



# ***A Plastic-free healthy Mediterranean Sea: the BLUEMED R&I Pilot***

*The Horizon funded Coordination and Support Action and its role in sustaining the Pilot*  
*Rimini, Ecomondo, 7 November 2019*



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# BlueMed Coordination and Support Action

1 Oct 2016-30 Sep 2020

2,998 K€, EC (H2020 WP-2014-2016 SC2-BG-13)



Consiglio Nazionale delle Ricerche



Research  
Promotion  
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INSTITUTE OF OCEANOGRAPHY AND FISHERIES SPLIT



SCIENTIFIC RESEARCH  
INNOVATION & TECHNOLOGY



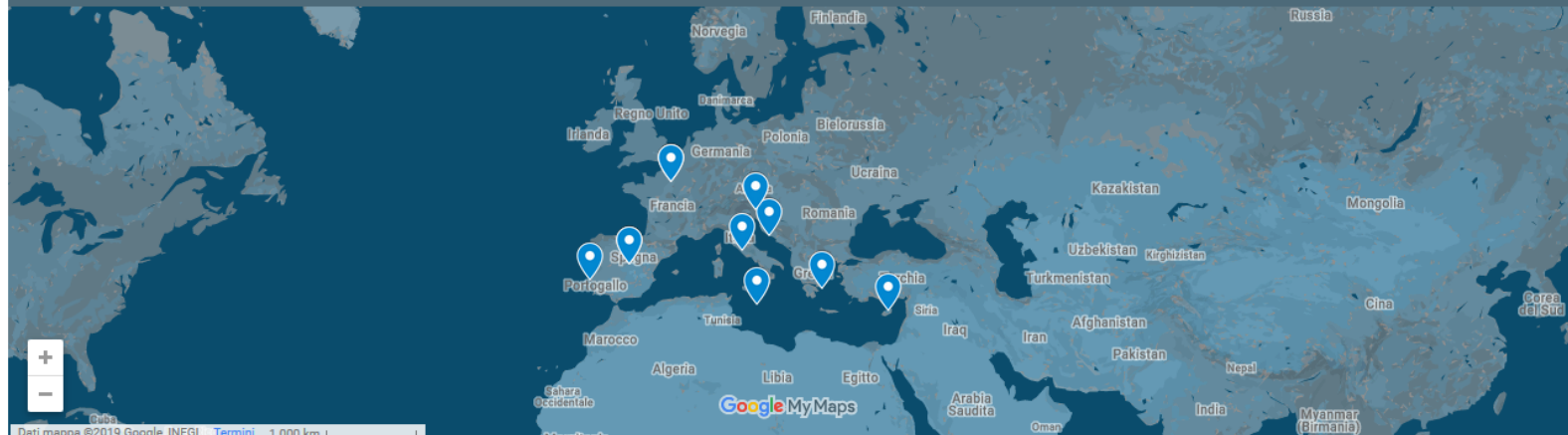
INSTITUTO  
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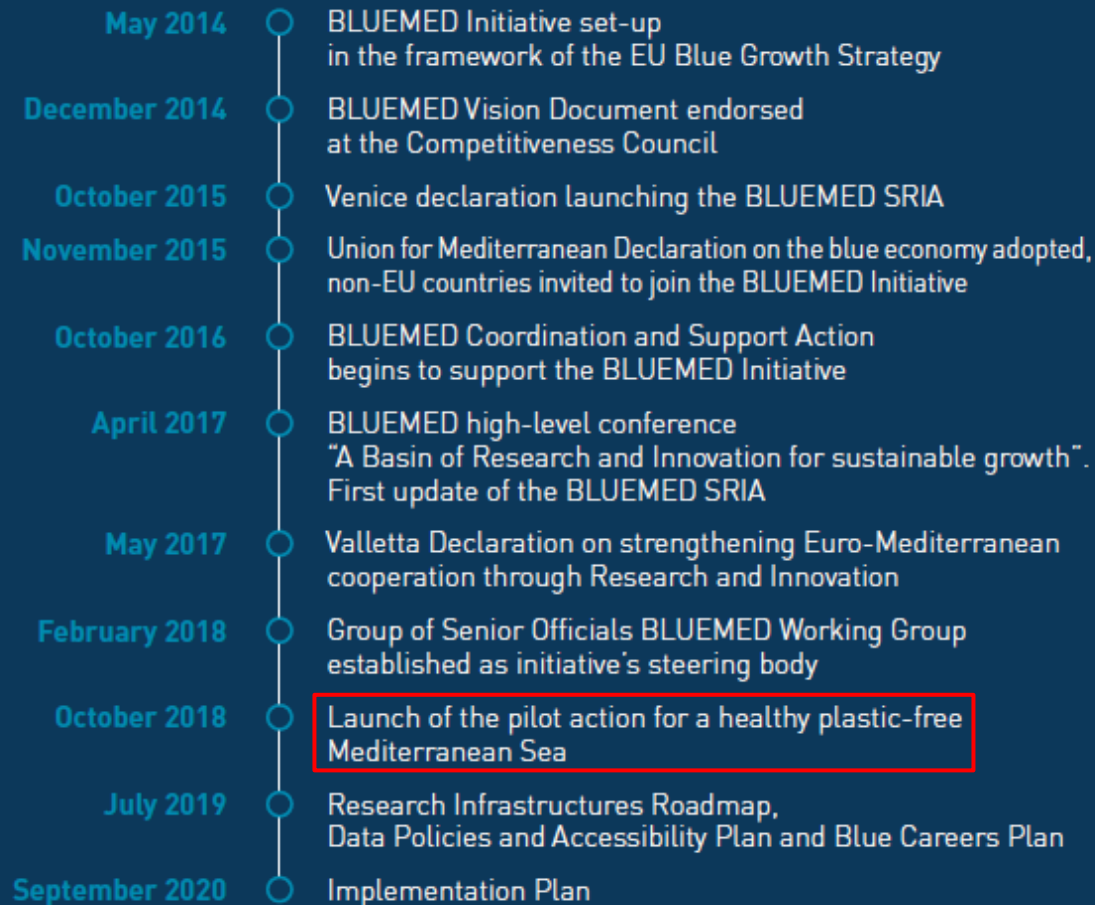


