



# Second International TouMaLi Conference

Effective Waste Management for Sustainable Tourism and Marine Ecosystem Protection

Marrakesh, 8th & 9th of November 2023

Sana Ben Ismail, Associate Professor, INSTM





 Plastic Busters CAP

# THE PLASTIC BUSTERS CAP

## Project Activities

SANA BEN ISMAIL, INSTM



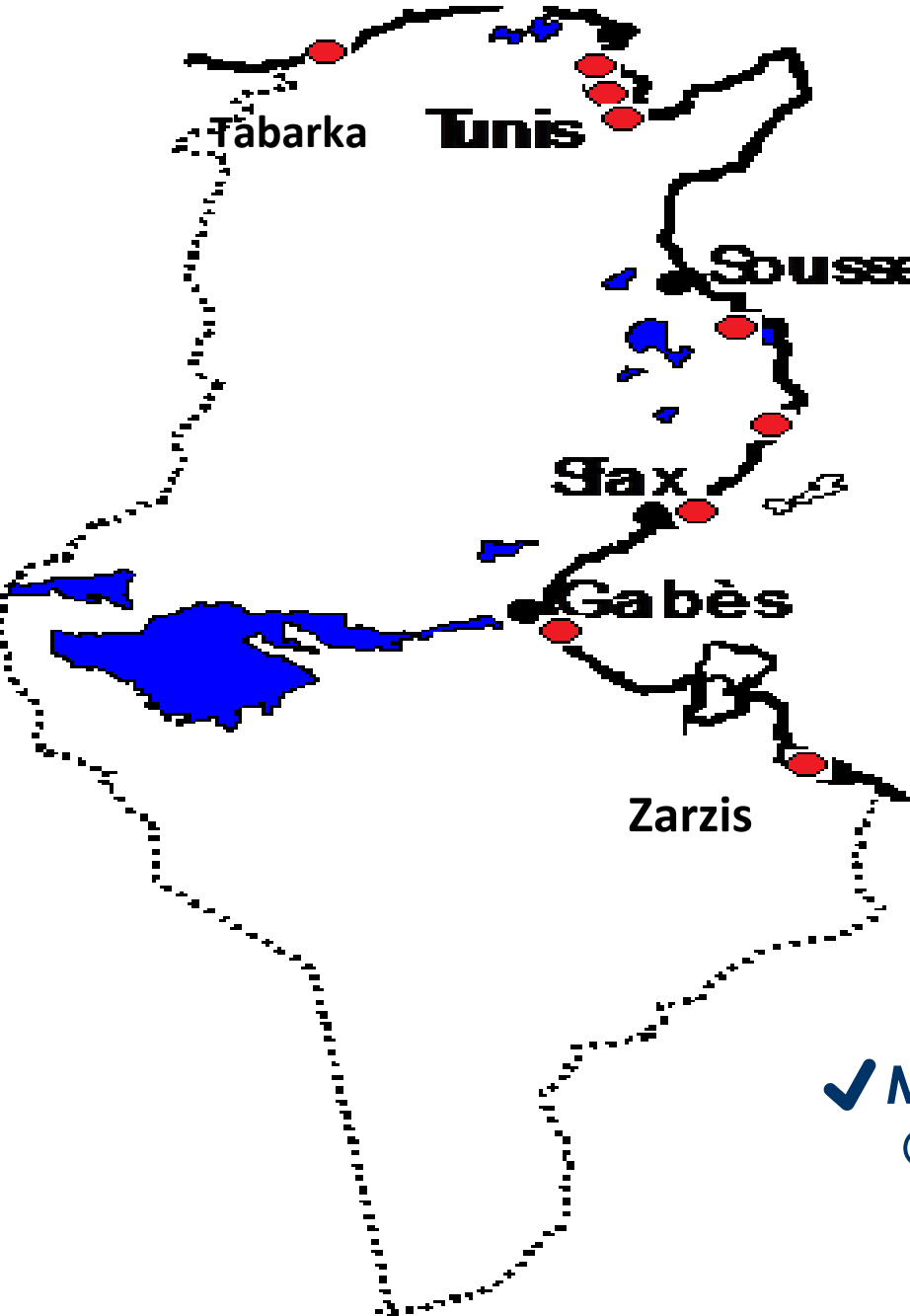




# INSTM

INSTM is one of the largest and widespread research center in Tunisia, founded in 1924 for the marine research and technologies.





- ✓ **Supervision:** Ministry of Agriculture, Hydraulic Resources and Fisheries
- ✓ **Structure :** EPA (public administrative establishment)

- ✓ **8 regional centers:**  
Tabarka; La Goulette;  
Kheireddine, Monastir;  
Mahdia; Sfax; Gabès; Zarzis.

