



**PLASTIC  
BUSTERS**

DRAFT AGENDA

BLUEMED Pilot: Towards a plastic-free Mediterranean Sea

Tuesday 12 March 2019

9:00 – 16:30

Room: CDMA -1/44

Rue du Champ de Mars, 21

1050 - Bruxelles



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

# PLASTIC BUSTERS PROJECT: FROM THE FLAGSHIP INITIATIVE OF SDSN AND UfM TO THE PLASTIC BUSTERS MPAs INTERREG-MED AND COMMON ENI-CBC PROJECTS



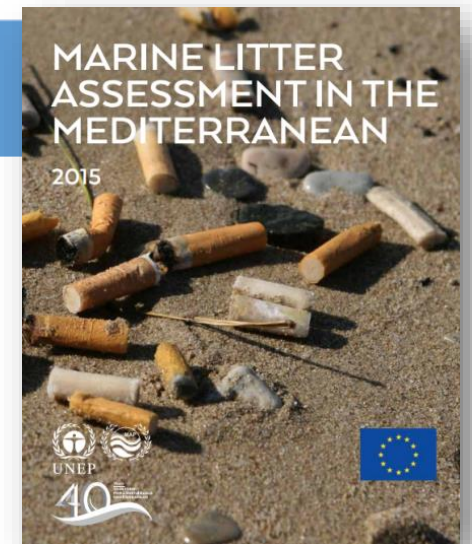
**Maria Cristina Fossi**

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# MARINE LITTER IN THE MEDITERRANEAN SEA



- An highly urbanized and developed coastline
- A closed basin
- 30% of the maritime traffic
- A touristic destination
- Large rivers (Rhône, Nile, Po)

## THE MOST AFFECTED AREA WORLWIDE FOR MARINE LITTER

- Some of the largest amounts of Municipal Solid Waste (MSW) are generated annually per person in the Mediterranean Sea (208 – 760 kg/Year)
- An estimated 731 tons of plastic is littered every day, with important differences depending on country
- Cigarette butts may reach 40% of stranded litter
- the highest densities of marine litter stranded on the sea floor, up to 100,000 items / km<sup>2</sup> (French Coast) are found in the Mediterranean Sea
- the highest densities of floating microplastics , up to 4680,000 items / km<sup>2</sup> (Southern Adriatic) are found in the Mediterranean Sea



# Marine litter impact: what happens in the Mediterranean sea?



**7** plastic items in the stomach



**145** plastic items in the stomach



**5 Kg** of plastic in the stomach

More than 91 marine vertebrate species affected by marine litter in the Mediterranean basin





Knowledge gaps

## MEDITERRANEAN SEA: ONE OF THE MOST AFFECTED AREAS FOR MARINE LITTER

Impact on Biodiversity?

Identification of Bioindicators?

Identification of Hot Spots Areas?

Impact on MPAs?

Impact on Fisheries?

Impact on Human Health?

Identification of reduction and mitigation measures





# Why Plastic Busters ?

## Plastic Busters on basin scale



A crucial aspect of the marine litter issue, underlined by the **Barcelona Convention within the Regional Plan for Marine Litter** (Istanbul 2013) is that: "Marine pollution knows no border, pollution in one country affects all other 21 countries, hence there is a need for a regional approach".

**Plastic Busters is the first project at basin scale that binds the Southern and Northern Mediterranean countries** on the issue of Marine Litter under the umbrella of UNEP/MAP and UfM, with 10 countries already involved in the project and 12 countries endorsing the project.



### Diagnosis of the problem to identified specific solutions

- Impact on Biodiversity?
- Impact on Fisheries?
- Identification of Hot spot areas?
- Impact on Human?

Project coordinator

**Maria Cristina Fossi**

*Biomarker Laboratory, University of Siena, Italy*



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**Mediterranean**

## SDSN-MED

### Flagship project



SUSTAINABLE DEVELOPMENT GOAL 14  
Conserve and sustainably use the oceans, seas and marine resources for sustainable development



## 2013

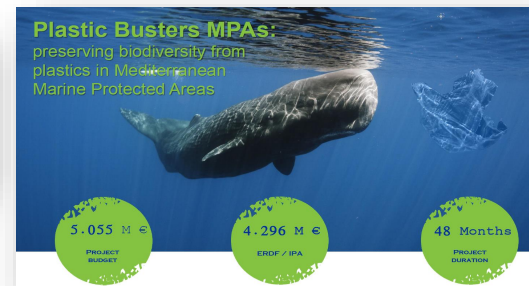
## UfM Labelling



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## 2016

## MED-Interreg



## 2018

## ENI -CBC



## 2019

# Plastic Busters MPAs:

preserving biodiversity from  
plastics in Mediterranean  
Marine Protected Areas

5.055 M €

PROJECT  
BUDGET

4.296 M €

ERDF / IPA

48 Months

PROJECT  
DURATION



# Plastic Busters MPAs: general objectives



**PlasticBusters MPAs**, is a 4-year-long project Interreg Mediterranean funded project aiming to contribute to **maintaining biodiversity and preserving natural ecosystems** in pelagic and coastal **marine protected areas** (MPAs), by defining and implementing a **harmonized approach against marine litter**.

The project entails actions that address the **whole management cycle of marine litter**, from **monitoring and assessment** to **prevention and mitigation**, as well as actions to **strengthen networking** between and among pelagic and coastal MPAs.