THE BLUEMED CSA CONSORTIUM



The BlueMed CSA partners



- 
- A vertical timeline on a dark blue background with a light blue wavy pattern on the left. A white vertical line with circular markers connects the dates to the descriptions. The text is in a light blue, sans-serif font. The date 'October 2018' and its corresponding description are highlighted with a red rectangular border.
- May 2014** ○ BLUEMED Initiative set-up in the framework of the EU Blue Growth Strategy
  - December 2014** ○ BLUEMED Vision Document endorsed at the Competitiveness Council
  - October 2015** ○ Venice declaration launching the BLUEMED SRIA
  - November 2015** ○ Union for Mediterranean Declaration on the blue economy adopted, non-EU countries invited to join the BLUEMED Initiative
  - October 2016** ○ BLUEMED Coordination and Support Action begins to support the BLUEMED Initiative
  - April 2017** ○ BLUEMED high-level conference "A Basin of Research and Innovation for sustainable growth". First update of the BLUEMED SRIA
  - May 2017** ○ Valletta Declaration on strengthening Euro-Mediterranean cooperation through Research and Innovation
  - February 2018** ○ Group of Senior Officials BLUEMED Working Group established as initiative's steering body
  - October 2018** ○ Launch of the pilot action for a healthy plastic-free Mediterranean Sea
  - July 2019** ○ Research Infrastructures Roadmap, Data Policies and Accessibility Plan and Blue Careers Plan
  - September 2020** ○ Implementation Plan



Proposal and agreement to launch the Pilot Action at the Euro-Med GSO BlueMed Working Group during the BlueMed Week, UfMS (Barcelona) October 2018, fast reaction of the BlueMed CSA







## Pilot Action for a plastic-free, healthy Mediterranean Sea

### Joining forces to address marine litter in the Mediterranean

The **BlueMed Pilot Action** consists in **mapping and assessing the actions** on place regarding **marine plastic pollution** in the EU and non EU countries of the Mediterranean in order to share of **good practices, R&I actions** but also **demonstration, communication and education** activities.



credit: Legambiente, photo by Anna Paola Montano

### Why a Pilot Action on plastic litter in the Mediterranean?

**1%** of the World's waters  
the Med Sea is a "plastic trap"

**7%** of all global microplastics

About **8 million tons** of plastic litter enter the ocean every year, threatening marine wildlife and ecosystems, affecting indirectly the human health and the sea based economies.