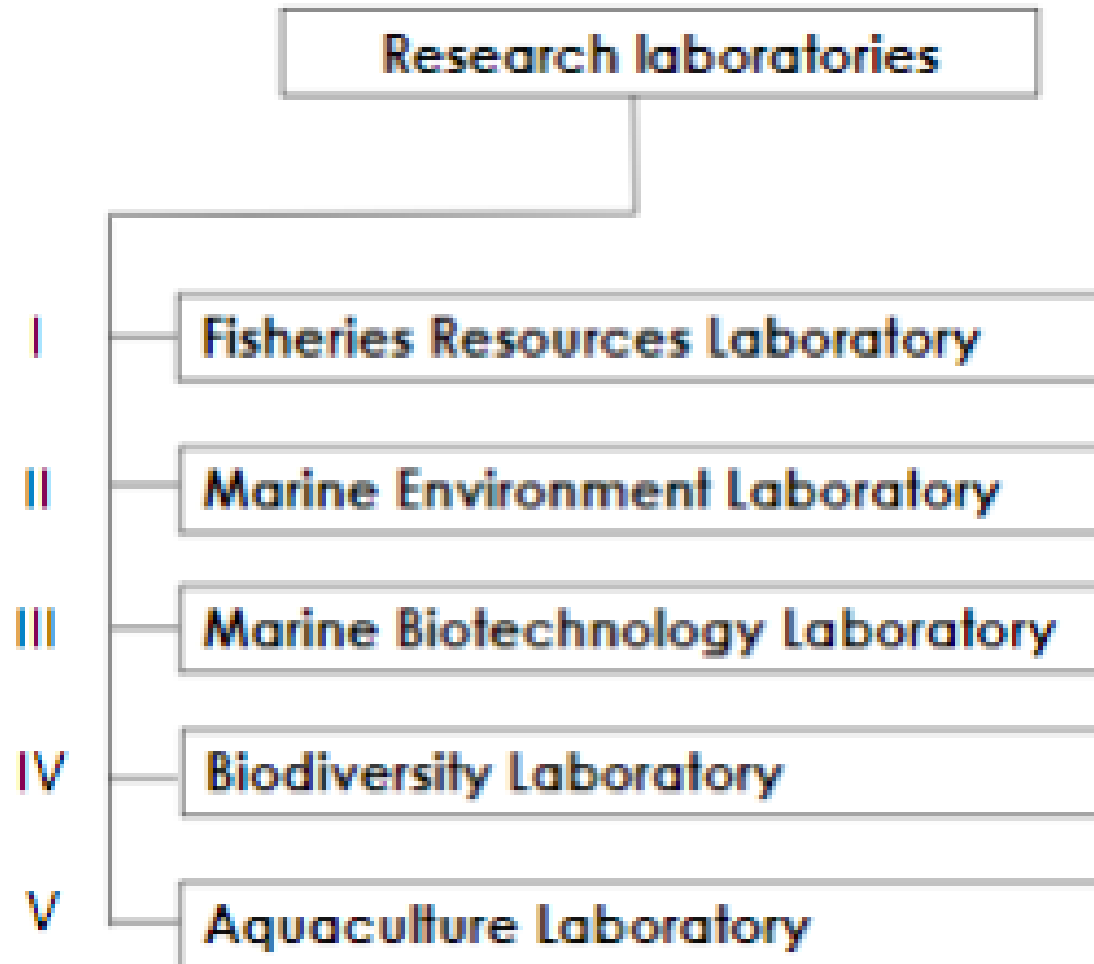
- ✓ **Human Ressources:**
  - ✓ 270 employe
  - ✓ 100 researchers

- ✓ **Museum Dar EL Hout**  
Oceanographic Museum  
Dates : **20th century (1924)**  
Receives: **65,000 visitors/year**





# Structuring of research activities





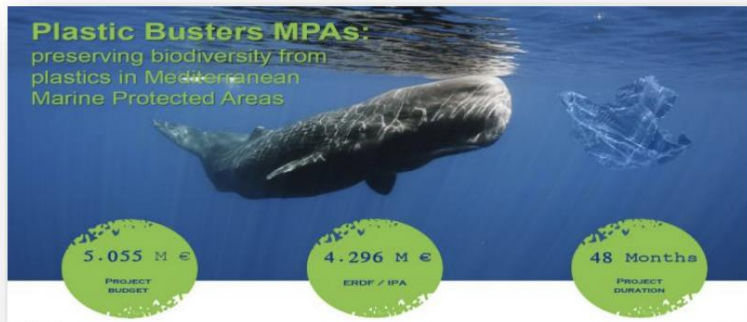
# PLASTIC BUSTERS ON BASIN SCALE

## TRANSFERRING/CAPITALIZATION OF PLASTIC BUSTERS MPAs



ENI  
CBCMED  
Cooperating across borders  
in the Mediterranean

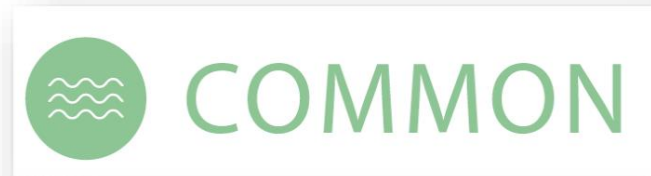
**Plastic Busters MPAs:**  
preserving biodiversity from  
plastics in Mediterranean  
Marine Protected Areas



5.055 M €  
PROJECT BUDGET

4.296 M €  
ERDF / IPA

48 Months  
PROJECT DURATION







**8 Partners et 11 Associate Partners**



## General objective

To facilitate decision makers and stakeholders in **effectively tackling Marine Litter** by integrating **Ecosystem Based Management** into **Integrated Coastal Zone Management** planning towards **supporting concrete mitigation actions on the science-policy-society interface**.

## Specific Objectives

- To enhance and **transfer knowledge**, experience and best practice tools that address the **entire management cycle of ML**, from **monitoring and assessment to prevention and mitigation**, towards an integrated and strategic approach that couples EbM and ICZM into local development planning
- To design and **implement fit-for-purpose ML knowledge transfer and capacity building** mechanisms for public administrations and stakeholders, and facilitate multi-directional relationships between stakeholders, towards co-evolution of knowledge, strengthened decision-making and effective actions
- To promote the **replication and sustainability of the project results via strategic dissemination and awareness raising** of public authorities and policy-makers, effective mobilization of key stakeholders, and strengthened **cross-border and cross-sectoral cooperation and networking to address ML**





# Plastic Busters CAP

Plastic Busters CAP



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

## PLASTIC-BUSTERS

For a Mediterranean free from litter/UfM-INTERREG MED/Feb 2018-Jan 2022



## MPA-ADAPT

Guiding Mediterranean MPAs through the climate change era: Building resilience and adaptation (MPA-ADAPT)/INTERREG MED/Nov 2016-May 2019