# Plastic Busters MPAs: main objectives



The main objectives will be achieved through a multidisciplinary and integrated approach (developed in PLASTIC BUSTERS UfM project) that focuses on:

- A. **defining harmonized methodologies** at regional and national level for **ML monitoring**
  - B. **identifying ML hotspots** such as 'gyres' and 'fronts' in the MPAs, where ML accumulates and marine species live and feed
  - C. **assessing the impact of ML on biodiversity** in MPAs
  - D. **implementing ML prevention and mitigation measures**
  - E. **setting up a joint governance plan for managing ML** in pelagic and coastal Med MPAs.
- The project will also **capitalize on results and outputs delivered by relevant initiatives and projects.**
- The project will support the **implementation of the MSFD and the Barcelona Convention Regional Plan on Marine Litter Management** in the Med.



# Plastic Busters MPAs Consortium

| Partner number | Name of the partner   | Abbreviation of the organisation |
|----------------|---|----------------------------------|
| LP1 ISPRA      | Italian National Institute for Environmental Protection and Research  | ISPRA                            |
| PP1            | University of Siena - Department of Physical Sciences, Earth And Environment  | UNISI                            |
| PP2            | Corsican Agency For Environment - OEC   | OEC                              |
| PP3            | Regional Government of the Balearic Islands. Department of Environment, Agriculture and Fisheries   | CAIB                             |
| PP4            | Management Agency of Zakynthos National Marine Park   | E.Θ.Π.Ζ.                         |
| PP5            | Tuscan Archipelago National Park  | PNAT                             |
| PP6            | Mediterranean Information Office for Environment, Culture and Sustainable Development   | MIO-ECSDE                        |
| PP7            | Spanish Oceanographic Institute - Balearic Centre of Oceanography   | IEO                              |
| PP8            | Hellenic Centre for Marine Research- Institute of Oceanography  | HCMR                             |
| PP9            | French Research Institute for Exploitation of the Sea – Département Océanographie et Dynamique des Ecosystèmes-Laboratoire Environnement Ressources des régions Paca et Corse | IFREMER                          |
| PP10           | Catalan Waste Agency – Regional Activity Center for Sustainable Consumption and Production  | ARC-SCP/RAC                      |
| PP11           | Hellenic Ministry of Environment and Energy, Special Secretariat for Water  | EGU                              |
| PP12           | Albanian Ministry of Environment - Directorate of Biodiversity and Protected Areas  | MM                               |
| PP13           | Ministry of Environmental and Nature Protection of Croatia  |                                  |
| PP14           | University of Split, Faculty of Civil Engineering, Architecture and Geodesy   | UNIST-FGAG                       |

**Dr. Teresa Romeo, as project coordinator (Lead Partner - ISPRA) and Prof. M. Cristina Fossi UNISI (PP1), as scientific coordinator, will work for four years alongside 13 other partners, coordinating the activities of the Steering Committee for the implementation of the entire project.**



**Interreg**  
Mediterranean



**Interreg**   
Mediterranean



**PLASTIC BUSTERS**  
MPAs

# Associated Partners and Advisory Board

1. Italian Ministry of the Environment, Land and Sea, Directorate-General for Nature and Sea Protection
2. UN Environment/Mediterranean Action Plan Barcelona Convention Secretariat
3. Tuscany Region – Direction Environment and Energy – Section Protection of nature and the sea
4. Spanish Ministry of Agriculture and Fisheries, Food and Environment
5. Alma Mater Studiorum – University of Bologna
6. Tethys Research Institute
7. ISO TECH LIMITED
8. Federazione Internazionale per lo sviluppo sostenibile - FISP MED ONLUS
9. NOVAMONT
10. Institute for Water of the Republic of Slovenia
11. WWF ITALY ONLUS
12. Stazione Zoologica Anton Dohrn
13. Priority Actions Programme/Regional Activity Centre
14. The Nature Conservancy
15. Blue World Institute of Marine Research and Conservation
16. IUCN Centre for Mediterranean Cooperation
17. Legambiente Onlus





### Plastic Busters MPAs:

preserving biodiversity from  
plastics in Mediterranean  
Marine Protected Areas



5.055 M €

PROJECT  
BUDGET

4.296 M €

ERDF / IPA

48 Months

PROJECT  
DURATION

WP1

• PROJECT MANAGEMENT

WP2

• PROJECT COMMUNICATION

WP3

• STUDYING

WP4

• TESTING

WP5

• TRANSFERRING

WP6

• CAPITALISING



# Plastic Busters MPAs: selected MPAs



## Plastic Busters MPAs Selected MPAs

### WP4 -Testing

- Pelagos Sanctuary (IT,FR,MC)
- Tuscan Archipelago (IT)
- Zakynthos National Marine Park (GR)
- Parque Nacional Del Archipiélago De Cabrera (SP)

### WP5-Transferring

- Reserve Naturelle des Boched de Bonifacio (FR)
- Parc National de Port-Cros (FR)
- Pelagie Islands MPA (IT)
- Res-Lošinj MPA (HR)
- Sazan-Karaburun (AL)





# Plastic Busters MPAs WP4 – Testing

## *AIM: Diagnosis*



The main objectives of this WP, led by ISPRA and UNISI, are to:

