

# **BLUEMED initiative for a healthier and more productive Mediterranean sea**

**Fabio Fava**

IT Representative, BLUEMED Initiative, on behalf of the BLUEMED GSO  
& University of Bologna, Bologna, Italy (fabio.fava@unibo.it)

**Fedra Francocci, Margherita Cappelletto, Fabio Trincardi**

National Research Council, Roma, Italy

# The Blue Economy in the Mediterranean Sea

## OCEAN ASSET VALUE OF THE MEDITERRANEAN SEA - SHARED WEALTH FUND

Marine assets in the Mediterranean Sea generate much more value than we are aware of and could provide even more if well managed.

US\$5.6 tn TOTAL SHARED WEALTH FUND ASSET BASE



## MEDITERRANEAN SEA GROSS MARINE PRODUCT (GMP)

(data from 2015-2016)

Gross Marine Product (GMP) is the ocean's annual economic value.

92%

Marine & coastal tourism

2%

Fisheries & aquaculture

6%

Direct services enabled by the ocean



The Mediterranean Sea represents 1% of total ocean surface but produces € 415 Bln/y, e.g., 20% global Gross Marine Product. It hosts 30% of global sea-borne trade, 450 ports/terminals, the 2nd World's largest market for cruise ships, half of the EU's fishing fleet, 400 UNESCO sites and 265 protected areas.

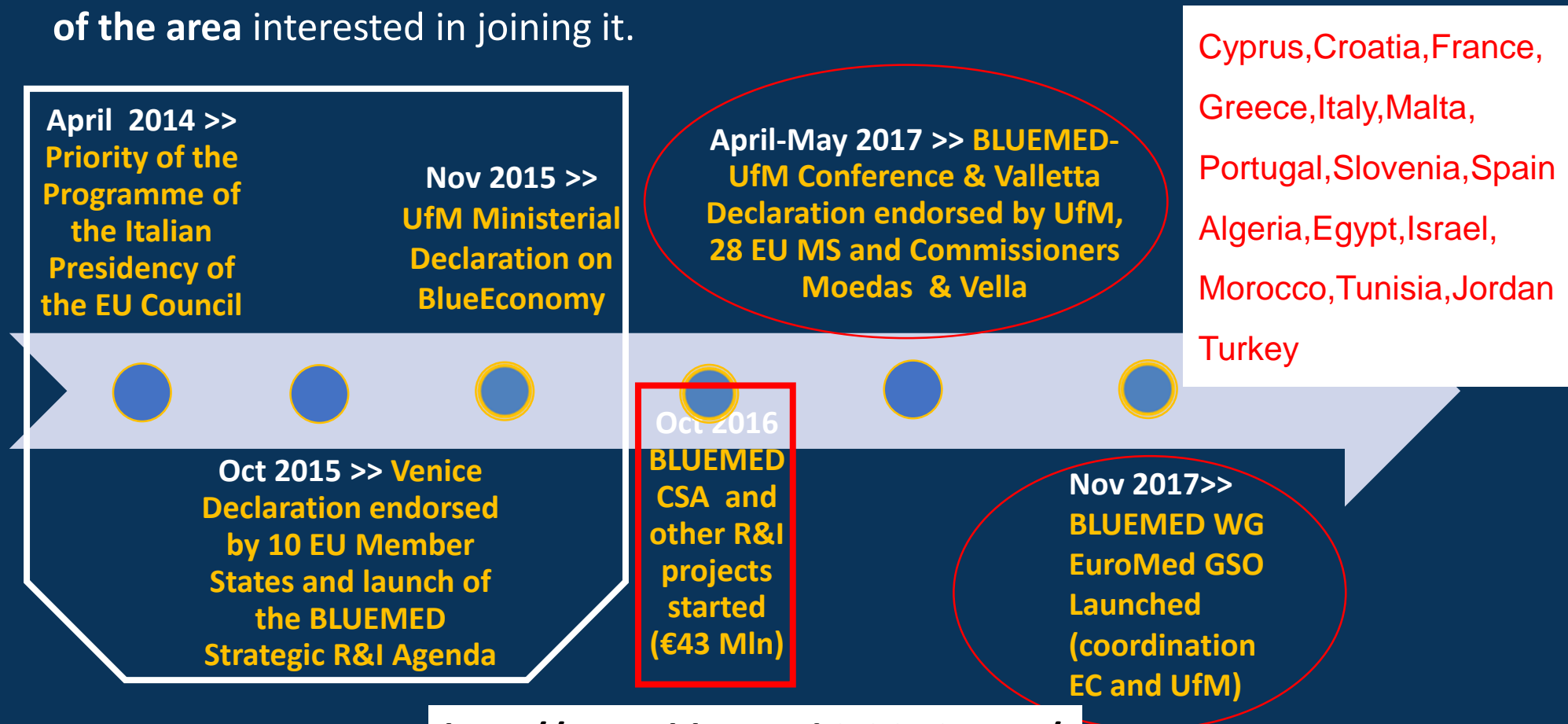
It is facing relevant environmental challenges (associated with climate change, pollution, overfishing, etc.) and it does not efficiently exploit local biodiversity, deep sea resources, renewable energy, etc.

