

MARINE LITTER IN THE DANUBE AND THE BLACK SEA REGION: CONCRETE PROPOSALS FROM THE REGIONS

THURSDAY 4 NOVEMBER 2021 | 11.00 - 13.30 (CET)



CLAIM

CLEANING LITTER
BY DEVELOPING AND
APPLYING INNOVATIVE METHODS
IN EUROPEAN SEAS

Innovative technologies and methods for waste cleaning, with emphasis on macro and microplastics, in the marine environment: the CLAIM project approach

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CO-ORGANISED BY:



CPMR
CRPM



CPMR BALKAN & BLACK
SEA COMMISSION



This project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774586.



Intergroup SEArca: Marine Litter in the Danube & the Black Sea region, 4/11/2021

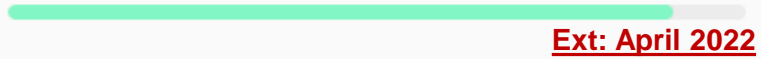
CLAIM: 2 Seas, 16 Countries, 21 partners, 54 months duration

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Project Information

CLAIM
 Grant agreement ID: 774586
[Project website](#)

Start date 1 November 2017
End date 31 October 2021



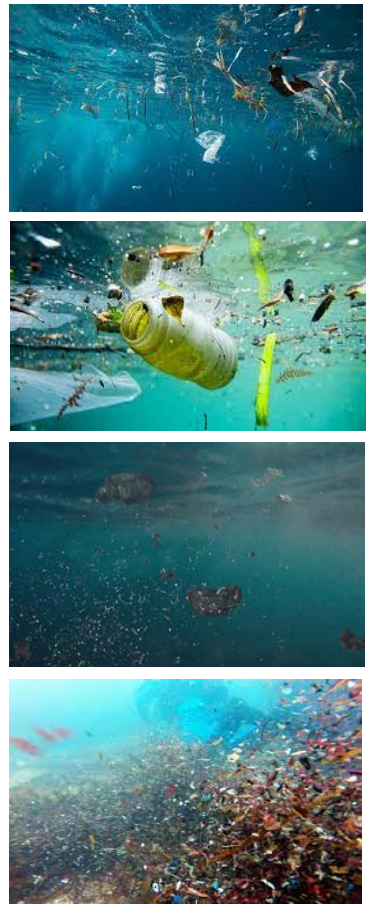
Funded under H2020-EU.3.2.5.
Ext: April 2022

Overall budget
 € 6 185 612,75



EU contribution
 € 5 654 786,01

Coordinated by
 HELLENIC CENTRE FOR MARINE RESEARCH
 Greece



Sea litter / plastic pollution: A growing problem

CLAIM's Objectives

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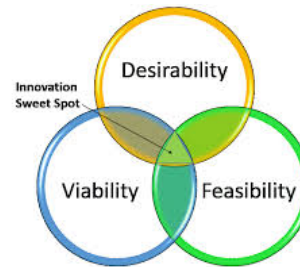
Advance our **knowledge** on the current status of marine plastic pollution



Fostering **ecosystems**: interventions to tackle marine litter issues and produce impact on human well being



Provide **innovative technologies** to reduce the amount and impact of plastic pollution



Test the **economic feasibility**, **social acceptance**, **institutional framework**



Set the basis for **operational forecasting** of the impacts of marine plastic litter pollution



Change **policy** and **public perceptions** and **provide advice** for management decision making



IN BRIEF – TECHNOLOGIES AND APPROACHES



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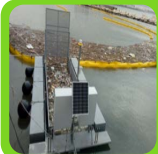
Technologies



WWTPs photocatalytic device



WWTPs pre-filtering device



River mouths Floating Barriers (CLEAN TRASH system)



Harbour & Vessels small-scale Pyroliser

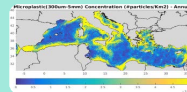


FerryBox flow-through filtering system

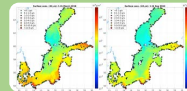
Knowledge / Forecasting tools & Methods



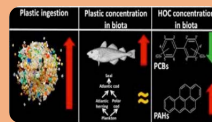
Database Macro/Micro marine plastic litter