## COMMON

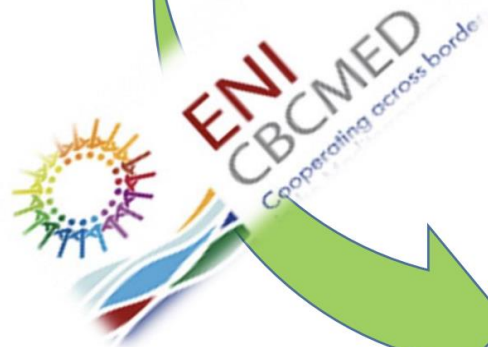
COastal Management and MOnitoring Network for tackling marine litter in Mediterranean sea (COMMON)/ENI CBC MED/Sep 2019-SEP 2020

## Co-Evolve4BG

Co-evolution of coastal human activities & Med natural systems for sustainable tourism & Blue Growth in the Mediterranean (Co-Evolve4BG)/ENI CBC MED/Sep 2019-Aug 2020

## MED4EBM

Mediterranean Forum For Applied Ecosystem-Based Management (MED4EBM)/ENI CBC MED/Oct 2019-Oct 2022



## Plastic Busters CAP

## Plastic Busters CAP

### PLASTIC BUSTERS MPAS ADDRESSES THE ENTIRE MANAGEMENT CYCLE OF MARINE LITTER



WP1

• PROJECT MANAGEMENT

WP2

• PROJECT COMMUNICATION

WP3

• MARINE LITTER MONITORING AND MITIGATION

WP4

• MARINE LITTER GOVERNANCE AND POLICY  
MAINSTREAMING



# The plastic busters cap marine litter monitoring & mitigation component

- ✓ Organization of **national training events** and a **Mediterranean-wide e-course**
- ✓ Piloting harmonized **marine litter monitoring** in **4 countries**
- ✓ Implementing a Mediterranean-wide **participatory science campaign**
- ✓ Setup of **demo projects** focusing on **showcasing ML prevention and mitigation measures** in the **4 countries**
- ✓ Carrying out an **awareness raising campaign** in all project countries aiming to promote information on the sources but also the solutions to tackle ML and plastic pollution.



# PLASTIC BUSTERS CAP Training programme on Marine Litter Monitoring & Mitigation



2-3 November 2022  
BIZERTE, TUNISIA



1-2 March 2023  
MATRUH, EGYPT



14-16 March 2023  
AQABA, JORDAN



May 2023  
TYRE, LEBANON

**IT'S A WRAP**

ENI CBCMED  
Cooperating formal bodies  
in the Mediterranean

Project funded by the  
EUROPEAN UNION

REGIONE AUTONOMA DI SARDEGNA  
REGIONE AUTONOMA DELLA SARDEGNA



Photo: Thomas Vlachogiannis

Plastic Busters CAP

Mediterranean e-course on marine litter monitoring & mitigation  
17 & 19 January 2023, 10.00 - 14.00 CET