Such challenges/opportunities cannot be addressed/implemented by any EU MS or local Country individually, but require a common/shared Vision and R&I Agenda.

# The BLUEMED initiative: aims and actions

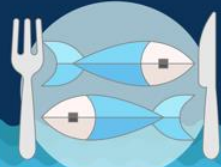
The R&I BLUEMED Initiative fosters integration of knowledge and efforts of Countries of the Mediterranean for a more sustainable blue growth in the area.

It was launched and implemented by the EU MS of the area in close cooperation with the EU commission (DG RTD, DG MARE). It was then open to all Countries of the area interested in joining it.



# The BLUEMED R&I priorities

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.



sustainable  
food production



open data,  
open science,  
open innovation



effective maritime  
spatial planning



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  
to maritime economic  
blue growth activities

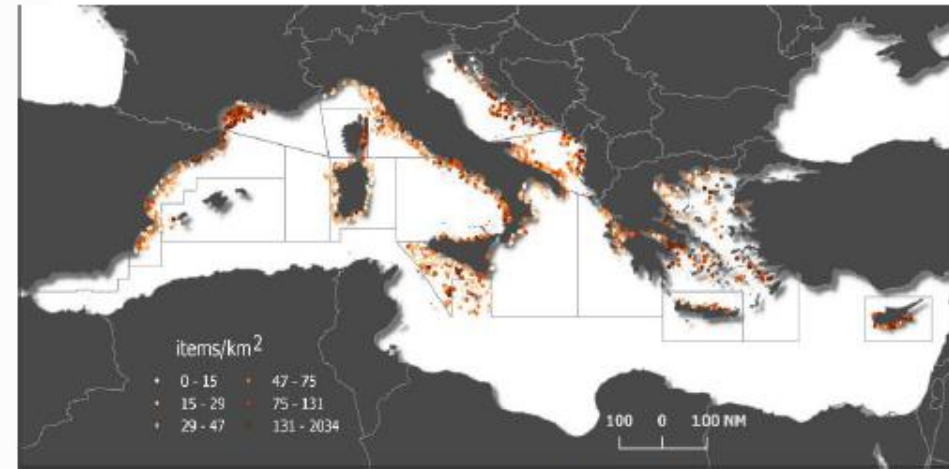
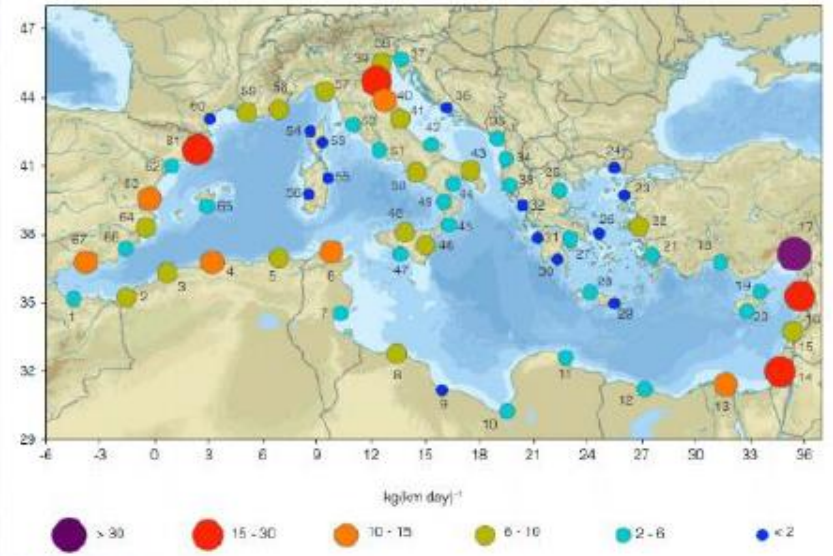
## ACTION PLAN (2021)

[http://www.bluemed-initiative.eu/wp-content/uploads/2021/05/Bluemed\\_Final\\_Implementation\\_Plan\\_D2.10\\_high\\_resolution.pdf](http://www.bluemed-initiative.eu/wp-content/uploads/2021/05/Bluemed_Final_Implementation_Plan_D2.10_high_resolution.pdf)