Mediterranean (Saline & oligotrophic system) Macro/Micro plastic litter forecasting



Baltic (Brackish system heavily influenced by freshwater runoff) Macro/Micro plastic litter forecasting



Fostering ecosystem services



Cost-effectiveness analysis, Social acceptance, Business models, MCDA



Communication & Dissemination

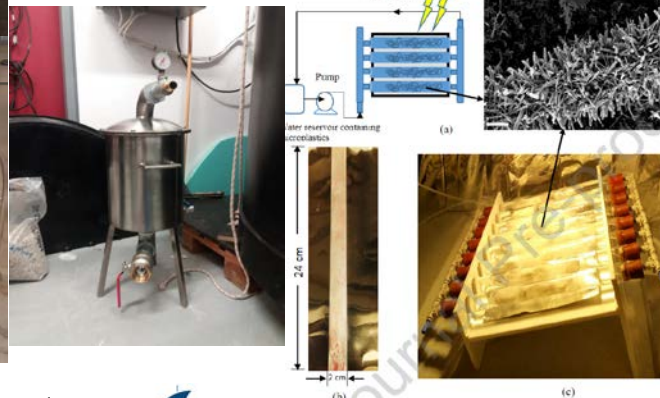
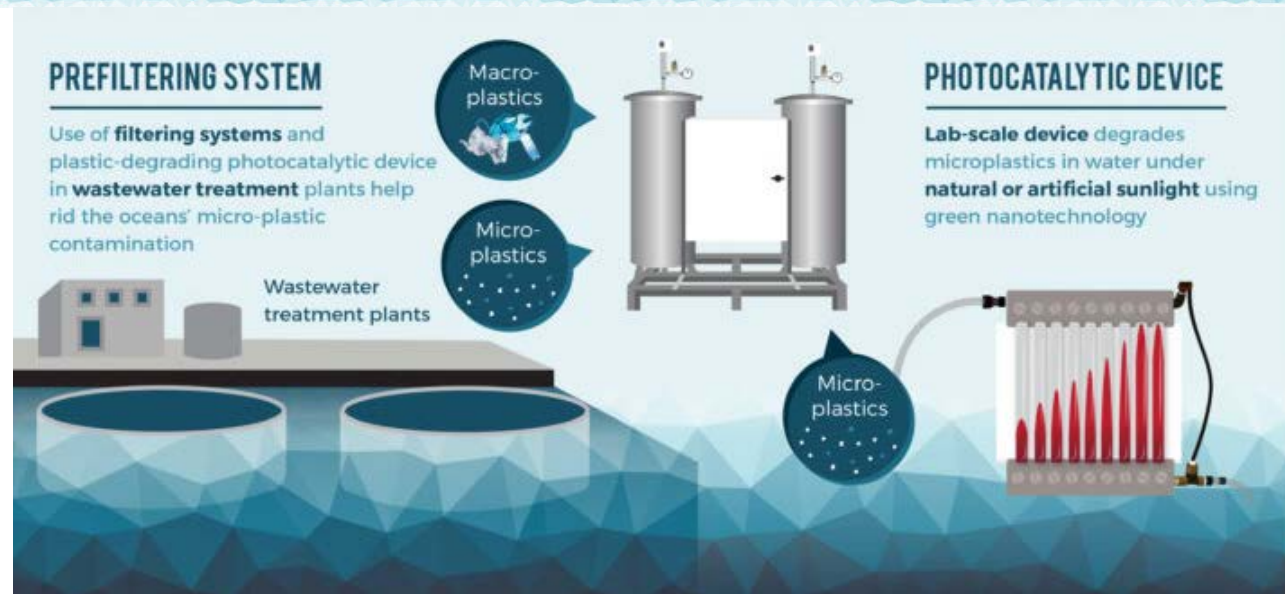


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Pre-filtering system and Photocatalytic device