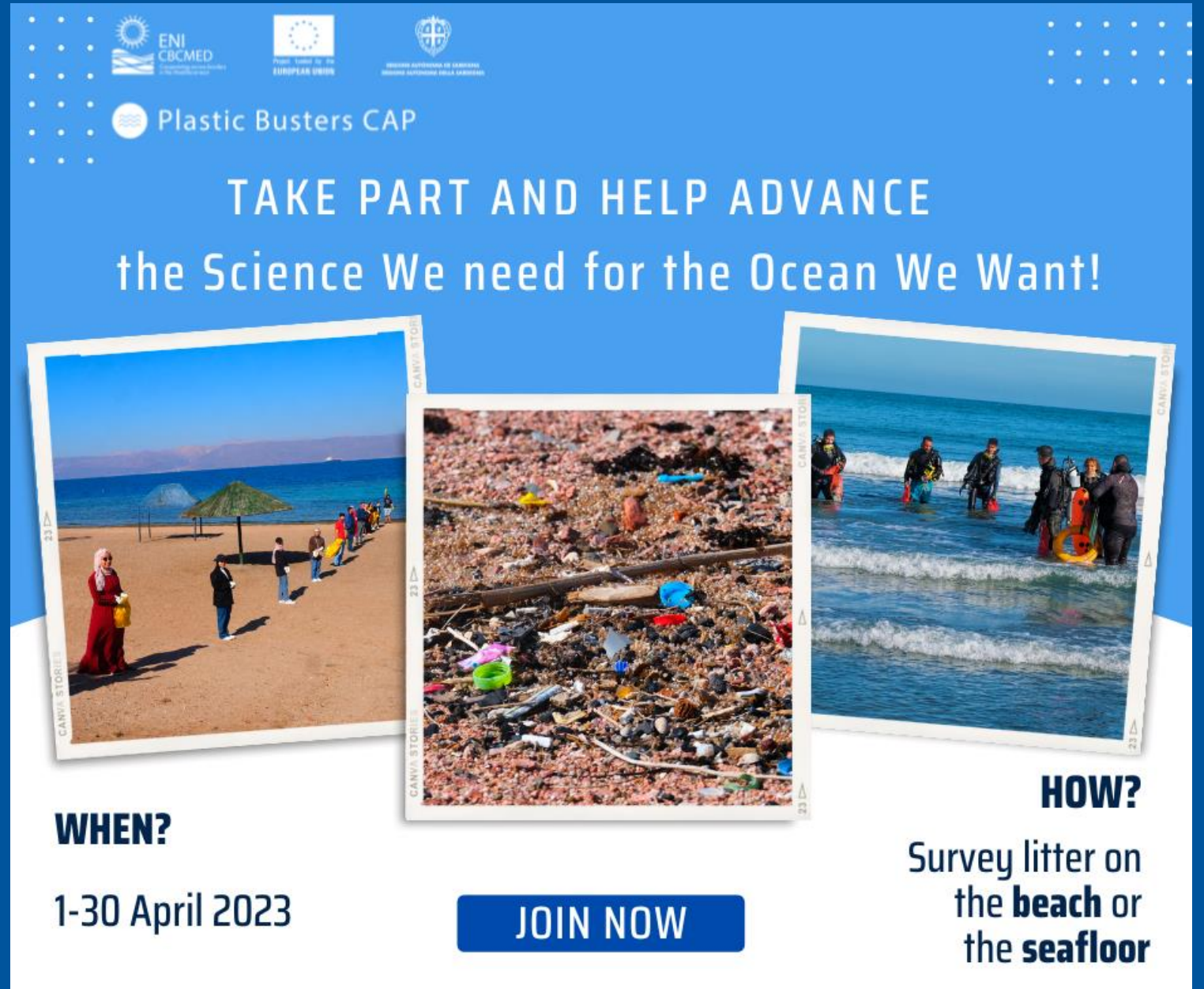


# Piloting harmonized marine litter monitoring

Egypt	BEACH MACROLITTER				
Lebanon	BEACH MACROLITTER	FLOATING MACROLITTER	FLOATING MICROLITTER	INGESTED MICROLITTER	
Jordan	BEACH MACROLITTER	FLOATING MACROLITTER	FLOATING MICROLITTER	INGESTED MICROLITTER	
Tunisia	BEACH MACROLITTER	FLOATING MACROLITTER	FLOATING MICROLITTER	INGESTED MICROLITTER	BEACH MICROLITTER

# THE PLASTIC BUSTERS CAP PARTICIPATORY SCIENCE CAMPAIGN IN A NUTSHELL

- To empower individuals and communities to take up action and fill in the data gaps that **hamper** the implementation of essential measures for a Mediterranean litter free.
- The power of participatory science and community-based research is that all of us can take part and generate fit-for-purpose data, fill in the environmental knowledge data gaps and contribute to effective environmental decision-making.






The poster features a blue background with white text and logos. At the top, there are logos for ENI CBCMED, the European Union, and the University of Ljubljana. Below these is the text 'Plastic Busters CAP'. The main headline reads 'TAKE PART AND HELP ADVANCE the Science We need for the Ocean We Want!'. Three polaroid-style photos are arranged in a row: the first shows a group of people on a sandy beach; the second shows a close-up of a beach covered in plastic litter; the third shows people wading in the ocean. At the bottom, there are three sections: 'WHEN?' with the dates '1-30 April 2023', a blue 'JOIN NOW' button, and 'HOW?' with the text 'Survey litter on the beach or the seafloor'.

ENI CBCMED  
EUROPEAN UNION  
UNIVERSITY OF LJUBLJANA

Plastic Busters CAP

TAKE PART AND HELP ADVANCE  
the Science We need for the Ocean We Want!