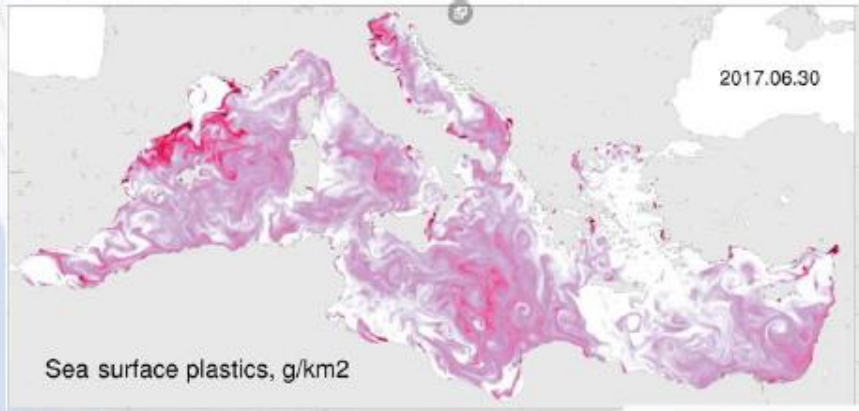
# The marine litter sources in the Mediterranean



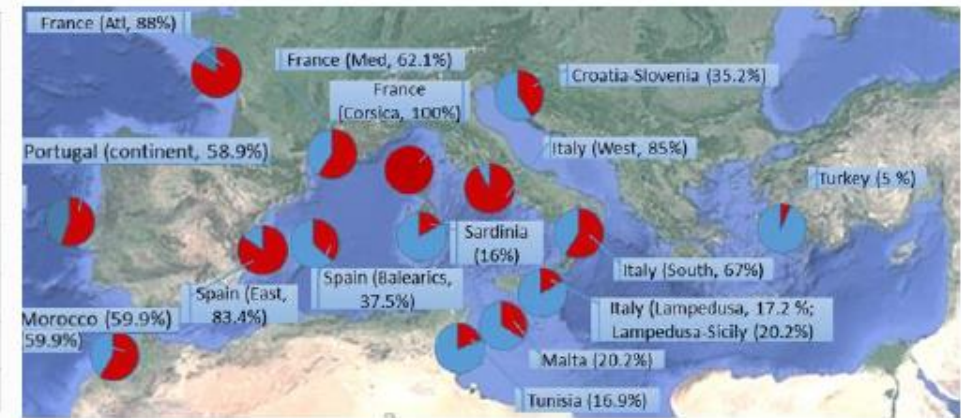
# The marine litter distribution in the Mediterranean



Total litter per km<sup>2</sup> seafloor (MEDITS)



Floating plastics (modelled, *Liubartseva et al., 2018*)



% Sea turtles with ingested litter (INDICIT)

After *Gargani 2019*



## 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.



credits: Legambiente, photo by Anna Paola Montuoro



**Mediterranean sea: 1% of the world water with 7% of the global microplastics detected so far in marine habitats.**

**BLUEMED Countries launched (April 2018) a Pilot for a plastic-free, healthy Mediterranean Sea with the actions:**

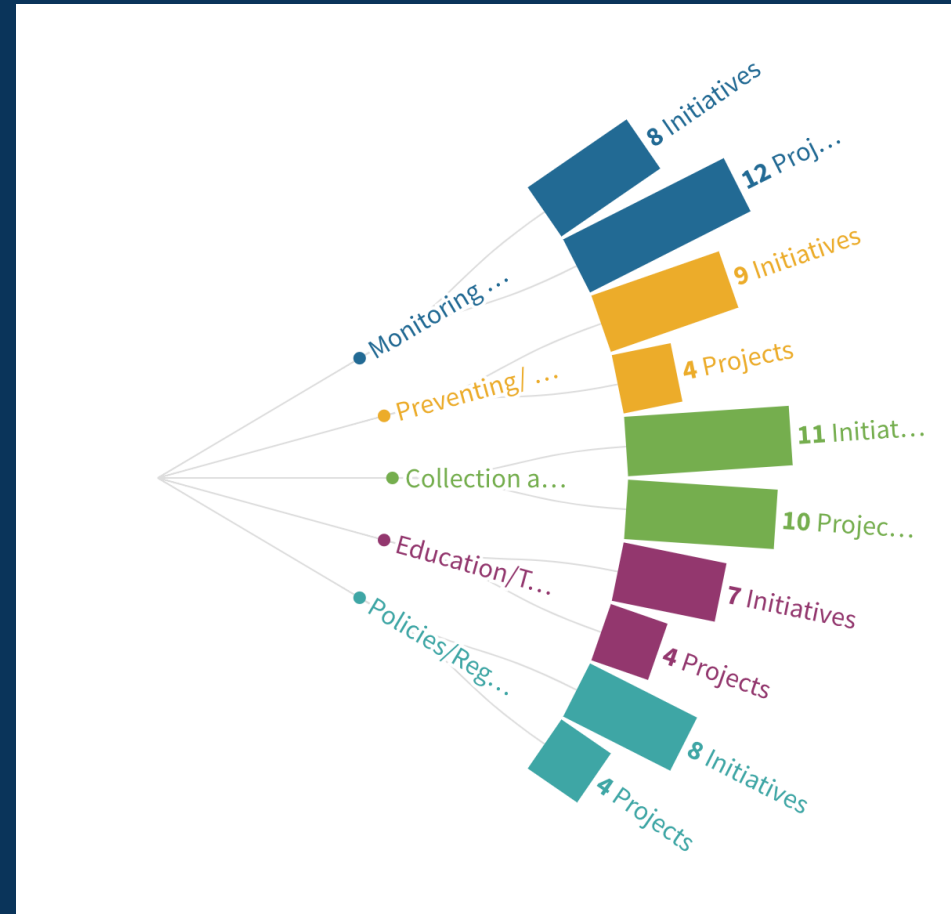
- **Mapping** in all Countries **ongoing actions and initiatives** with clear technological, business, policy, educational and social impacts (2019);
- Set up a joint **digital platform** to share the mapped initiatives/projects and the best experiences (2020);
- Building a **broad partnership** to implement joint concrete actions to **remarkably reduce marine litter** in the Mediterranean sea (2021-).