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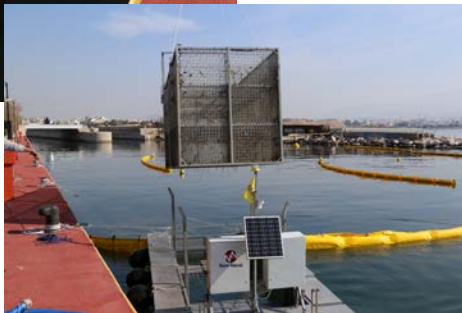


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CLEAN TRASH CLAIM's Litter Entrapping Autonomous Network Tactical Recovery Accumulation System Hellas



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CLEAN TRASH CLAIM's Litter Entrapping Autonomous Network Tactical Recovery Accumulation System Hellas



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<https://www.claim-h2020project.eu/technologies/>

<https://www.claim-h2020project.eu/successful-installation-and-trial-of-claims-marine-litter-containment-floating-boom/>



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Intergroup SEArca: Marine Litter in the Danube & the Black Sea region, 4/11/2021

PYROLISER



VESSEL



PORT


<https://www.claim-h2020project.eu/one-step-closer-to-battling-marine-plastic-litter/>



FerryBox automated seawater sampling device and passive flow-through filtering system



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CLAIM
CLEANING LITTER BY DEVELOPING & APPLYING INNOVATIVE METHODS IN EUROPEAN SEAS

CLAIM's enhanced modelling tools include:

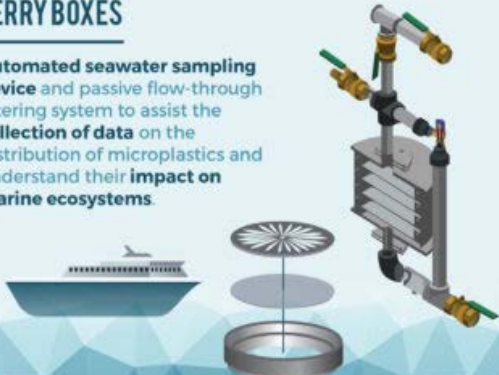
- Ocean circulation models
- Wave models
- Eulerian tracer drift and sedimentation
- Individual-based particle drift models
- Sustainable business models and integrated impact assessment

Micro-plastics

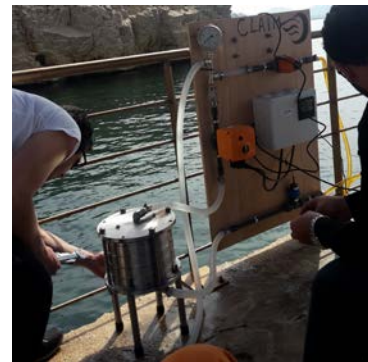
Macro-plastics

FERRY BOXES

Automated seawater sampling device and passive flow-through filtering system to assist the collection of data on the distribution of microplastics and understand their impact on marine ecosystems.



