

Activity: WES N-E-MO-2

Training on marine litter monitoring

Water and Environment Support (WES): an overview

The WES marine litter activities in Morocco

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WP Leader of Plastic Busters MPAs & Plastic Busters CAP



WES OBJECTIVES



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

- WES aims at **protecting the environment and improving the management of scarce water resources in the Mediterranean.**
- It strives to address the country needs for creating the enabling environment and **enhancing the capacities of stakeholders in the Partner Countries (PCs) to tackle problems** related to pollution prevention and water use efficiency.
- WES capitalises on previous successful EU funded regional projects running for more than 10 years (Horizon 2020 CB/MEP; SWIM SM; SWIM-Horizon 2020 SM).



WES FACTS & FIGURES



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

Facts & Figures	
Partner Countries:	Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine and Tunisia
Project value:	9,508,054 Euros
Duration:	May 2019 – November 2024 (66 months)
Project team:	Team Leader: Professor Michael Scoulllos, scoulllos@wes-med.eu Water Expert: Ms Suzan Taha, taha@wes-med.eu Environment Expert: Mr. Anis Ismail, a.ismail@wes-med.eu Communication & Networking Expert: Ms Lisa Papadogeorgaki, lpa@ldk.gr Stakeholder Engagement Expert: Dr. Emad Adly, wes.gc@raednetwork.org



WES CONSORTIUM



**Water and
Environment Support**
in the ENI Southern Neighbourhood region



LDK Consultants Global EEIG (Leader)



Gopa Infra GmbH



**Mediterranean Information Office for Environment,
Culture and Sustainable Development
(MIO-ECSDE)**



**MedWaves the UNEP/MAP Regional Activity
Centre for SCP**



**Arab Network for
Environment and Development (RAED)**



Ramboll Denmark A/S



**Association of Cities and Regions for
Sustainable Resource Management (ACR+)**



Royal HaskoningDHV



**CIHEAM – Mediterranean Agronomic Institute
of Bari (CIHEAM Bari)**



LDK Consultants Global EEIG

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by the European Union



TECHNICAL ASSISTANCE, CAPACITY BUILDING, NETWORKING OF STAKEHOLDERS



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

Regional level:

- Around **20 Regional Activities** on major water and environment issues such as **Trainings/Workshops, Study Visits** to European and Southern Mediterranean countries, **Webinars** and coached **Peer-to-Peer exchanges**.
- **+3 Regional Activities on plastic pollution** (environment)

National Level:

- Around **4 National Activities** (2 on water and 2 on environment) **per Partner Country**
- **+ Activities on plastic pollution** (environment)
- **National WES Meetings:** collaboration platforms to assess progress, plan next steps, enhance synergies with other programs/ projects, etc.

Follow the WES work programme:
[Component 1 Work Programme](#)
[Component 2 Work Programme](#)



ASSESSING IMPACT OF WES CAPACITY BUILDING



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

• **Committed trainers and trainees** → **significant impacts**

• WES measures **direct results** during the implementation of CB activities:

- quizzes, exercises, etc.
- evaluation form → *make sure to complete it!*
- **commitment form** → *be realistic but also be ambitious on what you commit to achieving by 2023*

WES measures **mid-term results** after the CB activities have taken place based on **commitments** made, e.g.:

- on-line post-impact survey sent to all trainees
- direct contact/interview with some selected trainees

TOGETHER
WE CAN WORK TOWARDS
A SUSTAINABLE
MEDITERRANEAN REGION



WES SUPPORT TO MARINE LITTER MONITORING AND MANAGEMENT IN MOROCCO



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

COMPONENT	Component 1 – Pollution prevention
WES TOPIC:	Topic 1: Curbing Plastic Pollution & Marine Litter
WES SUBTOPIC	Sub-Topic 1.1: Marine litter monitoring and management
DIMENSION	Technical Assistance & Capacity Building