# Example#1: the BlueMed Pilot Italian Hub – mapped projects and initiatives

## Actions identified and mapped:

- Monitoring and Assessment
- Preventing/ Recycling / Circular thinking
- Collection and Valorization
- Education/Training/Communication
- Policies/Regulatory framework/Financing







# Example#1: the BlueMed Pilot Italian Hub – mapped projects and initiatives

**Launched at MIUR on July 25, 2019 and integrated on October 9, 2020**

➤ more than 70 among full/pilot scale initiatives and prominent R&I projects (EU/national/regional)

13 University/ Research Center

1 National association of Fishery sector

3 National Environmental Associations

1 Public health institution

and more..



1 National Cluster (Blue Growth)

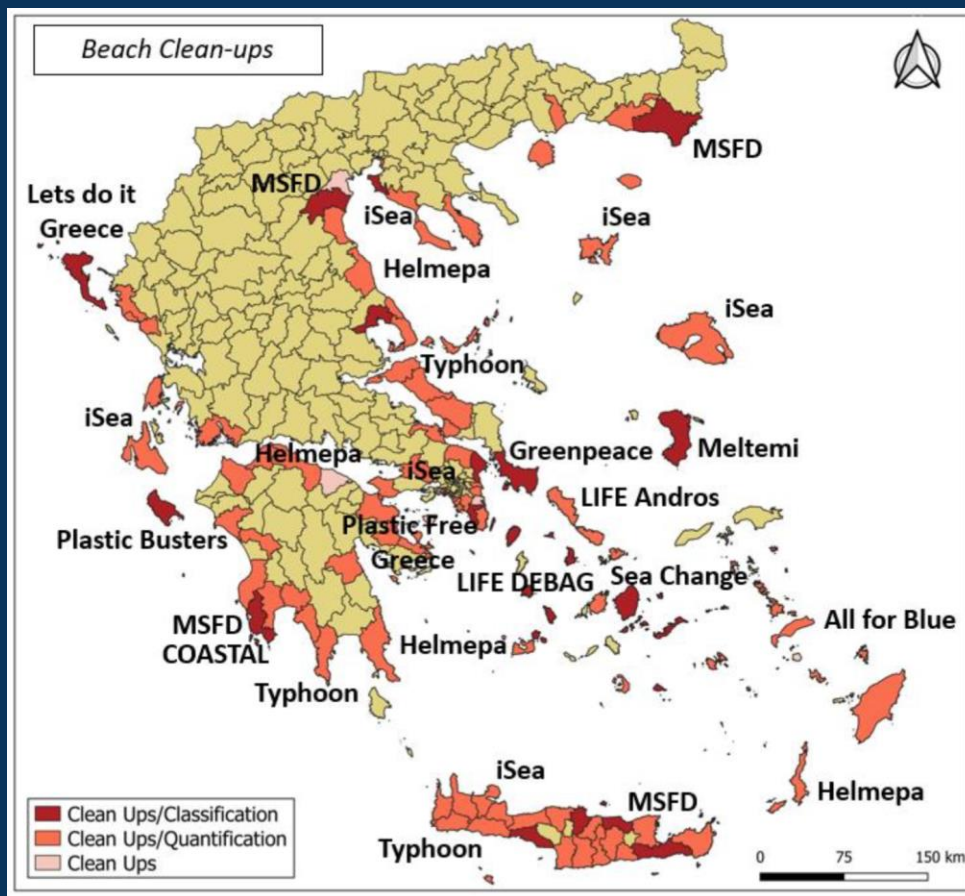
1 National Consortium for the collection and recycling of plastic packaging