Plastic pollution represents a **transboundary problem** and thus it requires global coordination and long-term multiple approaches to develop shared solutions.

Currently, Mediterranean is now one of the more plastic polluted seas at world scale, with record levels of microplastics. With only **1% of the world's waters**, Mediterranean Sea concentrates **7% of all global microplastics**, earning the "plastic trap" appellation.

### Which actions to take forward?

**Reduce**  
the generation  
of plastic waste

**Prevent** littering  
and leakage of plastics  
into environment

**Collect**  
and use plastic already  
in the environment

Overarching  
actions

### A multiperspective approach



Step 0 → Agreement  
at Basin level and  
launch



Step 1 → Mapping of the  
best R&I practices/  
experiences and  
identifying possible  
synergies at country level



Step 2 → Identification of  
the type of actions to be  
taken forward



Step 3 → Shared decision  
on the process,  
establishing dedicated  
hubs at national level

DENSELY POPULATED AREA

WITH **INTENSE HUMAN ACTIVITY**

+ 208-760kg/year per capita of solid urban waste  
produced by 150 million people

**OVER 200 MILLION TOURISTS**

+40% marine litter  
during summer

INADEQUATE

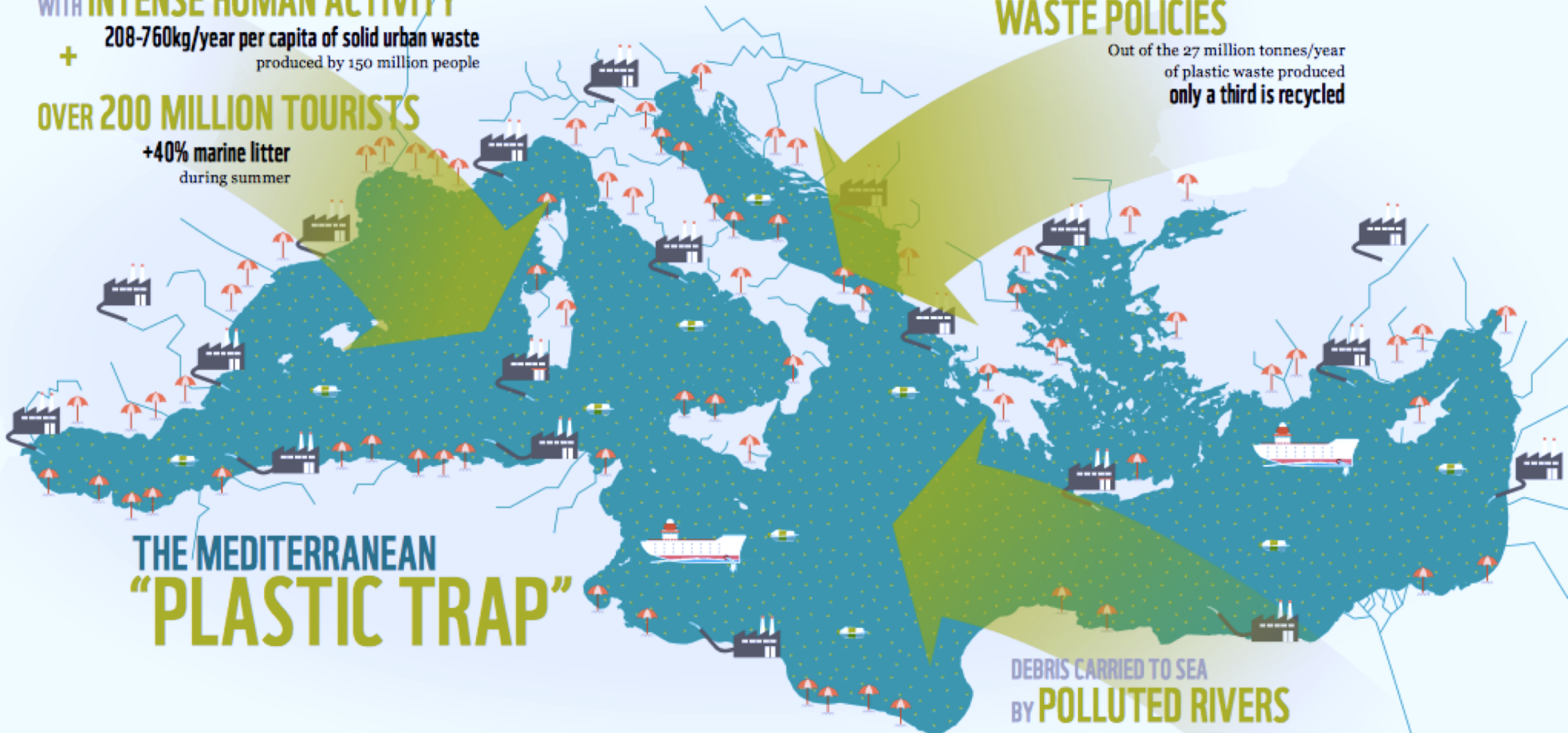
**WASTE POLICIES**

Out of the 27 million tonnes/year  
of plastic waste produced  
**only a third is recycled**

THE MEDITERRANEAN  
**"PLASTIC TRAP"**

DEBRIS CARRIED TO SEA





BY **POLLUTED RIVERS**







## 4 pillars, 13 priority goals

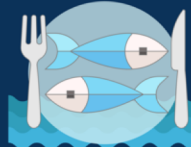
-  Key enabling **knowledge** for the Med (ecosystems, dynamics, pollution, coastal areas...)
-  Key **sectoral enablers** in the Med (tourism, clusters, MSP, bioresources, ...)
-  Enabling **technology** and capacity creation for the Med (transport, observing systems, off-shore platforms, cultural heritage)
-  **Cross-cutting enablers** for blue jobs and blue growth (open science, skills, ...)