Mediterranean and Baltic Seas

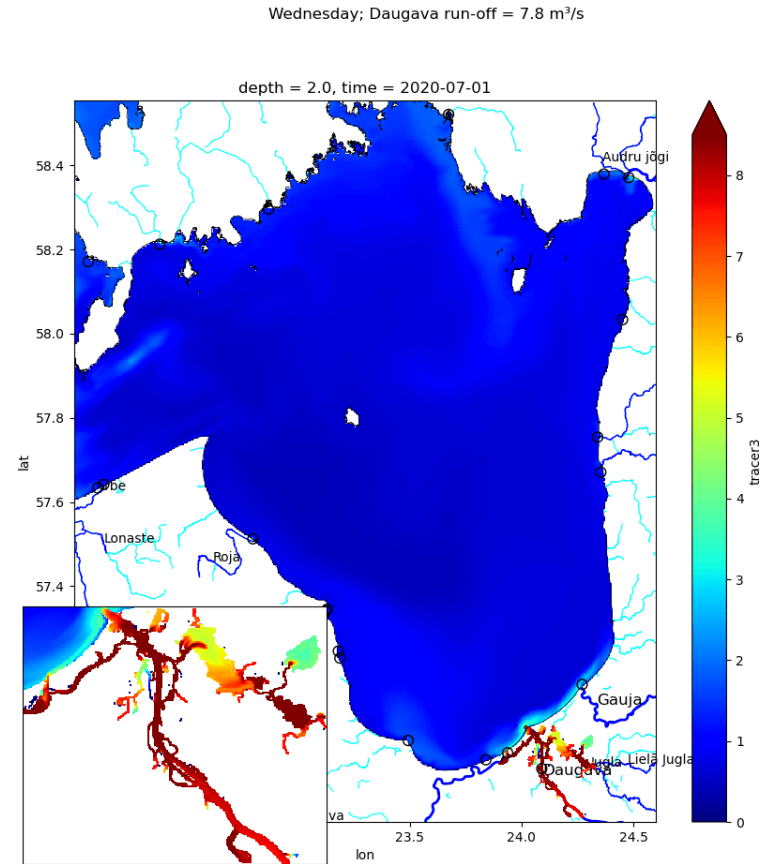
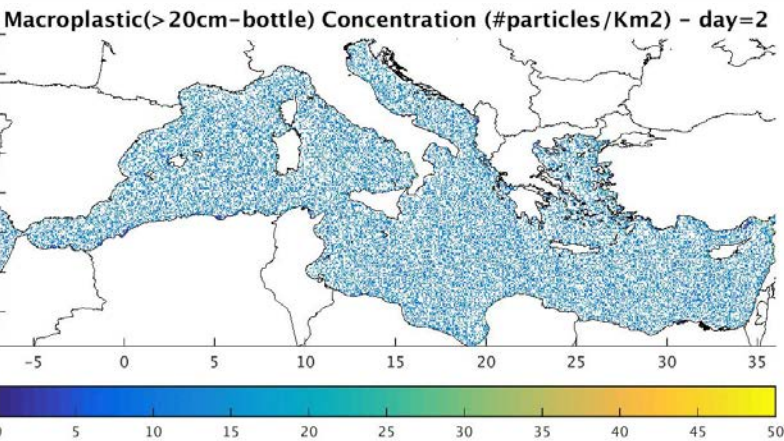
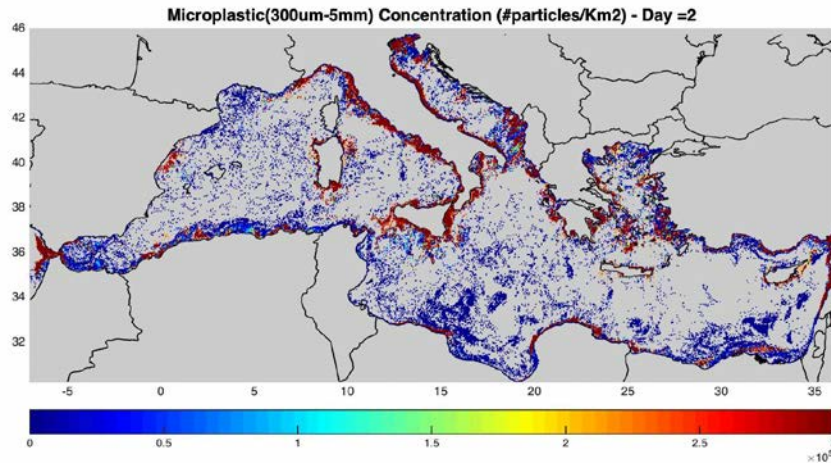


