



EUROPEAN RIVER MONITORING

monitor the large European
rivers to defend economy and
human health

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=TBGYPXSGRUQ](https://www.youtube.com/watch?v=TBGYPXSGRUQ)

5GYRES.ORG

MORE  CEAN
LESS PLASTIC

MONITOR THE LARGE EUROPEAN RIVERS TO DEFEND THE ECONOMY AND HUMAN HEALTH

The presence of plastics in the world's waters, from the smallest watercourses to the ocean

More than 268 million tons, 5.25 billions of plastic fragments float on the surface of the seas around the world, fine dust widespread everywhere and treacherous as the smog in the air.

These figures emerge from the scientific research (<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0111913>), and there are even more alarming data when analyzing the prospects for what concerns the spread of plastics also in the depths of the seas: estimated figures shown by the Ellen McArthur Foundation at the World Economic Forum in 2016 speak of a probable overcoming plastics weight in the sea than that of living organisms (fish, shellfish, etc.). These plastics come into the sea rather through rivers than from the inside, carry debris out to the open sea.

The plastics, that with time and through mechanical and thermal action are reduced to smaller and smaller fragments, end up in the food chain and in the biological cycle, constituting a strong risk for all economic activities linked to watercourses and to the sea: from fishing to hunting, since always cultural and social heritage of the people living close to watercourses.



General Objective:

To define common policies regarding the monitoring methodology to detect the micro/nano plastic pollution in the Danube river.

Expected Impact:

To protect the rivers, safeguard the fisheries and touristic sector and preserve the human and wildlife health conditions through the identification of the most invisible and invasive pollutant: micro/nano plastic:

- Nano plastic under 50 μm
- Micro plastic from 50 μm to 5000 μm

Preconditions: Definition of common protocol among all countries and methodology for the sampling and the analysis.



RELATED ACTIVITIES

Work together on this shared regional policy issue by exchanging experiences and practices in order to integrate the lessons learnt from this cooperation into the policies.

Collecting data on the presence of plastic (macro, micro and nano) along the entire route of the Danube, verifying the quantity, quality, dynamics, points of inflow and possible filtering and collection solutions

Instruments: a trawl with fine net (0.33 mm) and a small pumping system with paper filter of 20 microns + all along the route of the river with small-middle sized boats.

Laboratory analysis allow to reconstruct a distribution model (with quantity to size and total weight) and the type of identified plastics area by area.

The data collected allow to have a more reliable picture of the situation and to develop a European strategy aimed to minimize waste in the water, through filtration and collection solutions in specifically identified areas.



RESULTS

Study one: Build up shared Literature regarding all the studies on plastic in rivers and lakes.

Study two:

- Sampling and Measuring of micro/nano plastic presence in the column water and river sediments. The sampling will be realized in the source of the river, mouth, in the connection with main tributaries and main cities.
- Analysis of Waste streams with plastic content and waste management and water management contingency plans adopted in the same area of the sampling.

Study three: Report on the results of Study two

Study four: Report on how the data effects :

- Occurrences in fresh water
- Settlement water management
- Production and processing of plastics
- Eco toxicological aspects
- Commercial aspects

Result five: Definition of common protocols and goals



QUESTIONS

- Interested? Agree that a common action plan is required?
- Should we target the main rivers of Europe or only the Danube?
- For the main European rivers:
 - Interreg Europe 4.1 or 4.2 ?
 - phase 1 with or without possible pilots?
- Only the Danube river:
 - Interreg Danube Transnational Program
 - 1.1 PA 04 | Water Quality or
 - 2.1 PA 04 | Water Quality

Interreg Danube Transnational Program

1.1 Improve the **institutional and infrastructural framework conditions and policy instruments** for research & innovation to ensure a **broader access to knowledge for the development of new technologies and the social dimension of innovation**

2.1 Strengthen joint and integrated approaches to further develop and implement River Basin Management Plans in the Partner States in line with the overall Danube River Basin Management Plan in order to **improve transnational water management** and flood risk prevention contributing to the **sustainable provision of ecosystem services**

Interreg Europe

4.1: Improve the implementation of **regional development policies and programmes** - Investment for Growth and Jobs and ETC - in the field of **protection and development of natural and cultural heritage**.

4.2: Improve the implementation of regional development **policies and programmes** - Investment for Growth and Jobs and ETC - aimed at **increasing resource-efficiency, green growth and eco-innovation and environmental performance management**.