- ✓ **test the common monitoring approaches for ML (including macro-micro-plastics and **impact on biota**) defined in WP3;**
- ✓ **validate the ML forecasting model developed in WP3;**
- ✓ **pilot measures to prevent, reduce and remove marine litter in selected sites as defined in WP3.**
- ✓ **ML surveys will be carried in pelagic and coastal MPAs (e.g. Pelagos Sanctuary, Tuscan Archipelago, Zakynthos National Marine Park, Parque Nacional Del Archipiélago De Cabrera) in close collaboration between the partner MPA managers and the partners with strong competences on ML monitoring (ISPRA, UNISI, IFREMER, IEO, HCMR, MIO-ECSDE).**
- ✓ **Local and national related institutions will be also involved (OEC, Hellenic Ministry of Environment, Italian and Spanish Ministry of Environment, UNEP/MAP, etc**



# Plastic Busters MPAs WP4 - Testing



## WP4 -Testing

- Pelagos Sanctuary (IT,FR,MC)
- Tuscan Archipelago (IT)
- Zakynthos National Marine Park (GR)
- Parque Nacional Del Archipiélago De Cabrera (SP)





# Plastic Busters MPAs WP4: *Diagnosis*

## MARINE LITTER MONITORING

### 4.1 – Coordinating WP 4

#### 4.2

Piloting harmonized ML monitoring in Med MPAs to assess ML (macro- and micro-plastics) in the coastal and pelagic environment

#### 4.3

Piloting harmonized ML monitoring approaches in Med MPAs and hotspots to establish the impacts on biota, including endangered species and fishery resources

#### 4.4

Testing the ML forecasting model

#### 4.5

Preparation of the demo projects

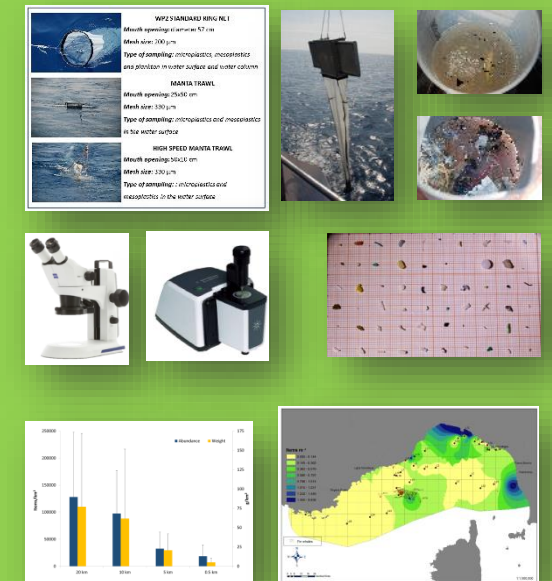
#### 4.6

Piloting ML prevention and mitigation measures

### Macroplastics



### Microplastics



# Plastic Busters MPAs WP4: Activities

## MARINE LITTER IMPACTS ON BIOTA

### 4.1 – Coordinating WP 4

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Piloting harmonized ML monitoring in Med MPAs to assess ML (macro- and micro-plastics) in the coastal and pelagic environment

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#### i) Plastic detection



Analysis of the ingested marine litter/microplastics:

- Occurrence (%)
- Abundance (n°)
- Weight (g)
- Polymer analysis

#### ii) Plastic tracers detection



Analysis of plastic additives:

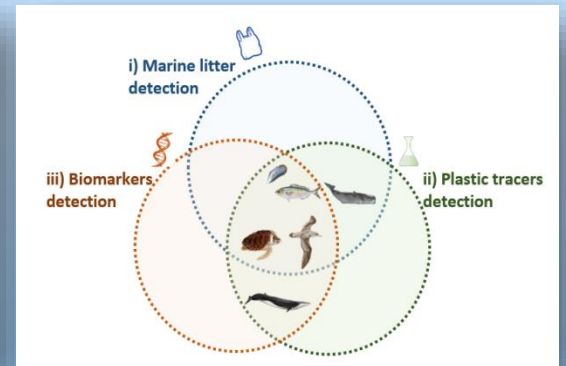
- Phthalates
- PBDEs
- Bisphenol A
- Analysis of PBT compounds:
- PCBs
- DDTs
- PAHs
- Mercury

#### iii) Biomarkers detection



Effects at molecular level:

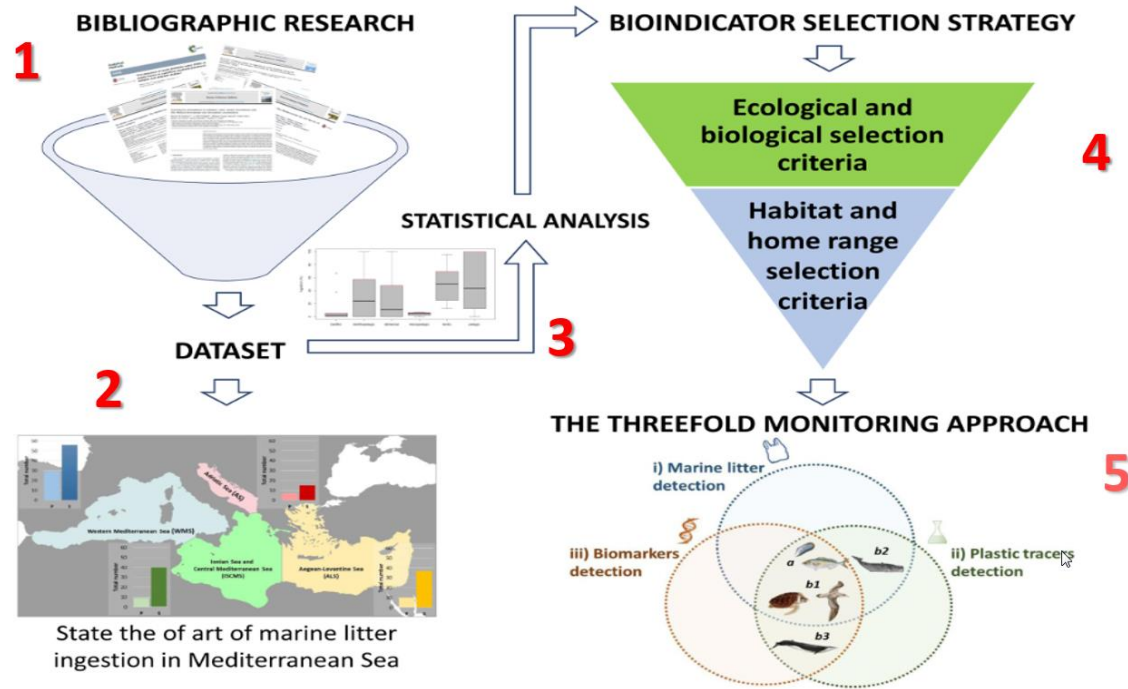
- Measure of DNA damage
- Alterations of gene expression
- Alteration of proteins
- Effects at cellular level:
- Alteration of cell functions
- Effects at tissue level:
- Histological and histopathological alterations





# Plastic Busters MPAs WP4: Activities

## Identification of marine litter bioindicators



# Plastic Busters MPAs WP4: Activities

## MARINE LITTER DISTRIBUTION MODEL

### 4.1 – Coordinating WP 4

### 4.2

Piloting harmonized ML monitoring in Med MPAs to assess ML (macro- and micro-plastics) in the coastal and pelagic environment

### 4.3

Piloting harmonized ML monitoring approaches in Med MPAs and hotspots to establish the impacts on biota, including endangered species and fishery resources

### 4.4

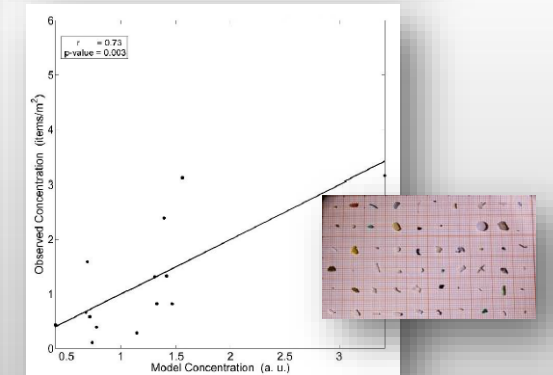
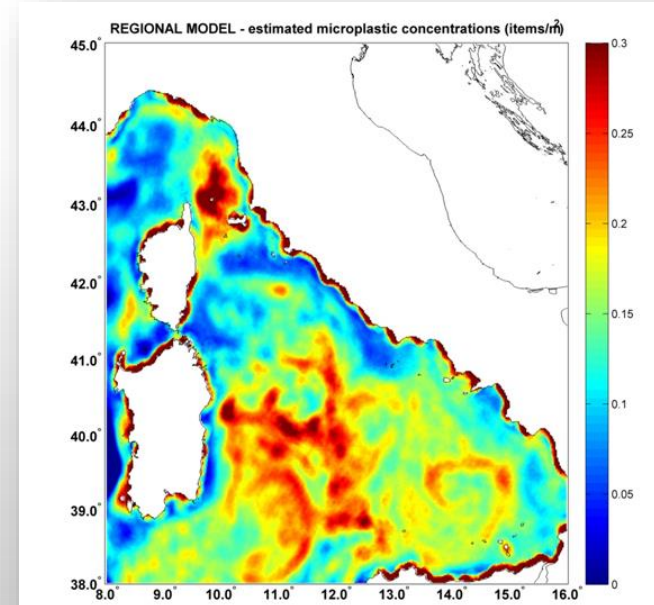
Testing the ML forecasting model

### 4.5

Preparation of the demo projects

### 4.6

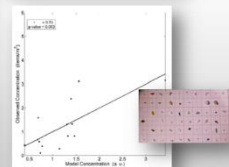
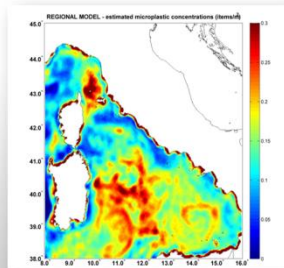
Piloting ML prevention and mitigation measures