13 priority goals were selected by countries of the Basin from the BlueMed Strategic Research and Innovation Agenda: their implementation will foster sustainable, non-conflicting Blue Growth in the Mediterranean.



effective maritime  
spatial planning



sustainable  
food production



open data,  
open science,  
open innovation



greening vessels,  
facilities  
and services



understanding  
pollution impacts,  
mitigation  
and remediation



building  
capacities,  
blue skills and  
blue professionals



towards  
an observing  
system of systems



preparing to  
climate change  
adaptation  
and mitigation  
measures



exploring the potential of  
blue biotech



strengthen  
synergies among  
science, industry,  
policy-makers  
and society



linking  
tourism, tourists  
and environment



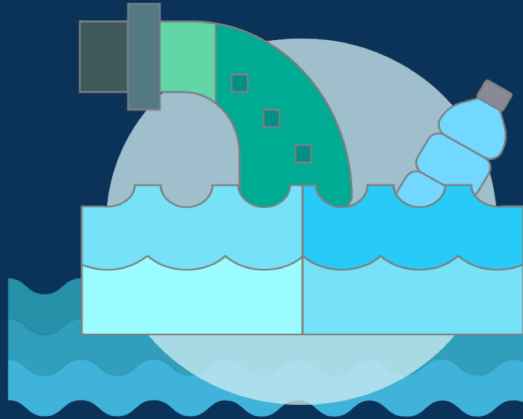
promote the role of  
marine renewable  
energies  
in the energy transition phase



from  
traditional  
maritime economic  
to blue growth activities



# Cross-feed the BlueMed Implementation Plan



understanding

**pollution impacts, mitigation  
and remediation**



# Implementation Plan Outline

## Part I - From vision to actions

- **Setting the scene: the BlueMed Strategic Research and Innovation Agenda (SRIA) and the prioritization of actions**

## Part II - Mapping and discussing implementation options and potentials

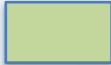
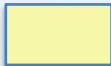
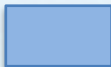
- **How the SRIA can be deployed at regional / sub-regional and sectoral levels:**
  - Recent and ongoing relevant projects
  - Programmes and initiatives of relevance, including research and data infrastructures
  - Target sectors and groups
  - Funding options and agencies

## Part III - Activities to promote SRIA Implementation

- **What can be done in the short-term to promote the implementation of the SRIA:**
  - Networking, engagement, alignment, lobbying
  - Training and capacity building
  - Start-up and pilot actions
  - Communication and outreach