**WHEN?**  
1-30 April 2023

**JOIN NOW**

**HOW?**  
Survey litter on the **beach** or the **seafloor**



# TESTING MEASURES TO ADDRESS MARINE LITTER



Setting up a SUPs-free network of coastal food and beverage outlets



Setting up the adopt-a-beach scheme



Developing an awareness raising campaign for cigarette-butt free beaches



Targeted removal of litter



Developing a network of collection points for beverage containers

Egypt

Lebanon

Jordan

Tunisia

# THE STUDY AREAS : Main activities developed in Tunisia - PB CAP Project (scientific activities)

Microplastic monitoring using a manta net

-Number of MPs found in transect 1 : **178**

-Number of MPs found in transect 2: **80**

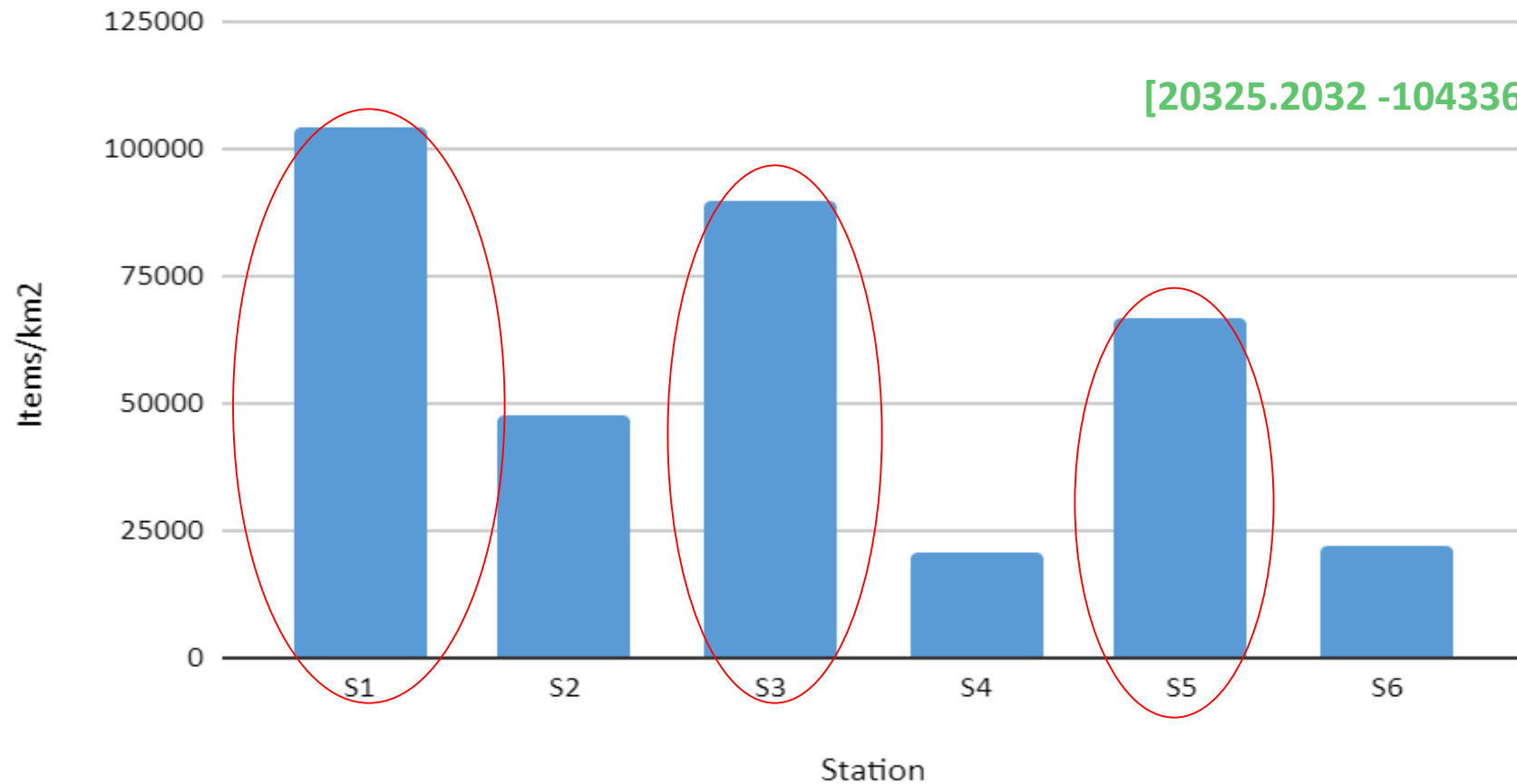




## ACHIEVED SCIENTIFIC ACTIVITIES

### Microlitter monitoring using manta net: Abundance of microplastic items per station

Abundance per station



[20325.2032 -104336.043 items/km<sup>2</sup>]



# FLOATING LITTER DENSITY IN ITEMS/KM<sup>2</sup>

Two transects were conducted at two stations. The sample size is quite small, and it only offers limited insights into the observed litter density.

Average  
litter density

225  
items/km<sup>2</sup>

The main items observed were:

pieces of plastic shopping/carrier/grocery bags (J3) &  
pieces of small plastic bags (J2)





# THE STUDY AREAS : Monitoring Microplastic in the Beach





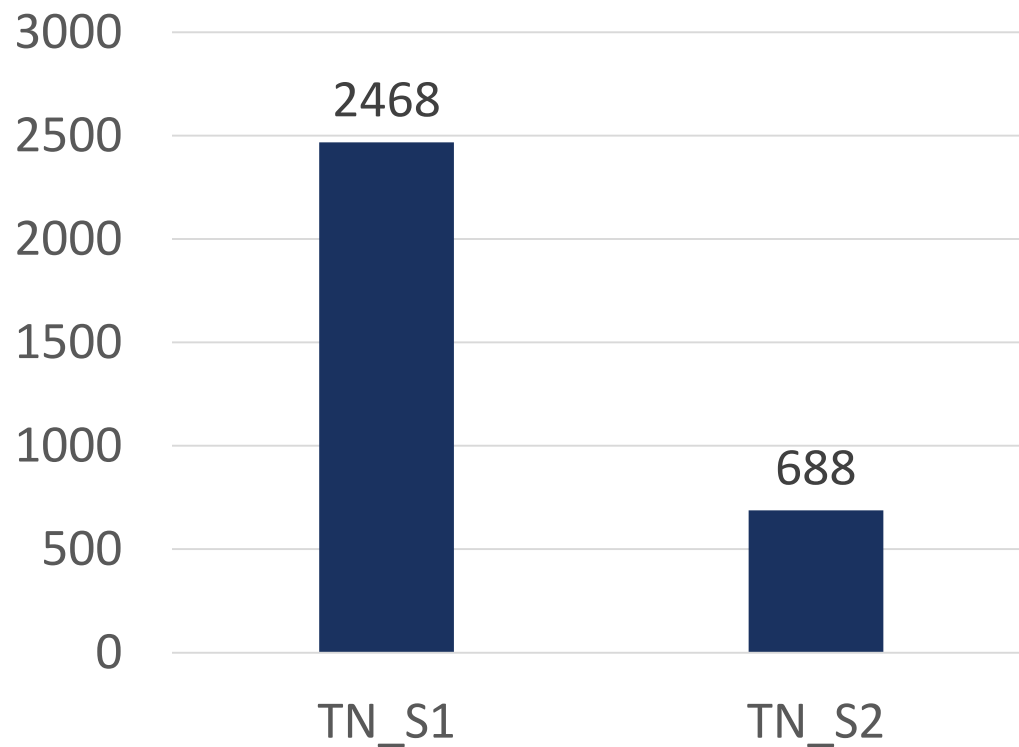
# IMPRESSIONS FROM OUR PILOT ML BEACH MONITORING ACTIONS





# BEACH LITTER DENSITIES IN NUMBER OF ITEMS/100M

A total of 3,156 litter items were collected, sorted and classified in 2 beach litter surveys



