

REDUCING POLLUTION

Water sustainability: How to keep minimising water contamination?



MARINA Project - Local Mobilisation and Mutual Learning Workshops Series Phase 1

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Water sustainability

During the periods of industrial expansion in the 20th Century, many regions in Europe consolidated large agglomerations of people and industries, and very often, the waste resulting from their activities ended up in the rivers, bays and coasts, turned them into sewers. The waste was a compendium of domestic spills, hydrocarbons, heavy metals, toxic organic chemicals, etc. Today, the de-industrialisation of many of these regions and the activity of wastewater treatment plants have considerably reduced the contamination levels reached in the past. Nevertheless, the uncontrolled waste of consumer goods into the waters such as batteries, plastics or the recently identified emerging contaminants (e.g. pharmaceutical products, detergents, personal care products, etc.) is disturbing. Hence the need to still ask ourselves "How to keep minimising water contamination at individual and collective levels?"

Participation at the water sustainability workshop

11 participants from different stakeholder groups put forth their solutions

👤 1 citizen, 2 policy makers, 3 researchers, 4 business actors, 1 educator 👤

Responsible Research & Innovation (RRI) principle

Responsible Research and Innovation (RRI) engages and brings together all stakeholders, creates dialogue and facilitates knowledge-sharing. It ensures the sustainable use of natural resources and makes sure that the needs of citizens and society are integrated into research and innovation. Participants put forth proposals of collective solutions based on the six RRI dimensions:



The six RRI pillars (figure courtesy of RRI Tools EU Project)

Workshop outcomes

Our workshop participants jointly identified measures to improve the management and quality of water in the Basque Country, in a systematic and rational way. The actions could be also applicable to other regions in Europe.

Infrastructures

- Managing rainwater sustainably
- Increasing percentage of wastewaters connected to the sanitation system
- Increasing efficiency of water supply (e.g. minimising pipe leaks)
- Reuse of water
- Minimising contamination in origin
- Naturalising riversides
- Treating water adequately & control of spills

Regulation & law

- Changing the policy of prices & fees (so that contaminating is more expensive than connecting to sanitation system)
- Imposing the management of the integral cycle of water by professionals
- Ensuring ecologic flows
- Legislating accordingly

Education and culture

- Creating awareness campaign on the great importance & value of water
- Becoming responsible consumers
- Promoting a culture of minimising water waste & contamination through good practices (e.g. recycling kitchen oils, using eco products for cleaning)

Technology & research

- Continuing the advancement of wastewater treatment techniques (e.g. to treat emerging contaminant)
- Designing products & processes which are environmentally friendly and minimise water use
- Ensuring valorisation of residues/waste in water (i.e. circular economy)



The MARINA Project is funded by the EU Programme Horizon 2020. 14 partners across Europe are joining forces for a period of 36 months to bring together stakeholders around marine issues and societal challenges and propose RRI driven roadmaps of actions to respond to them.

45 workshops on marine issues in the European Union



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