# Plastic Busters MPAs WP4: Activities

## MARINE LITTER DISTRIBUTION MODEL

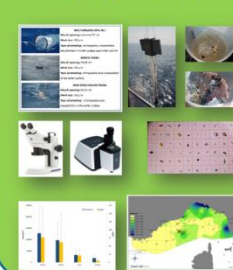


## MARINE LITTER MONITORING

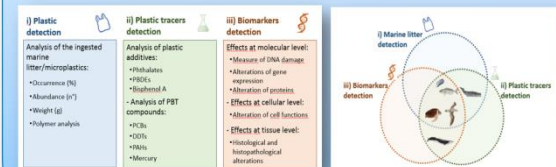
### Macroplastics



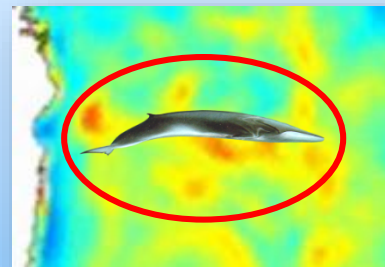
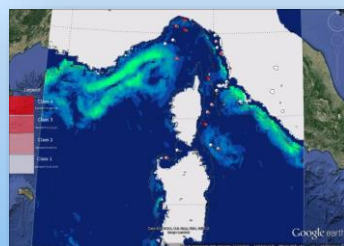
### Microplastics



## MARINE LITTER IMPACTS ON BIOTA



## RISK ASSESSMENT



# Plastic Busters MPAs WP4: *Mitigation*

## 4.1 – Coordinating WP 4

## 4.2

## Piloting harmonized ML monitoring in Med MPAs to assess ML (macro- and micro-plastics) in the coastal and pelagic environment

## 4.3

**Piloting harmonized ML monitoring approaches in Med MPAs and hotspots to establish the impacts on biota, including endangered species and fishery resources**

## 4.4

## Testing the ML forecasting model

## 4.5

## Preparation of the demo projects

## 4.6

## Piloting ML prevention and mitigation measures





# Plastic Busters MPAs WP4 – Testing

## ***AIM: Mitigation***



- ✓ **WP4 will apply the Plastic Busters multidisciplinary approach** to demonstrate how the presence, sources and effects of marine litter in MPAs can be detected and how their **impacts on Med biodiversity** (including **endangered species**) can be mitigated with tailored-made measures.
- ✓ **10 demo projects** (selected in WP3) will be implemented by several project partners in selected MPAs of **6 project countries** to mitigate the impact of ML in the project areas and the experience gained will be capitalized upon and will be further applied in several other Med MPAs in the capitalization phase (WP6).
- ✓ Indicatively, some proposed measures to be showcased include **fishing for litter, targeted removal of ghost nets, setting up deposit schemes for beverage packaging, single-use plastic bags reduction, etc.**



# Plastic Busters project and circular economy approach:

**Which are the most effective actions to put on place for removing/reducing marine litter from the Med and what about their impacts on jobs and economical growth in the Mediterranean sea basin?**



It is essential to develop at **basin scale** specific **prevention and mitigation measures/actions** (outlined in the UNEP/MAP Regional Plan on Marine litter Management in the Mediterranean under article 9 and 10) aiming to reduce the input and impacts of marine litter in the Mediterranean coastal and marine environment:

- a) **Single - use plastic reduction in MPAs;**
- b) **Deposit refund systems for beverage packaging;**
- c) **Fishing for litter, targeted recovery of ghost nets and derelict fishing gear management;**
- d) **Circular economy approach – turning plastic marine litter into products;**
- e) **The no-special-fee system to reduce dumping at sea;**
- f) **Bioremediation and biodegradation process on plastics;**
- g) **Sustainable aquaculture.**







# BEST PRACTICE Fishing for litter activity



FFL initiatives aim to reduce marine litter involving fishermen and local Authorities

Include Fishing For Litter in marine litter reduction projects

Try to recycle and/or reuse collected materials

Increase awareness-raising and educational activities



Storyboards by – louwheeler (2016)





**From the Diagnosis to the Mitigation**







# FUTURE DEVELOPMENTS IN AQUACULTURE

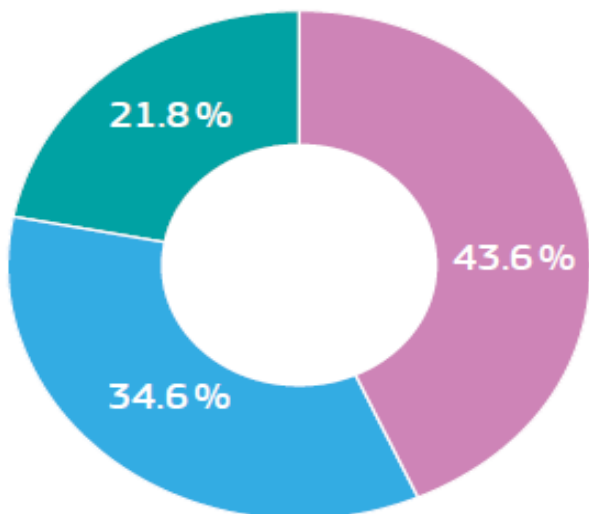
## Use of biodegradable and compostable plastics?

Marine aquaculture is a significant activity in many European regions. It uses huge amounts of plastics as nylon cage nets in fish culture and polypropylene socks in mollusk culture



Develop and test the use of bioplastics in shellfish and fish farming as an alternative to conventional plastic polymers (polyethylene, polypropylene, nylon)

EU aquaculture production per product type (2013)  
(percentage of total volume)



- Molluscs and crustaceans
- Freshwater fish (including trout and salmon farmed in freshwater)
- Marine fish (including trout and salmon farmed in seawater)





# Plastic Busters MPAs WP5: Activities

5.1

Coordinating the WP5

5.2

Development of protocols on harmonized ML monitoring approaches

5.3

Capacity building and training on how to apply harmonized ML monitoring approaches

5.4

Capacity building and training on how to implement selected ML measures in Med MPAs

5.5.

