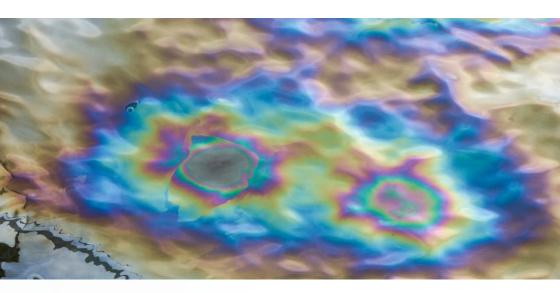


Get started in Responsible Research and Innovation

# MARINE BIOTECHNOLOGIES

# Oil spill at sea: can bacteria be the solution?



#### **MARINA** Project

13<sup>th</sup> March 2018 - Local Mobilisation and Mutual Learning Workshop Phase 2 Organised by ISPRA, hosted by CNR | Rome (Italy)

marina@isprambiente.it





#### MARINE BIOTECHNOLOGY

The Blue Growth strategy pursued by Europe, and the parallel development of marine transportation, calls for an effort to increase the number of tools at our disposal to reduce pollution in the marine environment. The *in-situ* bioremediation - the use of indigenous oil-eating bacteria to reduce pollutants - have been widely studied in mesocosms but a lack of specific legislation impede its test and application *in-situ*.

The purpose of the workshop organized by ISPRA was to discuss how to make marine bioremediation application sustainable. 20 participants from different stakeholder groups attended the workshop:



### RESPONSIBLE RESEARCH AND INNOVATION

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:



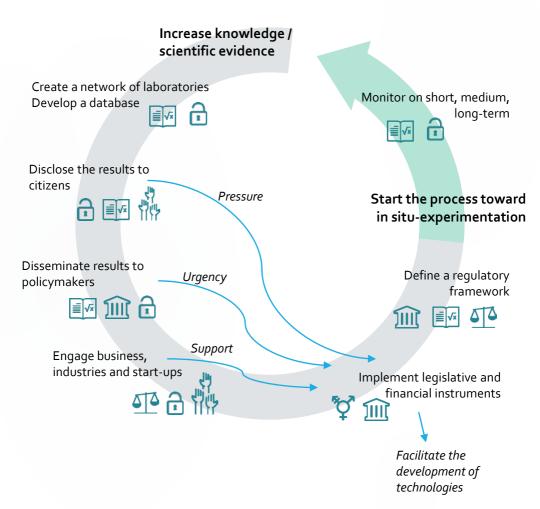
(Pictograms courtesy of RRI Tools - https://www.rri-tools.eu/)

#### WORKSHOP OUTCOMES

The discussion about oil-eating bacteria was the opportunity to unveil a more general problem related to research and innovation: our ability to innovate, to explore and discover is often not in line with the unavoidable – and necessary policy procedures that will regulate the real application of these progresses.

To modify or update a regulation is a slow task, also for the necessary precautionary approach adopted by national and over-national authorities. If, on the one hand, this attention is crucial to assure the sustainability of the research and innovation outcomes, on the other, an accurate risk assessment of pros and cons must be carried out to assure a technological growth.

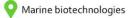
The participants envisioned the following iterative process:



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









Tourism and coastal cities







Pollution caused by human, land and sea pressures

Do you want to learn more? Register now on www.marinaproject.eu



