# Activities to Promote SRIA Implementation

-  Identifies priorities for action plans, implementation and capitalization (core actions)
-  Coordination, start-up and training/education (support actions)
-  Lobbying and implementation of working group (impact actions)

## Key relevant ongoing action

- ✓ Support to the development of the BLUEMED Pilot Action “Towards Plastic-free, Healthy Mediterranean Sea”

Examples of activities [Champion countries must choose those activities that suit best the priority addressed]	Content and objective [Champion countries describe in more detail the content and specific objective of a given activity]	How and timeframe [Champion countries explain how the activity can be carried out and timeframe within the IP (2020-2023)]
Networking and engagement of economic sectors and national Blue Growth communities	Participation in the Maritime Clusters Participation in the Research organizations (e.g. JERICO)	How: thematic workshops for stakeholders When: at least one per year
Alignment and coordination	GSO BLUEMED Working Group Alignment and coordination with coherent EUSAIR initiatives Alignment and coordination with coherent UNESCO/IOC Initiatives Alignment and coordination with UNEP/MAP initiative dedicated to ecotoxicology and marine pollution	How: meetings When: at least one each 6 months
Promotion and possibly implementation of actions coordinated and jointly undertaken by different countries, with a “variable geometry” approach	Research organizations	How: Development of strategies and plans for pollution monitoring, data exchange, mitigation and remediation of impacts When: to be assessed
Identifies priorities for prevention and remediation action plan	Addressing key GAPs and developing a framework that looks also at land-sea interaction. Focus on policy aspects.	How: Working groups When: at least one each 6 months
Start-Up actions	Blue Labs EU funding calls Research organizations	How: calls When: each year
Assessment and promotion of the capitalisation and valorisation under the BLUEMED umbrella of ongoing and future projects	GSO BLUEMED Working Group EU Advisory Groups Research organizations	How: to be defined <i>One ongoing action is the BLUEMED Pilot: Towards Plastic-free, Healthy Mediterranean Sea</i> When: to be assessed
Lobbying actions		How:  When:

## So far >> preparatory background work

Session on **A litter-free Med Sea: Utopia or Reality?** @ the Malta Presidency BlueMed event in Sliema, April 2017

Panel discussion on **Building on the knowledge we have and recognizing the knowledge gaps we need to bridge to attain a healthy Mediterranean Sea free of litter and plastics** @ the meeting with projects' coordinators, Kalkara, Malta, January 2019



MALTA EU2017

BLUEMED – A basin of research and innovation for sustainable growth

18 - 19 April, 2017  
The Victoria Hotel, Sliema, Malta





**The present >> support and participation to the dedicated workshops at Med level and technical assistance to the national hubs**

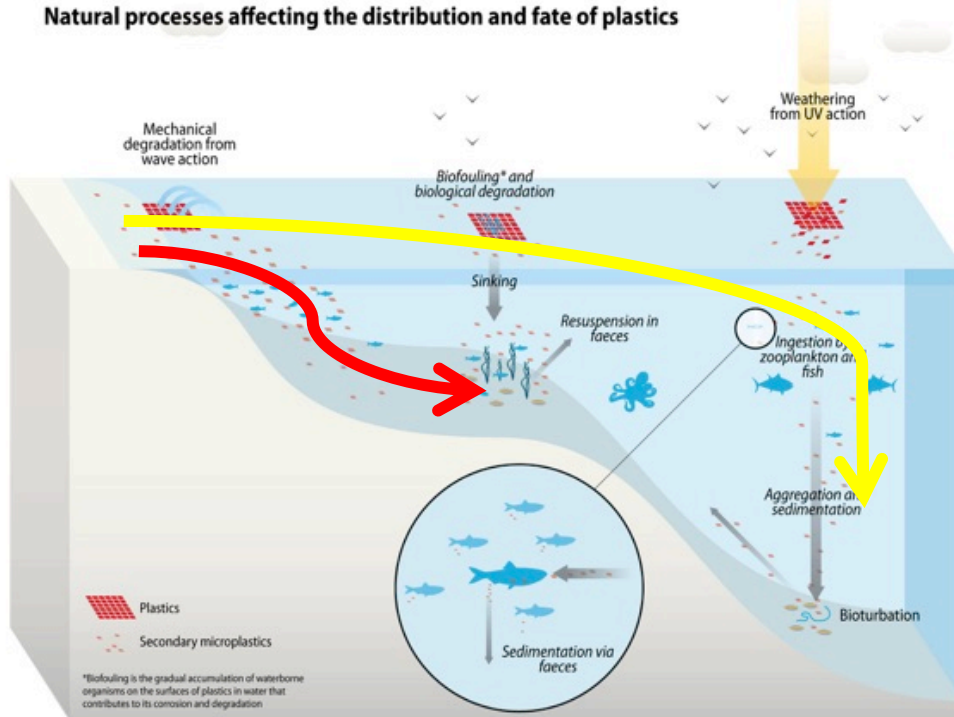
Mapping of best practices and relevant initiatives			
Title of the action	General objective	Action to be undertaken	Potential National Partners
Country i/ Proposition n			
Country i/ Proposition m			
...			
Country j / Proposition n			