Technical support for transferring the Plastic Busters tested approaches in 10 Med MPAs

**Institutional Leader - PP 13 Ministry of Environmental and Nature Protection of Croatia**

**Operational Leader – UNISI – PP1**



## Transferring?

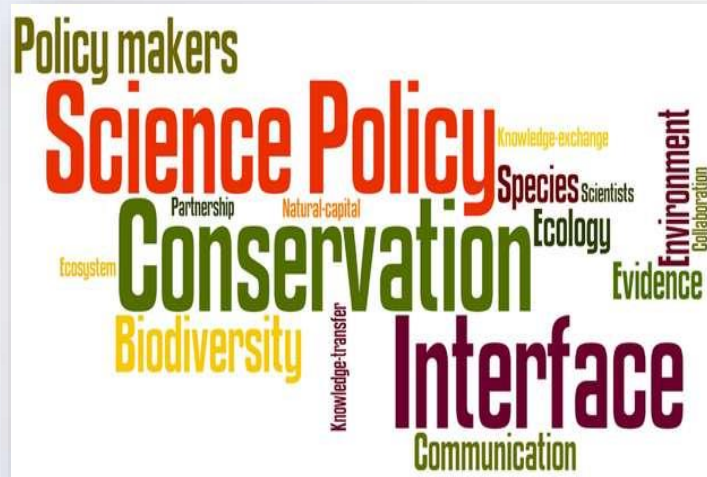


## TARGET GROUP

- MPAs Managers
- Local public authority
- Regional public authority
- National public authority
- Interest groups including NGOs
- Higher education and research
- Business support organisation
- International organisation, EEIG

# Plastic Busters MPAs WP5 - Transferring

WP5 tackles one of the main challenges of our era and one of the main challenges of all science-policy-society projects which is to bridge the gap between science, policy and society and connect the information production and knowledge generation to its use in the decision making process at different levels.



- ✓ WP5 will be implemented with **inputs from WP3 and WP4**. Its actions will be developed in full synergy with those of **WP6** while the promotion of **WP5** knowledge outputs will be supported by the communication vehicles to be developed within WP2.
- ✓ WP5 activities are important for the project success as these are expected to strengthen knowledge exploitation, **networking exchange, stakeholders' collaboration** and dialogue towards concrete, effective and continuous actions against marine litter in Med MPAs.
- ✓ The **transferring activities** will create the enabling environment for a truly transnational **Mediterranean common approach against marine litter in Med MPAs**.
- ✓ They will guarantee that the necessary tools and competences are in place in order to promote the uptake of the project results **by additional Med MPAs** (see Act.6.3), **policy and decision makers** (see Act.6.4) and other **relevant stakeholder**.



# Plastic Busters MPAs WP 6: Capitalizing

**Institutional Leader - PP11 Hellenic Ministry of Environment and Energy, Special Secretariat for Water**  
**Operational Leader – MIO-ECSDE – PP6**

6.1 Coordinating of WP6

6.2 Capitalizing and building synergies with other related initiatives

6.3 Promoting the uptake of the project results by Med MPAs

6.4 Promoting institutional uptake of the project results

6.5 Lobbying and advocacy to promote the uptake of the project results





# PLASTIC BUSTERS ON BASIN SCALE

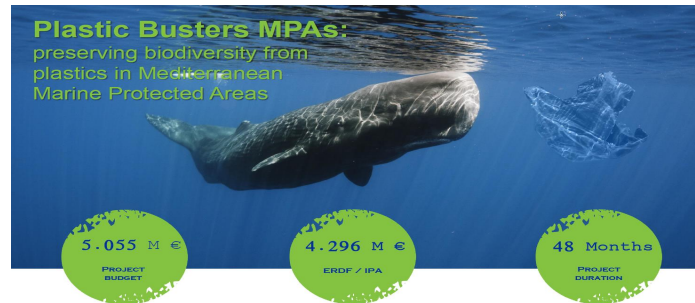


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الإتحاد من أجل المتوسط



**ENI**  
**CBCMED**  
Cooperating across borders  
in the Mediterranean

**Plastic Busters MPAs:**  
preserving biodiversity from  
plastics in Mediterranean  
Marine Protected Areas



**COMMON**

**NEWS**







# PLASTIC BUSTERS ON BASIN SCALE



## COMMON



**Thematic Objectives B.4** - Environmental protection, climate change adaptation and mitigation (Address common challenges in environment)

**CO**astal **M**anagement and **MO**nitoring **N**etwork for tackling marine litter in Mediterranean sea

### Partners

Legambiente Onlus – ITALY (LP)  
University of SIENA – ITALY  
C.I.H.E.A.M. – Istituto Agronomico Mediterraneo di Bari –ITALY  
Institut National des Sciences et Technologies de la Mer – TUNISIA  
Amwaj of the Environment Beirut - LEBANON  
Tyre Coast Nature Reserve – LEBANON  
University of Sousse – TUNISIA

**Geographic coverage**  
Tunisia, Italy, Lebanon

**Budget**  
€ 2.223.421,48





# PLASTIC BUSTERS ON BASIN SCALE



## COMMON



### AIM

The **COMMON** project aims at applying the Coastal Zone Management (ICZM) principles to the **marine litter management**, improving the environmental performance of **5 pilot coastal areas in Italy (2), Tunisia (2) and Lebanon (1)**, testing a model that could be transferred to the whole Mediterranean area.