2 National Associations of plastic producers

3 Large Companies/Start up



# Example#2: the BlueMed Pilot Greek Hub – mapped projects and initiatives

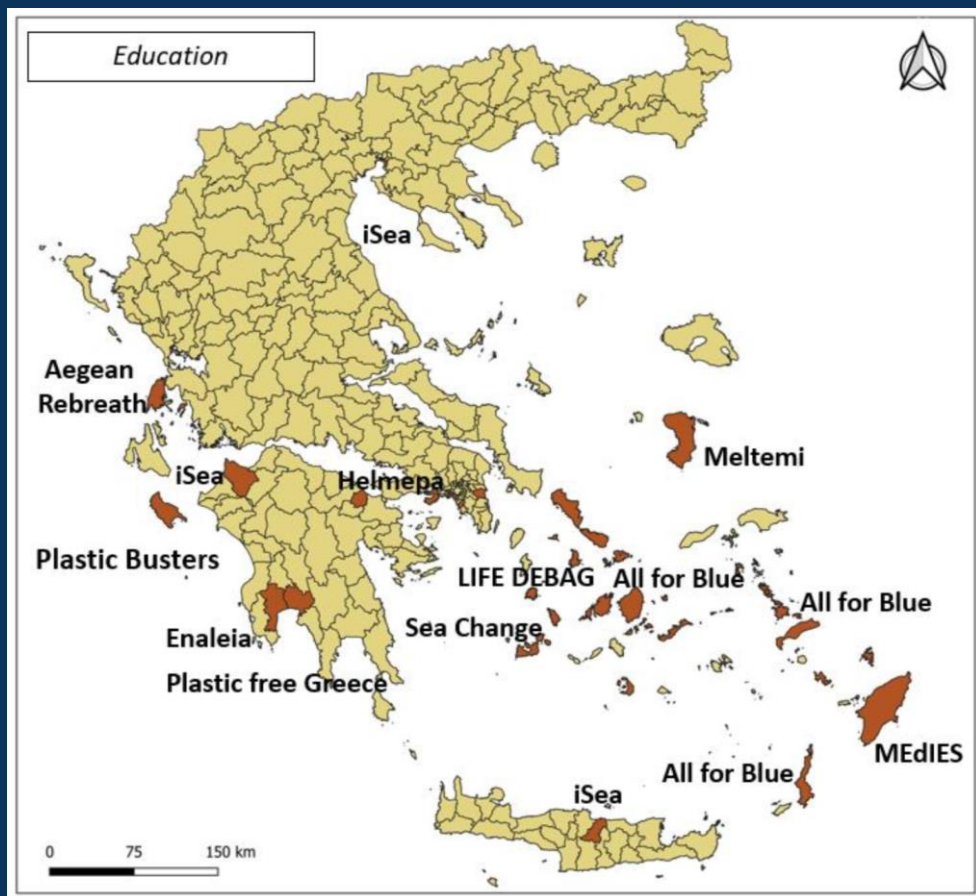


*After: Kikaki A., Kastanidi E., Pagou, K., Karageorgis A.*

Details and interactive mapping on: <http://www.blued-med-initiative.eu/pilot-action-on-a-healthy-plastic-free-mediterranean-sea/>



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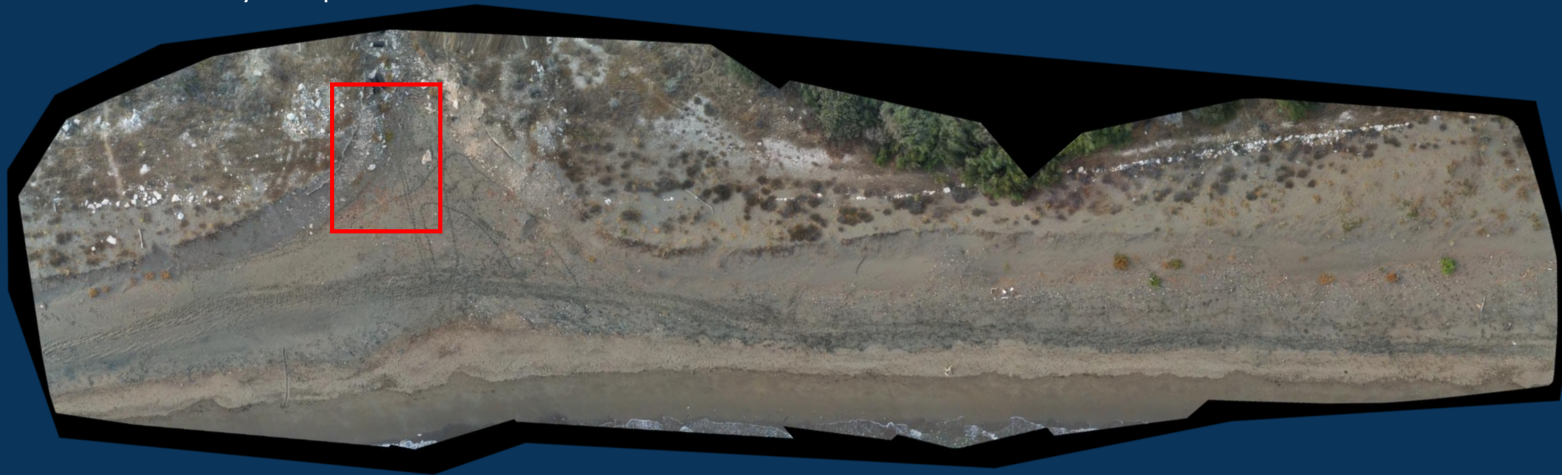