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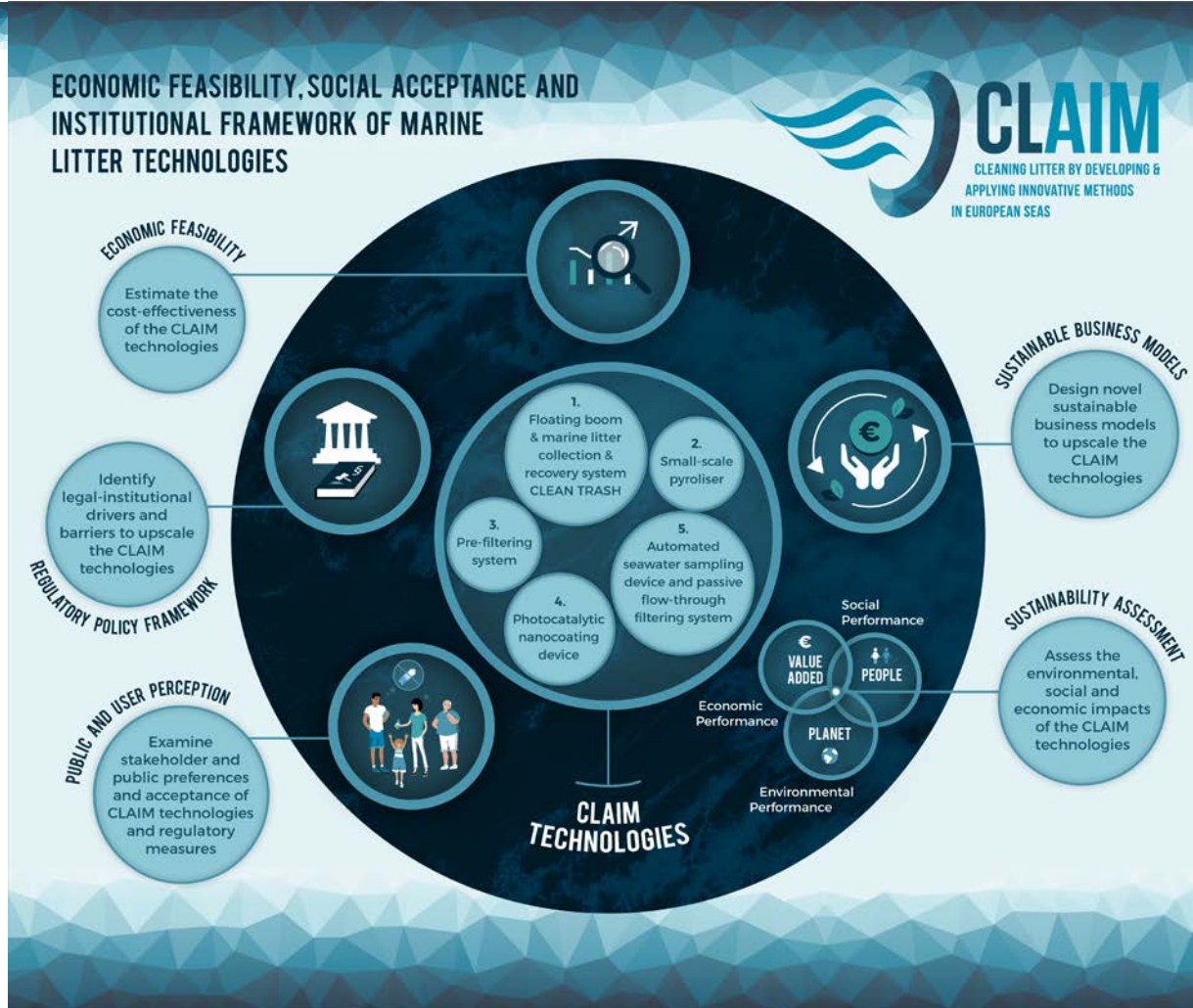








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Use of hydrodynamic – ecological models - Ecosystem approach



Socioeconomics



 **Website:** www.CLAIM-H2020project.eu
 **Email:** claim@hcmr.gr
 **Twitter:** @CLAIM_H2020
 **Facebook:** @CLAIM.H2020
 **Instagram:** @claim.h2020
 **YouTube:** CLAIM H2020



THANK YOU

QUESTIONS?

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Institute of Oceanography
Hellenic Centre for Marine Research



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