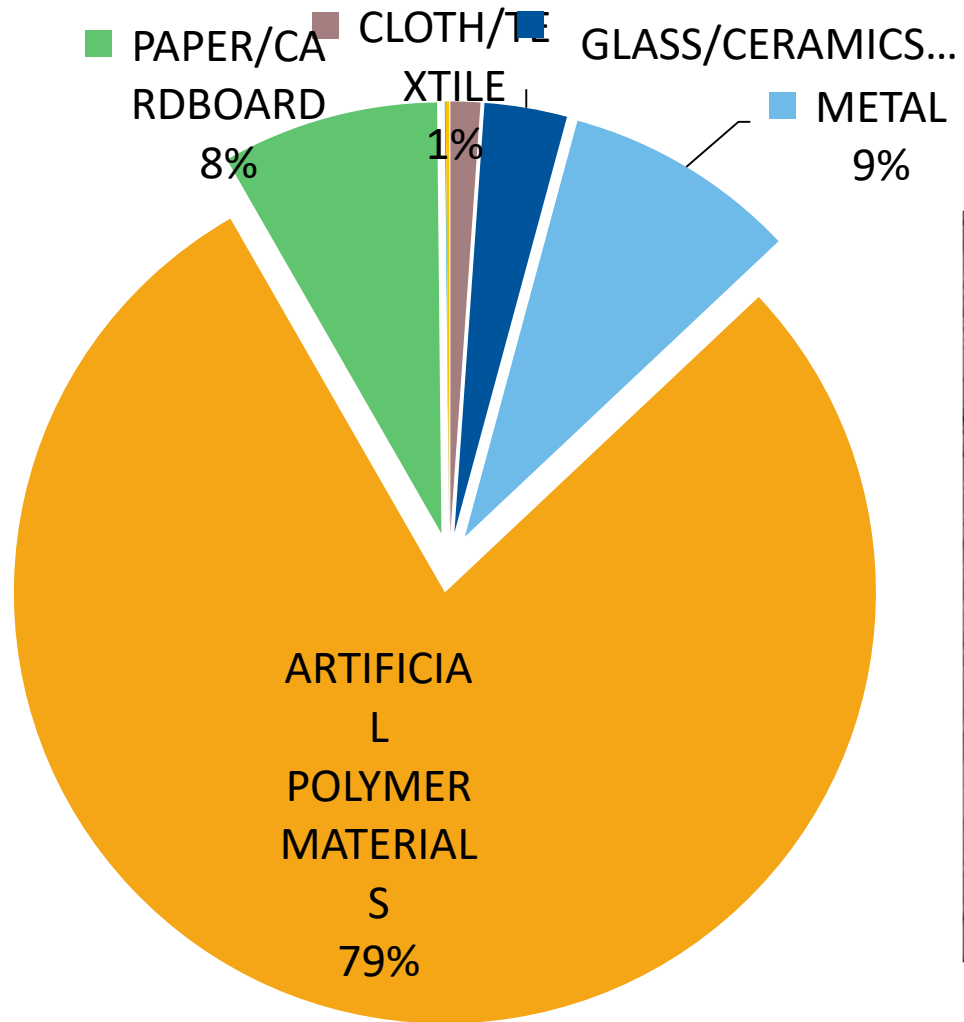
Average density: **1,578 items/100 m**

**x 12 times higher** than the Mediterranean beach litter threshold value

**x 29 times higher** than the European beach litter threshold value



# PERCENTAGE (%) OF TOTAL LITTER ITEMS PER MATERIAL TYPE





# TOP 10 MARINE LITTER ITEMS

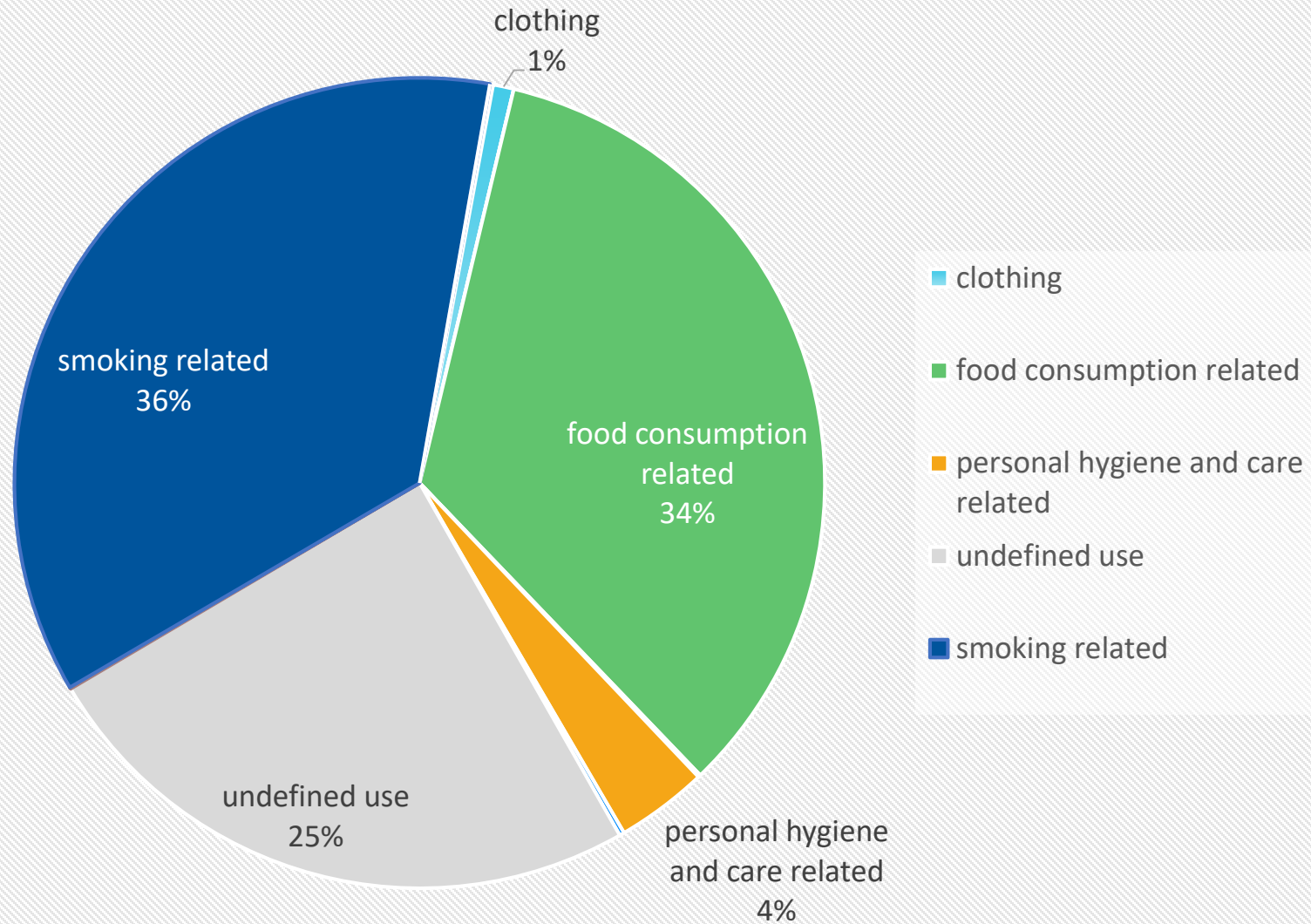
1	J27	tobacco products with filters (cigarette butts with filters)	32
2	J21	plastic caps/lids drinks	14
3	J3	plastic shopping/carrier/grocery bags	10
4	J177	metal foil wrappers, aluminium foil	5
5	J8	plastic drink bottles >0.5 l	4
6	J152	paper cigarette packets	4
7	J231	plastic straws	3
8	J227	cups and lids of hard plastic	2
9	J151	paper cartons/Tetrapak (non-milk)	2
10	J237	plastic wet wipes	2