# Example#3: the BlueMed Pilot Turkish Hub – an example from the mapped projects and initiatives



Using drone technology for Marine litter monitoring in coastal areas

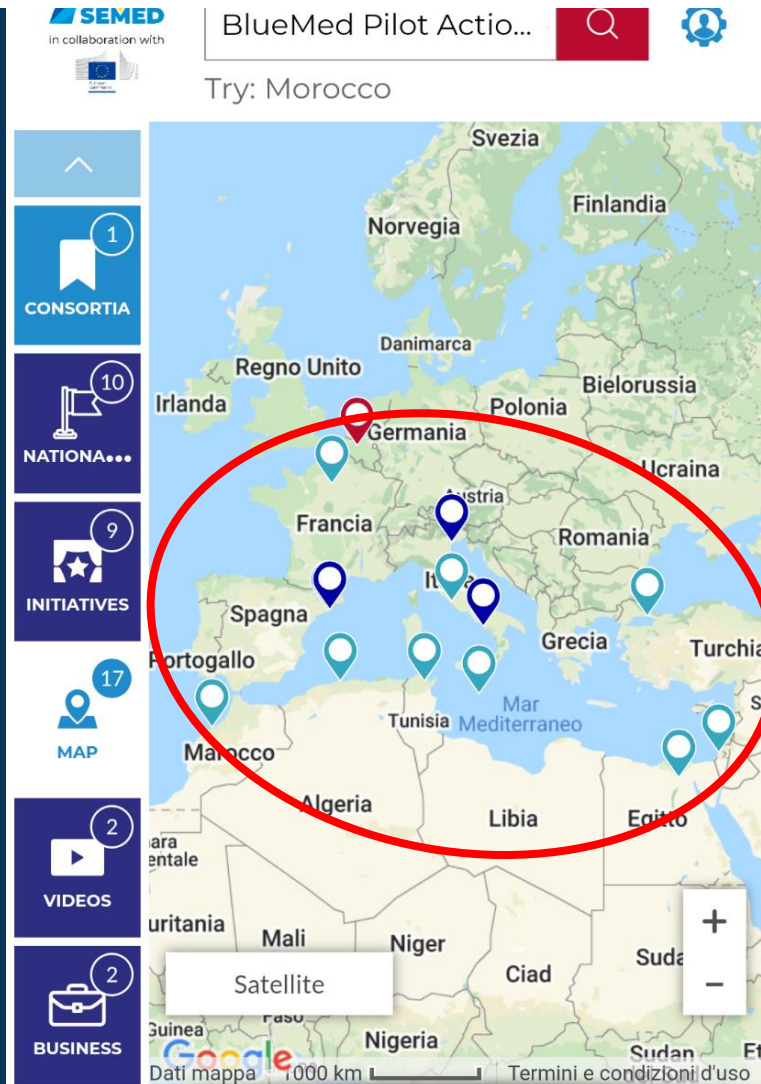
- High Resolution pictures
- Coverage of large areas quickly
- Machine Learning technology to classify the marine litter
- Litter Categories
- Density map



*After Prof. Dr. Baris Salihoglu*

# The BLUEMED Pilot: main joint achievements

Countries involved: Algeria, Egypt, France, Greece, Israel, Italy, Malta, Morocco, Spain, Tunisia, Turkey



Actions identified and mapped:

- 1) Monitoring and Assessment marine litter
- 2) Preventing/Recycling/Circular thinking
- 3) Collection and Valorization of litter
- 4) Education/Trainig/Communication
- 5) Policies/Regulatory framework/Financing

**Unlocking potential of Ports and Harbours in preventing and exploiting Marine Litter**  
**Venice, Sept 2021**

**ECOMONDO**  
THE GREEN TECHNOLOGY EXPO

**Plastic producers meeting**  
**October 26 - 29 2021**

<https://semed.eu/search?q=bluemed>

<http://www.bluemed-initiative.eu/pilot-action-on-a-healthy-plastic-free-mediterranean-sea/>

