ul style="list-style-type: none"> Urban Waste Water Treatment Directive to improve wastewater treatment to capture TWP Other relevant legislation: Fertiliser Regulation, Water Framework Directive