WES CAPITALIZES ON SWIM-H2020 SM ACTIVITIES ON MARINE LITTER CARRIED OUT IN MOROCCO



**Water and
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in the ENI Southern Neighbourhood region

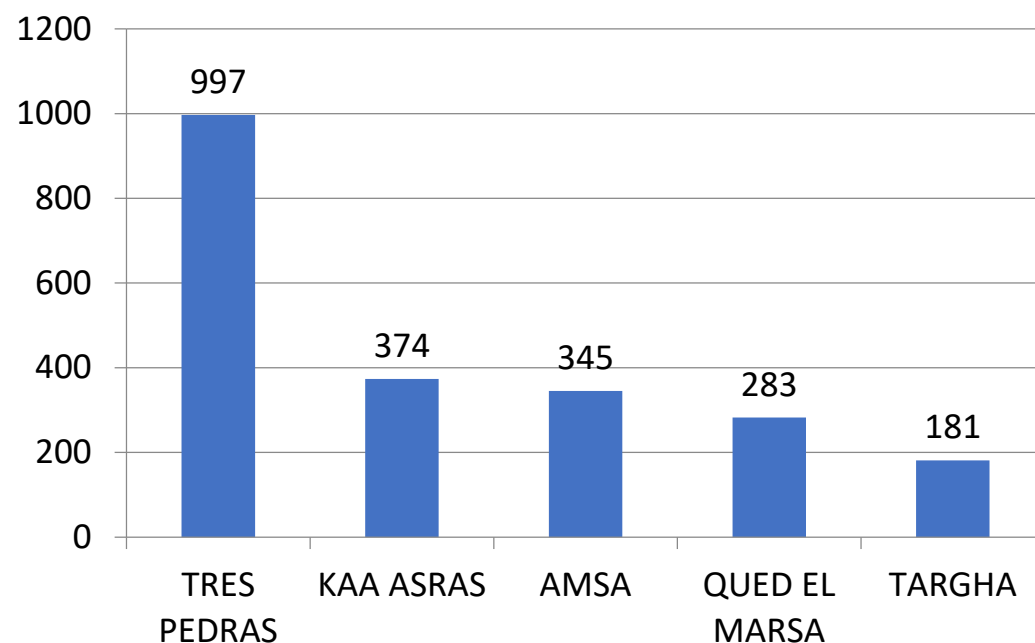


Assessing marine litter on the Moroccan coastline

ASSESSING MARINE LITTER ON THE MOROCCAN COASTLINE



**Water and
Environment Support**
in the ENI Southern Neighbourhood region



	Item code	Item name	Items count	%
1	G3	Shopping bags, incl. pieces	2083	15,9
2	G30	Crisps packets/sweets wrappers	1820	13,9
3	G21	Plastic caps/lids from drinks	1129	8,6
4	G27	Cigarette butts and filters	917	7,0
5	G10	Food containers incl. fast food containers	898	6,9
6	G8	Drink bottles >0.5l	741	5,7
7	G137	Clothing / rags (clothes, hats, towels)	725	5,5
8	G7	Drink bottles <=0.5l	681	5,2
9	G31	Lolly sticks	517	4,0
10	G79	Plastic pieces 2.5 cm > < 50cm	337	2,6

OBJECTIVES



**Water and
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in the ENI Southern Neighbourhood region

To generate fit-for-purpose data on the amounts, types, composition and sources of marine litter on the sea surface and the seafloor.

To identify management measures to tackle the identified sources and types of marine litter;

To propose a plan with priority measures for reducing marine litter.



MAIN LINES OF ACTION



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

Task 1:

Preparatory actions, including an inception mission to Morocco, to kickstart the activity

- ▶ Result 1.1: Aims, targets, steps (methodology), stakeholders to be engaged, modalities of intervention of stakeholders as well as their roles and commitments during and after the activity, are confirmed and agreed.
- ▶ Result 1.2: Moroccan Peers for the WES Marine Litter Peer-to-Peer exchange identified/confirmed.



MAIN LINES OF ACTION



Water and Environment Support

Task 2:

Carry out marine macrolitter pilot surveys on the sea surface and the seafloor, including a hands-on training & peer mentoring



Result 2.1: Marine macrolitter datasets from the pilot monitoring surveys on the sea surface and the seafloor.

Result 2.2: The core group will be trained (pilot surveys, training workshop, peer-to-peer process) on how to properly monitor marine macrolitter (and microlitter) on the sea surface and macrolitter on the seafloor.

MAIN LINES OF ACTION

Task 3:

Assess the amounts, types, composition and sources of marine litter and identify management options and develop a draft Plan with priority measures for reducing marine litter



Result 3.1: Comprehensive assessment of the amounts, types, composition and sources of marine litter in Morocco.

Result 3.2: Identification of management options for tackling marine litter in Morocco.

Result 3.3: Propose a draft Plan with priority measures for reducing marine litter in Morocco

MAIN LINES OF ACTION



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

Task 4:

Build capacities for informed decision-making with regards to marine litter and for operationalizing best practice marine litter measures via a workshop

Result 4.1: A wider group trained on how to make informed decisions based on sound scientific evidence and international experience in the field.

Result 4.2: A shortlist of marine litter priority measures.

Result 4.3: A wider group trained on how to operationalize best practice marine litter measures.

Result 4.4: Monitoring indicators agreed.



DELIVERABLES



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

Tasks	Deliverables
Task 0 Kick-off meeting Task 1 Preparatory actions, including an inception mission to Morocco, to kickstart the activity	D.1.1. Inception mission report
Task 2 Carry out marine macrolitter pilot surveys on the sea surface and the seafloor, including a hands-on training & peer mentoring	D.2.1. Marine macrolitter datasets D.2.2. Training & peer-to-peer mentoring report
Task 3 Assess the amounts, types, composition and sources of marine litter and identify management options and develop a draft Plan with priority measures for reducing marine litter	D.3.1. Assessment report, including a literature review and a section with the identification of management options D.3.2. Draft Plan with priority measures for reducing marine litter
Task 4 Build capacities for informed decision-making with regards to marine litter and for operationalizing best practice marine litter measures via a workshop	D.4.1. Workshop report, including shortlist of marine litter priority measures and the follow-up actions agreed by the stakeholders
Task 5 Synthesis Report	D.5.1 Synthesis Report