79%

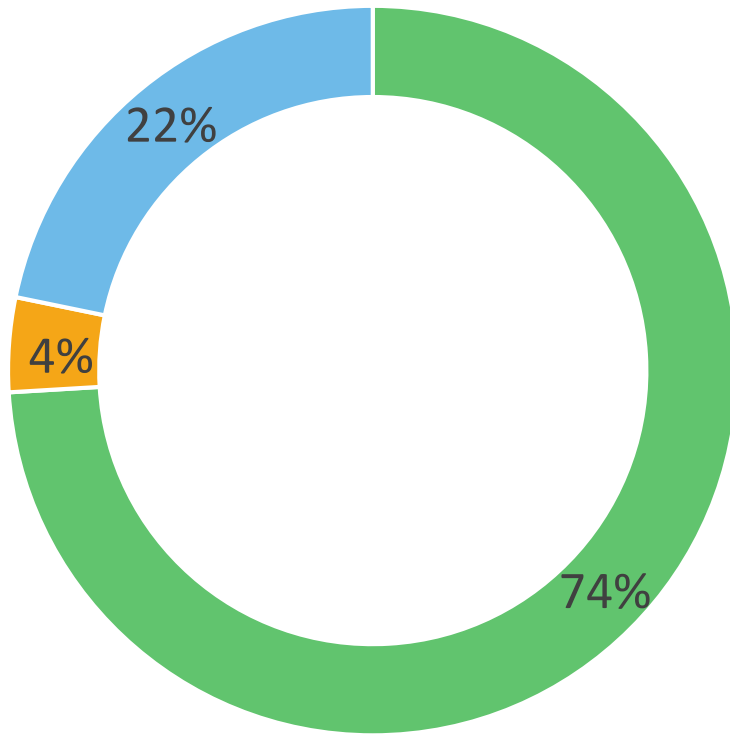


# SOURCES OF BEACH LITTER



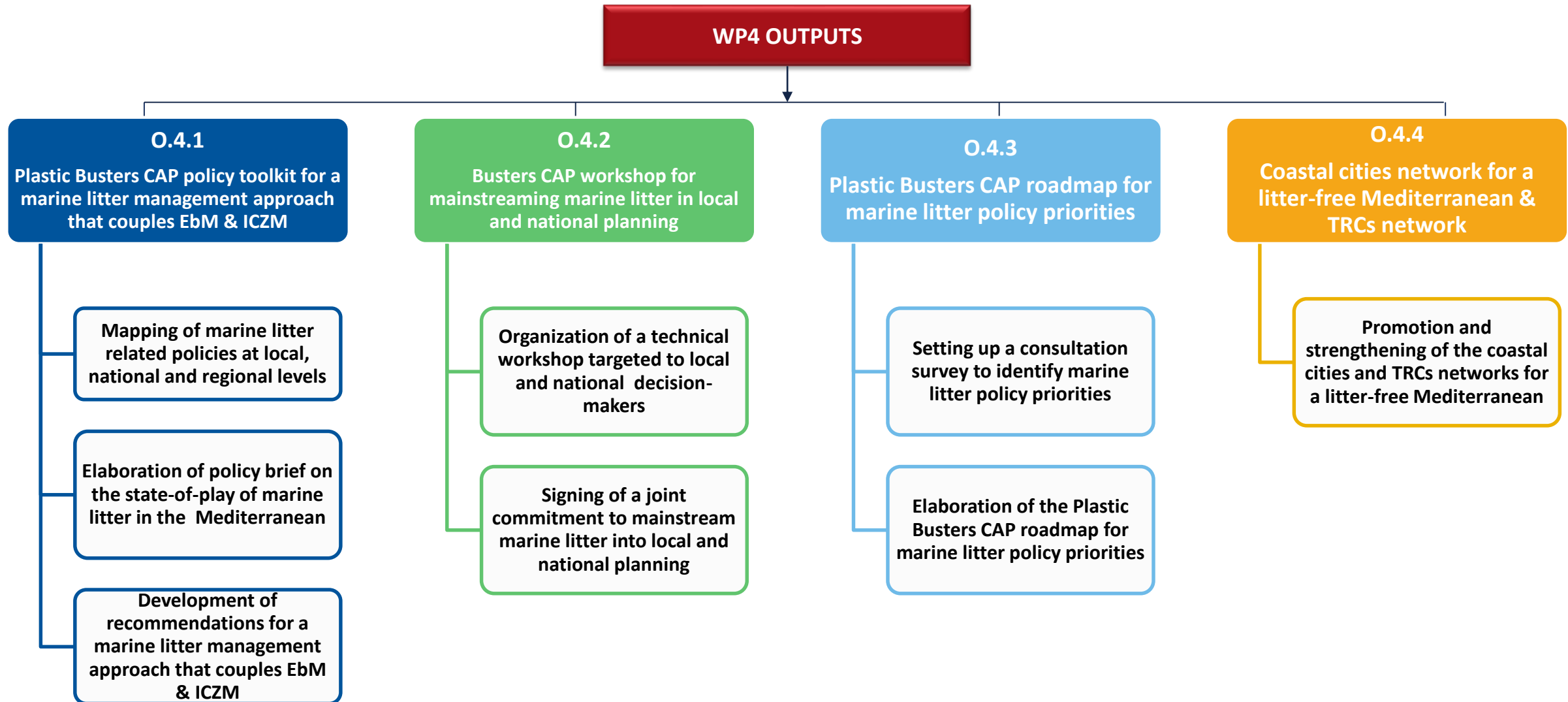


# SUPS RESULTS & FINDINGS FOR BEACH LITTER



■ SUP   ■ non SUP plastics   ■ non plastics

# The plastic busters cap policy component (WP4)





# THE WORKSHOP AIM

- The technical workshop aims to bring together Mediterranean policy-makers and other key stakeholders who will work within a dynamic and interactive setup towards the identification of a core set of policy recommendations for mainstreaming marine litter, which deploy a management approach that couples Ecosystem-Based Management & Integrated Coastal Zone Management.

The technical workshop is organized within the framework of the UfM labelled ENI CBC Plastic Busters CAP project by the National Institute of Marine Sciences and Technologies of Tunisia (INSTM) in close collaboration with the Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE) and the University of Siena (UNISI).

# The objectives



Leverage the knowledge, know-how, experiences and lessons learned obtained from marine litter initiatives in the Mediterranean addressing the entire management cycle of marine litter, from monitoring and assessment to prevention and mitigation.



Review the most recent policy and scientific advancements related to marine litter in the region and provide an opportunity for stakeholders to create synergies and foster exchanges on the science-policy-society interface.



Engage with policy-makers and decision-makers at all levels of governance and enhance institutional capacities for integrating marine litter in local and national planning



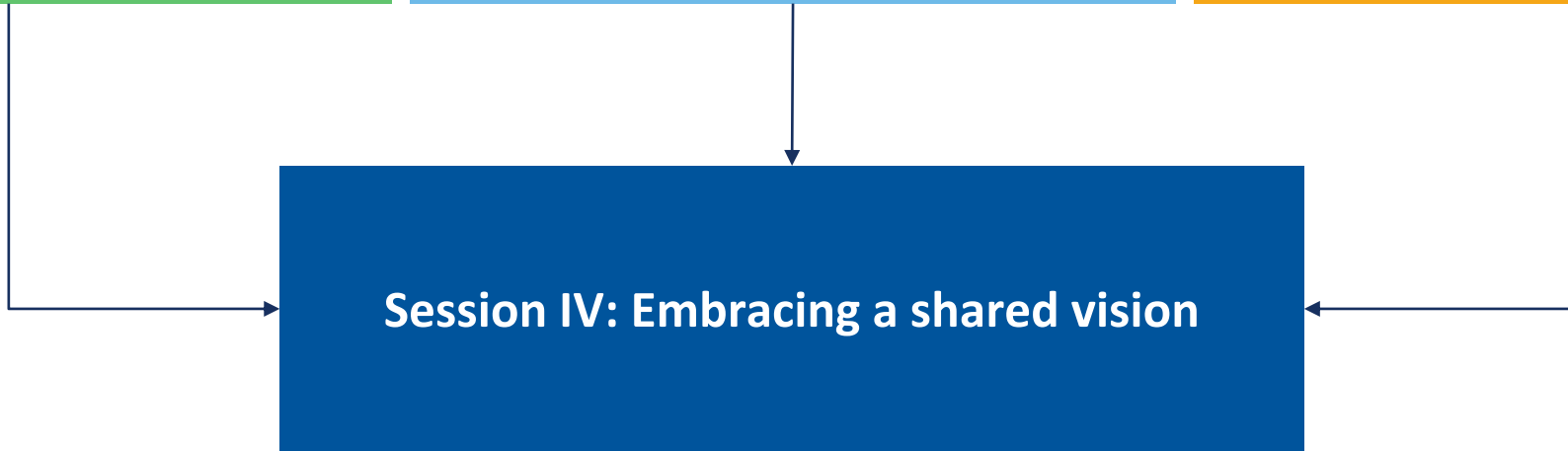
# The workshop setup

**Session I:  
Setting the scene**

**Session II:  
Bridging science and policy**