*The plastic problem: at once evident but elusive  
(a three-slide digression on commonly overlooked aspects)*



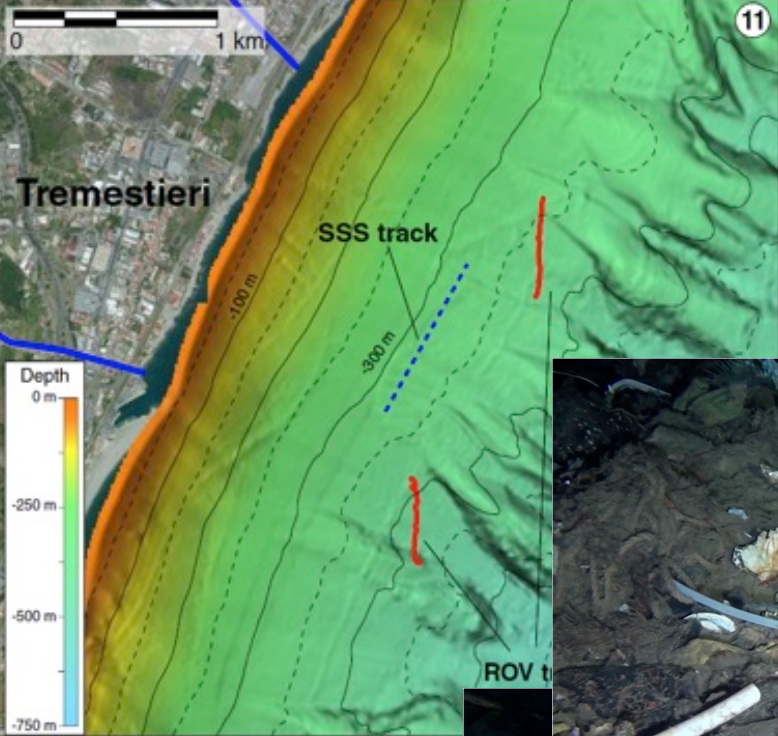
**Small rivers, flash high density flows carry plastic straight into the deep**

**Natural processes affecting the distribution and fate of plastics**



**Large rivers, low density superficial plumes; plastic floats at the sea surface**





- Litter is patchy but reaches very high densities (up to ~200 items/10 m)
- “We” do not see the seafloor; do we care?
- Illegal dumps in small river are catastrophic; should “we” patrol/protect these areas?