Interreg Danube Transnational Program	Interreg Europe
<p>Estimated launch: May 2017 Submission deadline: 4 weeks later Expected start of projects: Early 2018</p>	<p>Open: 1 March 2017 - www.iolf.eu Submission: 30 June 2017 12:00h Expected start of projects: Early 2018</p>
<p>Maximum duration: 36 months</p>	<p>lasts from one to three years</p>
<ul style="list-style-type: none"> ❖ Commercialisation of research results and technology transfer; Cluster policies and transnational cluster cooperation based on smart specialisation approaches; Management of intellectual property rights for supporting innovation – 1.1 ❖ Water quality management (e.g. harmonised monitoring and assessment systems and solutions, measures to reduce nutrient and hazardous substance pollution, more efficient waste water treatment solutions) – 2.1 	<ul style="list-style-type: none"> ❖ solely dedicated to the exchange of experience among project partners and preparing the implementation of the lessons learnt from the cooperation ❖ to optimise the chance that the findings from interregional policy learning are transformed into actions, an action plan must be prepared at the end of Phase 1 for each region providing details on how the lessons learnt from the cooperation will be implemented in order to improve the policy instrument that is addressed within their region. It specifies the nature of the actions to be implemented, their timeframe, the players involved, the costs and funding sources.

Interreg Danube Transnational Program

- ❖ Real transnational character
- ❖ Result-oriented
- ❖ Durable and transferable results
- ❖ Qualitative partnership
- ❖ Integrated territorial approach
- ❖ Sustainable development
- ❖ Efficiency in terms of mobilised resources

Interreg Europe

- ❖ Built on the experience of the regions and focus on the identification, analysis and transfer of good practices and policy experiences.
- ❖ Through the exchange of experience, improve the performance of the regional development policy instruments of the participating regions, in particular the Investment for Growth and Jobs goal programmes, and European Territorial Cooperation (ETC) programmes. Contribute to a better performance of the region's own specific policy instruments.
- ❖ Aligned or joint initiatives between the various partners of shared cross-border territorial needs, development of interregional synergies between the economic sectors of the participating regions

Interreg Danube Transnational Program	Interreg Europe - Phase 1 ACTIVITIES
<p>WP1 & WP2 predefined:</p> <ul style="list-style-type: none"> • management & communication • Max. 5 more thematic WPs <p>Programme output indicators:</p> <ul style="list-style-type: none"> • Documented learning interactions (mandatory) • Strategies • Tools • Pilot actions 	<p>1 Exchange of experience: multidimensional learning process, integrated approach</p> <ul style="list-style-type: none"> • interregional site visits • interregional thematic seminars, workshops • interregional peer-reviews • interregional staff exchanges • joint thematic surveys, studies, analysis • <u>meetings with the stakeholder group</u> (compulsory) • participation in the policy learning platform activities (compulsory) • <u>joint development of action plans</u> (compulsory) <p>2 Communication and dissemination</p> <ul style="list-style-type: none"> • communication strategy, covering both internal and external communication contribute to achieving the overall project objective <p>3 Management and coordination</p> <p>administrative, legal and financial activities</p>

Interreg Danube Transnational Program

Preparation costs: 17 500 EUR

Staff costs

Office and administration: 15% of staff costs

Travel & accommodation

External expertise & services: Studies, surveys, Training, Translations, IT systems and website, modifications and updates, Project promotion, communication, publicity or information, Financial management, Organisation of events, meetings, Participation in events (e.g. registration fees), Legal consultancy and notarial services, technical and financial expertise, other consultancy and accountancy services, Travel and accommodation for external experts, speakers of meetings and service providers

Equipment: Office equipment, IT hardware and software, Furniture and fittings, Laboratory equipment, Machines and instruments, Tools or devices, Other specific equipment

Infrastructure & works: small scale infrastructure with transnational character. Design and execution of works, site preparation, delivery, handling installation, renovation

Interreg Europe - Phase 1 FINANCED COSTS

Staff, administration, travel & accommodation, external expertise, equipment:

- Interregional learning activities (study visit, workshop, seminar, peer review, staff exchanges)
- Possible studies (e.g. SWOT analysis, case studies)
- Development of action plans
- Development of policy recommendations
- Communication activities
- Management activities
- Participation in programme events and EU related events (see section 8.3.3)

Other sources of funding: Any possible costs related to the implementation of the lessons learnt from the cooperation in the region (results can be achieved before the finalisation of the action plans)

INTENSION TO COOPERATE

My organisation is interested in participating in the MICROPLASTIC PROJECT

NAME OF ORGANISATION (COUNTRY)	
CONTACT PERSON	
E-MAIL	
In the frame of:	
Interreg Danube Transnational Program	YES / NO
Interreg Europe	YES / NO



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