Thanks to an improved knowledge of the marine litter phenomenon, specific **training** and **capacity building activities** addressed to local and **regional authorities, MPAs, Turtles Rescue Centres and citizens, thematic awareness campaign and material, targeted networking activities at basin level**, COMMON project will engage local communities in incorporating marine litter management and disposal in coastal planning with the ICZM approach.

The project specific objective is to **enhanced the capacity of public authorities** in the 5 selected areas to plan for **sustainable management**, use and **monitoring of marine litter sources**, treatment and consequences , employing an effective participatory approach **involving relevant stakeholders** and local communities according to the **Plastic Busters strategy**.







# PLASTIC BUSTERS ON BASIN SCALE



## COMMON



### General objective

The **COMMON** project aims at applying the **Coastal Zone Management principles** to the **marine litter management in 5 pilot coastal areas** through a local coordination and the Mediterranean networking among different stakeholders.

### Specific Objectives

1. Testing an integrated strategy for **marine litter management and disposal at coastal level** that could be transferred to the whole Mediterranean area
2. Building **multi-stakeholder networks at basin-level** for tackling marine litter in a coordinate and integrated manner
3. Enhance the capacity of public authorities in **5 pilot areas**, to plan for sustainable management, use and **monitoring marine litter sources, treatment and consequences**, employing an effective participatory approach **involving relevant stakeholders and local communities**



# AWARENESS RAISING

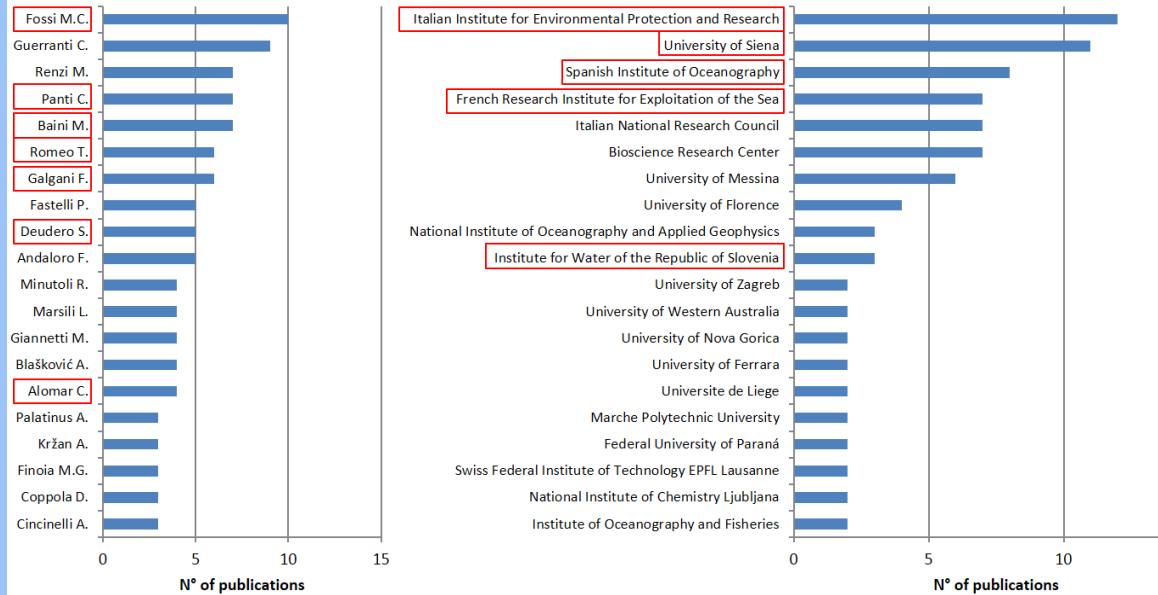
## Publications on microplastics

MED area (2012 – 2018)

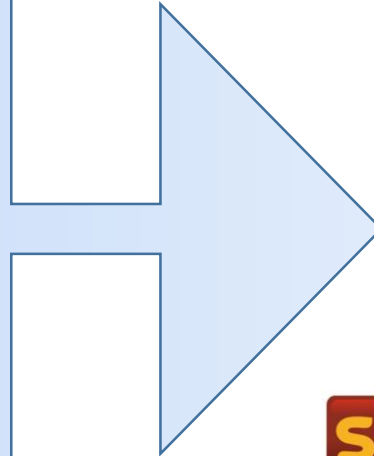
Results: 64 documents

Authors (first 20 entries)

Institutions (first 20 entries)



Bibliometrics from scopus - Keywords: "microplastics" AND "Mediterranean Sea"



Whale and shark species at increasing risk from microplastic pollution - study

Large filter feeders, such as baleen whales and basking sharks, could be particularly at risk from ingesting the tiny plastic particles, say scientists







# PLASTIC BUSTERS KEY MESSAGE

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| Rue du Champ de Mars, 21                                |
| 1050 - Bruxelles  |



## 1. Defining success for the pilot plastic-free Mediterranean

- What would constitute a success for a pilot plastic-free Mediterranean by 2025? What benefits would it bring to the Mediterranean citizens by 2025?
- *Binding Southern and Northern Mediterranean countries under the same strategy, of monitoring and mitigation, developed within the project PLASTIC BUSTERS*
- *The **transferring activities** (in EU and IPA countries through the project PLASTIC BUSTERS MPAs and between northern and southern countries through the project COMMON) will create the enabling environment for a truly transnational Mediterranean **common approach against marine litter** in Mediterranean countries.*