**Session III:  
Bridging policy and practice**

**Session IV: Embracing a shared vision**



## ■ Empowering Coastal Cities: Integrating Local Governance Perspectives into the Plastic Busters CAP Technical Workshop



- ❑ The technical workshop is held back-to-back with the Plastic Busters CAP online meeting targeting the Coastal Cities Network for a litter-free Mediterranean.
- ❑ This meeting aims to strengthen the involvement of local authorities and local communities in the collective fight for a litter-free Mediterranean and ensure that local governance perspectives are effectively streamlined into the technical workshop.
- ❑ The participants of the parallel online meeting will attend Session I and part of Session II. During Session III, the rapporteur of the online event will present the outcomes of the online group, highlighting their recommendations for a marine litter management approach that couples EbM & ICZM.

The online meeting is organized by LEGAMBIENTE.



A project labelled by UfM



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

## Plastic Busters CAP

### Objective :

This training aims to build capacity for the various stakeholders

- Monitoring of macro and micro litter on the sea surface;
- Analysis of microplastic samples collected by the Manta net.
- Analysis of marine litter in fish and invertebrates species
- Analysis of macro and micro litter on beaches.

**video about the national training on marine litter monitoring and mitigation that took place in Bizerte from November 2 to 3, 2022.**

<https://www.facebook.com/INSTMPageOfficielle/videos/640867787533187>





# THANK YOU FOR YOUR ATTENTION

“ For a litter FREE Mediterranean



A project labelled by UFM  
Union for the Mediterranean  
Union pour la Méditerranée  
الاتحاد من أجل المتوسط

