

Response

RESPONSE – Towards a Risk-Based Assessment of Microplastic Pollution in Marine Ecosystems

Pillar IV
Healthy oceans and resilient coasts

7 | The fight against marine pollution



The RESPONSE project brings together 14 partner institutions from across Europe with expertise in oceanography, environmental chemistry, ecotoxicology, experimental ecology and modelling to answer key research questions related to marine plastic pollution.

Overview

RESPONSE aims to develop a model that will support the EU Marine Strategy Framework Directive in monitoring marine plastic pollution. This will be achieved through the realisation of the following objectives:

- Gain new knowledge on the spatial and temporal distribution of microplastics and nanoplastics in marine ecosystems;
- Characterise ecological thresholds for specific characteristics of microplastics that can affect their ingestion and toxicity in marine organisms;
- Investigate the ecotoxicological hazard of still unexplored particles such as nanoplastics and biodegradable polymers;
- Provide a quantitative model for assessing the potential impact of MPs in the marine environment, considering the environmental impact of multiple stressors;
- Set up an analytical Smart Hub that will share innovative technologies and application expertise for analytical needs, along with contributing to methodological improvement and training;
- Increase public understanding of the ecological risk of microplastics and nanoplastics and increase public action.



Project funding

Total cost:
2,633,000 euros

EU funding:
2,054,000 euros

Funding instrument:
JPI Oceans

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Impact & Results

Research on: Monitoring Microplastics in European coastal Areas, Biological Fate of Microplastics and Nanoplastics, Biomarkers in Ecological Risk of Microplastics, Bioassays in Ecological Risk of Microplastics/Nanoplastics, Effects of Microplastics on Ecological Functioning, Weight of Evidence (WOE) Model for Microplastics, “Smart Hub” of Analytical Facilities, Communications and Dissemination

PARTNERS



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