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## 2. Developing a portfolio of actions and concrete measures to make the pilot a success (1)

- Which areas would need to be part of a portfolio of actions that together would make the pilot a success (e.g. prevention of plastic waste, prevention of leakage, mitigation, knowledge creation)?
- *Mainly **knowledge creation** and **mitigation action** are the main objectives of PLASTIC BUSTERS (WP4)*
- What concrete measures could and should be taken in each of the action areas?
- ***Knowledge creation:** a) defining harmonized methodologies at regional and national level for ML monitoring; b) identifying ML hotspots, where ML accumulates and marine species live and feed; c) assessing the impact of ML on biodiversity in MPAs; d) defining impact on Fisheries.*
- ***Mitigation action:** a) Single - use plastic reduction; b) Deposit refund systems for beverage packaging; c) Fishing for litter, targeted recovery of ghost nets and derelict fishing gear management; d) Circular economy approach – turning plastic marine litter (e.g. fishing gear) into products; e) The no-special-fee system to reduce dumping at sea; g) Sustainable aquaculture.*







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| Rue du Champ de Mars, 21                                |
| 1050 - Bruxelles  |

## 2. Developing a portfolio of actions and concrete measures to make the pilot a success (2)

- How can the generation of plastic waste be reduced, which is currently increasing in the EU? Does the development of alternative materials (e.g. novel bio-based solutions) need to be strengthened and how can their use be encouraged? How can design choices reduce plastics? What other ways to reduce plastic waste generation?
- *Sustainable aquaculture. Develop and test the use of bioplastics in shellfish and fish farming as an alternative to conventional plastic polymers (polyethylene, polypropylene, nylon).*
- How to prevent the discarding of plastic products by encouraging their re-use, re-cycle and/or their repair?
- *Training and capacity building activities addressed to local and regional authorities, MPAs and citizens, thematic awareness campaign and material, targeted networking activities at basin level.*
- What measures can be taken to prevent leakage of plastics into the Mediterranean? How to reduce the main macroplastic items found on the coast and ocean and microplastics?
- *Apply specific mitigation actions: a) Single - use plastic reduction; b) Deposit refund systems for beverage packaging; c) Fishing for litter, targeted recovery of ghost nets and derelict fishing gear management; d) Circular economy approach – turning plastic marine litter (e.g. fishing gear) into products; e) The no-special-fee system to reduce dumping at sea; g) Sustainable aquaculture; h) to ban microplastics from cosmetics and abrasives on a basin scale.*



# PLASTIC BUSTERS KEY MESSAGE

## 2. Developing a portfolio of actions and concrete measures to make the pilot a success (3)

- What are the most effective measures to collect plastics from the ocean? What role for hotspots such as rivers, beaches, harbours?
- *Removal actions: a) Fishing for litter, targeted recovery of ghost nets and derelict fishing gear management; b) remove plastic from the beaches; c) remove plastic from the river banks.*
- What **research is needed** to make the pilot a success? What new knowledge needs to be created to enable the transition to a circular plastics economy? What's the **role of science and research** in this process? What role for scientists and researchers?
- *a) identifying ML hotspots where ML accumulates and marine species live and feed; b) assessing the impact of ML on Mediterranean biodiversity and fisheries; c) define the potential impact on human linked to the consumption of sea food (microplastics/nanoplastics and related additives); d) define (through laboratory experiments) the different toxicological impact of plastics and bio-plastics in marine organisms. e) to experiment the use of bioplastics in aquaculture; f) finally, is essential the transfer of correct information and awareness raising (on solid scientific basis) both to policy makers and the general public.*
- Which promising technologies and innovations are on the horizon? What role for social innovation?
- *Novel bio-based solution, design products for life and end-of-life.*





# PLASTIC BUSTERS KEY MESSAGE

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|---|
| DRAFT AGENDA  |
| BLUEMED Pilot: Towards a plastic-free Mediterranean Sea |
| Tuesday 12 March 2019                                   |
| 9:00 – 16:30  |
| Room: CDMA -1/44  |
| Rue du Champ de Mars, 21                                |
| 1050 - Bruxelles  |

## 3. Building a partnership to successfully implement the portfolio of actions

- What would a partnership look like that could successfully implement the required actions? Which actors need to be mobilized that together could make the pilot a success?
- *Bridge the gap between science, policy and society and connect the information production and knowledge generation to its use in the decision making process at different levels. TARGET GROUPS (MPAs Managers, Local public authority, Regional public authority, National public authority, Interest groups including NGOs, Higher education and research, Business support, organisation, International organisation, EEIG)*
- Which existing networks could be mobilised? What existing initiatives, programmes, projects, etc. could be scaled up to be more effective?
- *PLASTIC BUSTERS MPAs and COMMON NETWORKS which works in synergy with other important initiatives at the EU (H2020) and MED (MED-Interreg, ENI-CBC) level*
- *All these initiative will support the implementation of the MSFD and the Barcelona Convention Regional Plan on Marine Litter Management in the Med.*





# Plastic Busters MPAs:

preserving biodiversity from  
plastics in Mediterranean  
Marine Protected Areas



@PlasticsB\_MPA



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**Interreg**  
Mediterranean



**Interreg**  
Mediterranean



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MPAs

**Thanks !**