*Pierdomenico et al.  
2019 Scient. Reports*





# Litter interacts with living forms (sessile and not)

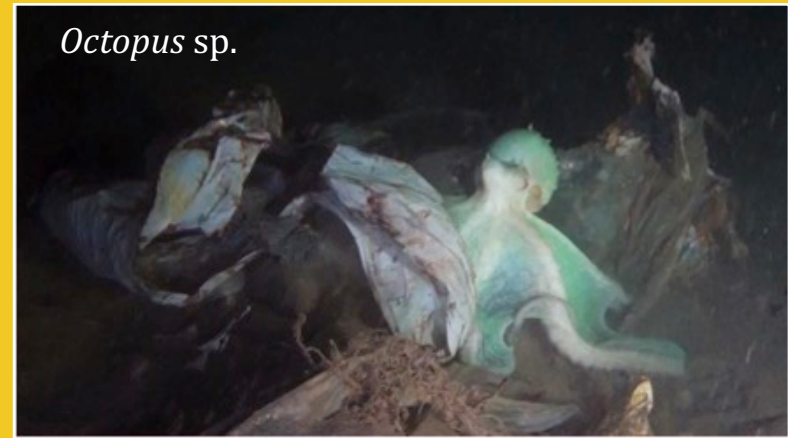
*Entanglemen*



*Substrate*



*Shelter*



*Spawning areas?*

# The future >> e-training course on marine litter

## Draft outline

Introduction to Plastics and Microplastics

Plastics in the Sea

Impact of plastics on marine ecosystems

Research and Monitoring protocols

Use of new technologies for observation (drones, remote sensing, sensors) (as in University of the

Aegean, MYSSEA Project)

Cutting edge technology for prevention and removal (as in CLAIM, GoJelly, ...)

Alternatives and Recycling: how much better?

Fisheries and Aquaculture (Inputs, Issues, Actions)

Tourism (Inputs, Issues, Actions)

Shipping (Inputs, Issues, Actions)

Cosmetics Industry (Inputs, Issues, Actions)

Governance Challenges - EU Policy and Action Plans

Work in progress

# Constant promotion and communication

- Presentation at relevant international meetings: Sustainable Black Sea High-level Conference (Bucharest, Romania, May 2018), EurOCEAN Conference (Paris, France, June 2019), International Conference on Microplastic Pollution in the Mediterranean Sea (Capri, Italy, September 2019), etc...;
- Action plan of the BlueMed Young Communication Ambassadors;
- Production of ad hoc gadgets.

## BlueMed *plogging* bag

"plogging"= jogging picking up litter

1. go jogging on the beach;
2. use the bag to collect the litter you find on your way;
3. bring the litter back home and throw it in the correct recycling bin;
4. wash the bag if needed;
5. start again from point 1. ☺

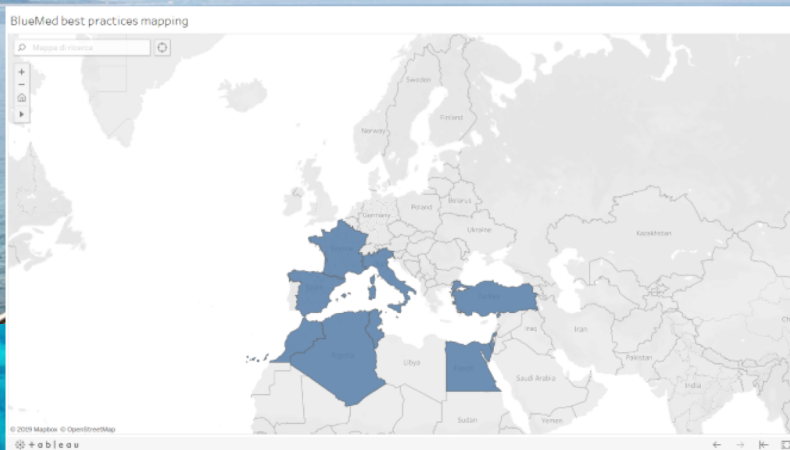
**blueMed** Pilot Action for a  
plastic-free, healthy  
Mediterranean Sea





Dedicated webpage @ [www.blumed-initiative.eu/pilot-action-on-a-healthy-plastic-free-mediterranean-sea/](http://www.blumed-initiative.eu/pilot-action-on-a-healthy-plastic-free-mediterranean-sea/)

The BlueMed Pilot action, launched in 2018, consists in **mapping** and **assessing** the actions on place regarding marine plastic pollution in the EU and non EU countries of the Mediterranean area to promote the **circulation of good practices, R&I actions but also demonstration, communication and educations actions** specifically addressed to face the challenges posed by marine litter in the Mediterranean Sea as a whole.



# Support actions for further uptake at national, EU, Med and global level



SUMMIT OF THE TWO SHORES



Union for the Mediterranean  
Union pour la Méditerranée  
الإتحاد من أجل المتوسط



2021  
2030 United Nations Decade  
of Ocean Science  
for Sustainable Development





**Thank you!**

**[www.blued-med-initiative.eu](http://www.blued-med-initiative.eu)**

**@BlueMedEU**