# BlueMed Young Ambassadors

<b>INÈS BOUJMIL</b>	<b>BADR EL MAHRAD</b>	<b>MUSTAFA GHAZAL</b>	<b>DENIZ YAPILCAN</b>	<b>FELLA MOUALEK</b>
<b>BlueMed Y.C. Ambassador In Tunisia</b>	<b>BlueMed Y.C. Ambassador In Morocco</b>	<b>BlueMed Y.C. Ambassador In Egypt</b>	<b>BlueMed Y.C. Ambassador In Turkey</b>	<b>BlueMed Y.C. Ambassador In Algeria</b>



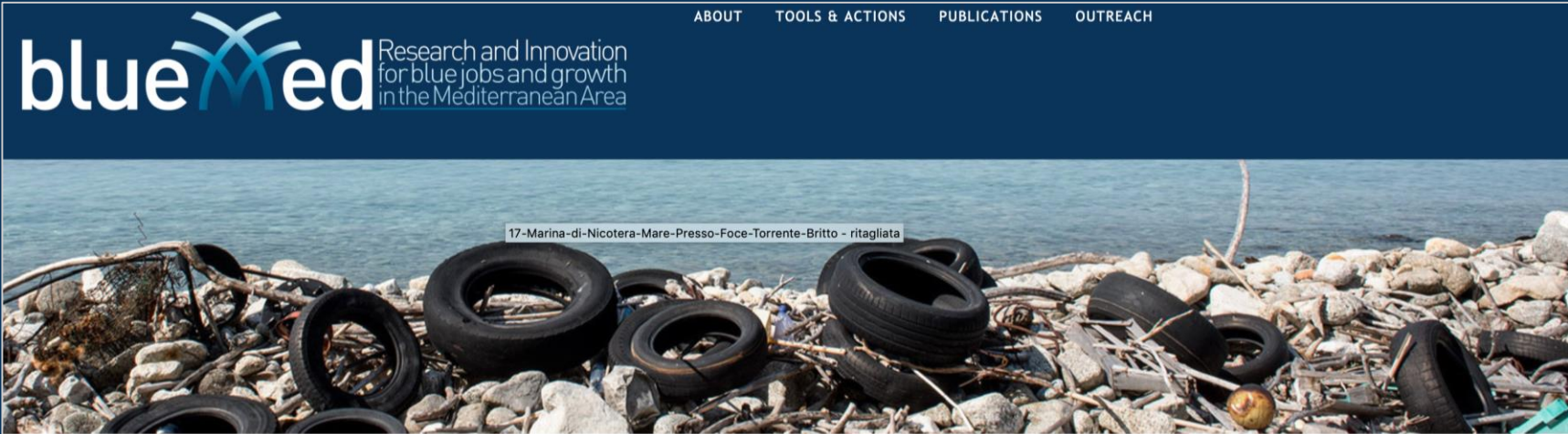


Image credits: Legambiente, Anna Paola Montuoro

## UNDERSTANDING AND ACTING FOR A HEALTHY PLASTIC FREE MEDITERRANEAN SEA

Building a sustainable blue economy in the basin

The BlueMed Initiative presents the e-training course on Understanding and acting for a healthy plastic free Mediterranean Sea, organized in the framework of the Pilot Action Healthy Plastic-free Mediterranean Sea.

This course brings together experts working on **Marine Litter and the Blue-economy** in order to share knowledge, showcase best practices and suggest methods enabling more sustainable blue jobs in the framework of the circular economy strategy, taking into due consideration education for sustainable development and citizen science.

<http://www.blumed-initiative.eu/e-training-course/>

11 lessons, 19 experts  
400+ registrants

The thumbnail shows a landing page for the e-training course. It features the BlueMed logo, the title 'UNDERSTANDING AND ACTING FOR A HEALTHY PLASTIC FREE MEDITERRANEAN SEA', and the subtitle 'Building a sustainable blue economy in the basin'. A blue banner highlights '11. COMMUNITY AND CITIZEN AWARENESS, OCEAN LITERACY' for July 21st, 2020 at 11:00 CEST. A text box describes citizens as active players in the marine circular economy. Below is an agenda table and a registration link.

**11. COMMUNITY AND CITIZEN AWARENESS, OCEAN LITERACY**  
July 21st, 2020 at 11:00 CEST

The citizens as **active players** in the marine circular economy, towards shared sustainable choices: marine tourism, food and water consumption, waste management, plastic reduction etc.  
1. Intro on basic concepts of public engagement, community awareness, ocean literacy, citizen science and the RRI approach;  
2. Webinar with experiences of citizens engagement in marine-based projects.