2nd WES activity in Morocco



**Water and
Environment Support**
in the ENI Southern Neighbourhood region

N-E-MO-1: Joint initiative for the establishment of the management chain for PET bottle packaging within the framework of EPR in Morocco

- **Aim:** to improve the sorting, collection and recovery system for PET beverage packaging waste in Morocco through the establishment of Extended Producers Responsibility (EPR) in the PET sector.
 - **Objectives:**
 - Take stock of relevant, already existing initiatives on packaging waste management
 - Facilitate effective dialogue among all stakeholders involved in the sector
 - Set up a monitoring group for the implementation of EPR in the PET bottles sector (COPIL)
 - Provide technical assistance to establish a roadmap and a work plan, for the establishment of an operational model for the management of PET beverage packaging based on the principle of EPR
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- Read more: https://www.wes-med.eu/activities_type/n-e-mo-1-support-for-the-promotion-of-green-entrepreneurship-circular-economy-and-green-banking/



ABOUT THE TRAINING



**Water and
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in the ENI Southern Neighbourhood region

DAY 1: 25 APRIL 2023 | THEORETICAL SESSIONS

09:00-09:30	Registration
09:30-10:30	Welcome, opening remarks, getting to know each other
09:30-10:00	Welcome and Opening Remarks <ul style="list-style-type: none"> - Representative from the Ministry of Energy Transition and Sustainable Development in Rabat - Dr. Thomais Vlachogianni, WES Senior Marine Litter Expert - Mr. Driss Nachite, WES National Marine Litter Expert
10:00-10:15	Tour de table
10:15-10:30	Ice-breaker
10:30-11:15	Session 1
10:30-11:00	Brief overview of the WES project and introduction to the activity <ul style="list-style-type: none"> - Dr. Thomais Vlachogianni, WES Senior Marine Litter Expert - Mr. Driss Nachite, WES National Marine Litter Expert
11:00-11:15	Intro Quiz and Q&A
11:15-11:45	Coffee break
11:45-13:00	Session 2
11:45-12:15	Marine litter in the Mediterranean: an overview of research and policy advances <ul style="list-style-type: none"> - Dr. Thomais Vlachogianni, WES Senior Marine Litter Expert
12:15-12:30	Marine Litter Monitoring Programs and Activities in Morocco <ul style="list-style-type: none"> - Representative from the Laboratory of Studies and Monitoring Pollution, in Rabat
12:30-13:00	Q&A
13:00-14:00	Lunch break

14:00-15:30	Session 3
14:00-14:40	Introduction to marine litter monitoring & overview of the state-of-the-art methods <ul style="list-style-type: none"> - Dr. Thomais Vlachogianni, WES Senior Marine Litter Expert Q&A
14:40-15:15	Monitoring macrolitter on the sea surface and on the seafloor: experimental design and survey protocols <ul style="list-style-type: none"> - Dr. Thomais Vlachogianni, WES Senior Marine Litter Expert Q&A
15:15-15:30	Coffee break
15:30-16:30	Session 4
15:30-16:00	Monitoring microlitter on the sea surface with manta trawling: experimental design and survey protocol <ul style="list-style-type: none"> - Dr. Thomais Vlachogianni, WES Senior Marine Litter Expert Q&A
16:00-16:30	Introduction to next day's field work and wrap up of the day
16:30	Closing



ABOUT THE TRAINING

DAY 2: 26 APRIL 2023 | HANDS-ON SESSIONS

08:30	Departure from the hotel to Mdiq
09:00-12:30	Field sessions & field work
09:00-09:15	Brief introduction to the fieldwork <ul style="list-style-type: none">- Dr. Thomais Vlachogianni, WES Senior Marine Litter Expert
09:15-12:30	Monitoring marine macrolitter on the seafloor with scuba diving <ul style="list-style-type: none">- Group work to characterize and classify the seafloor litter items collected
12:30-13:00	Return to the hotel
13:00-14:00	Lunch break
14:00-16:30	Sessions at the hotel
14:00-14:30	Discussion of the fieldwork: findings and takeaways <ul style="list-style-type: none">- Dr. Thomais Vlachogianni, WES Senior Marine Litter Expert- Mr. Driss Nachite, WES National Marine Litter Expert
14:30-15:15	Transforming marine litter related observations to fit-for-purpose data: challenges, uncertainties, conclusions & lessons learned <ul style="list-style-type: none">- Dr. Thomais Vlachogianni, WES Marine Litter Expert
15:15-15:30	Coffee break
15:30-16:30	Wrap-up, closing quiz, evaluation and certificates
16:30	Closing



2nd WES MARINE LITTER MONITORING CAMPAIGN IN TETUAN



**Water and
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in the ENI Southern Neighbourhood region

DAY 3: 27 April 2023

DAY 4: 28 April 2023



**FLOATING MACROLITTER
MONITORING SURVEYS**



**FLOATING MICROLITTER
MONITORING SURVEYS**



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Thank you for your attention!

Visit our Website

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