**AGENDA:**

- 11:00: Welcome address (Erasmia Kastanidi, BlueMed and HCMR)
- 11:05: Introduction to the session and key concepts (Alba L'Astorina and Rita Giuffredì, BlueMed and CNR)
- 11:25: Panel Sharing and discussing experiences of citizens' engagement in marine-based projects

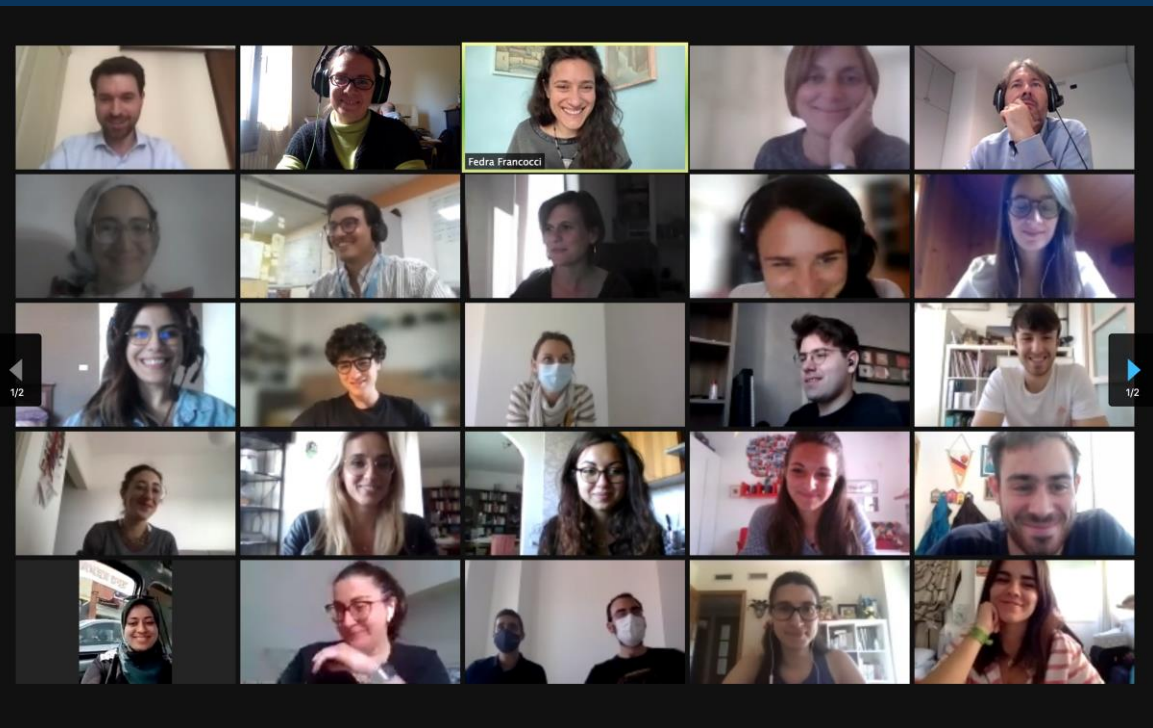
Speaker	Engagement mode	Marine issues	Experience
Francesca Ronchi (SPRA, Italy)	Stakeholders engagement / RRI	Fishing/plastics	RRI-MARINA, DeFishGear, MI-REPAIR, Fishing for Litter
Lucía Fraga (ICETMAR, Spain)	Ocean Literacy	Marine litter	CleanAtlantic project
Mihaela Mirea Căndea (Mare Nostrum NGO, Romania)	Community engagement	Single use plastics	Anemone project
Macarena Marambio (IC3E, Barcelona)	Citizen science	Monitoring/global warming	Observadores del Mar / Sea Watchers
Inés Boujmi (INGTM, Tunisia) and Badr El Mahred (Mohammed V University of Rabat, Morocco and GIMA, Portugal)	Citizens' engagement in non-EU countries: the perspectives of the BlueMed Young Communication Ambassadors		

12:15: Questions & answers  
12:25: Conclusions and session wrap up

Registration here: <https://register.gotomeeting.com/join/147267452788052>  
Info on the complete e-training: <http://www.blumed-initiative.eu/e-training-course/>

# blue med HACKATHON

Ideas and Solutions for a Healthy Plastic Free Mediterranean Sea



Do you care about **marine pollution**? Apply now!  
Registrations open until May 10th 2021

# blue med HACKATHON

Ideas and solutions for a Healthy Plastic Free Mediterranean Sea

Are you a passionate young MSc and PhD graduate in STEM disciplines,  
a creative or a marine sciences young professional?

**Join the BlueMed Hackathon**  
to contribute solving plastic pollution challenges!

Info and registrations:  
<https://semed.eu/search?q=bluemed>  
<http://www.bluemed-initiative.eu/bluemed-hackaton/>





# Thank you

**BLUEMED GSO**  
**Fabio Fava**

School of Engineering, University of Bologna, Bologna &  
Ministry of University and Research, Italy

[fabio.fava@unibo.it](mailto:fabio.fava@unibo.it)

[www.italy-croatia.eu/acronym](http://www.italy-croatia.eu/acronym)

