



Tackling marine litter in the Atlantic Area







































4th newsletter

March - July 2019

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1 | Editorial



Welcome to the fourth issue of the CleanAtlantic project newsletter reporting the latest advances and progresses on the CleanAtlantic activities from March to June 2019. The articles that follow will take you through the latest CleanAtlantic news and events, and will update you on relevant project activities and achievements.

Please note you can also follow CleanAtlantic in our social media networks (<u>Twitter</u>, <u>Facebook</u> and <u>Instagram</u>) and keep updated checking out our project website where you can find sections dedicated to news, events and project outcomes developed up to date.

If you have any comments or suggestions, please feel free to contact us at <u>cleanatlantic@cetmar.org</u>.

We would like to thank you for keeping up with our project's developments and for being part of our community.

The CleanAtlantic Coordination Team

2 Ongoing activities

The CleanAtlantic Knowledge Tool

CleanAtlantic, in the framework of its capitalisation strategy, is building an online database named the CleanAtlantic Knowledge Tool that compiles the outcomes produced by past and ongoing R&D projects and public/private organisations addressing marine litter at national, EU and international level. The first stage of collection and analysis of information is about to come to its end and a first version of the online database has been circulated within the partnership for revision. The tool will provide a user-friendly repository of marine litter knowledge that will be publicly available by August 2020.

Impact of marine litter in economic sectors

After completing an extensive literature review on the subject, online surveys have been or are about to be launched in UK, Ireland, France, Spain and Portugal investigating the impacts of marine litter in economic sectors, particularly on: 1) the tourist sector: this will be carried out in tourist beaches on the west coast of Ireland, and the South West and South East region of the UK. This questionnaire will consist on a Choice Experiment (CE) to elicit individuals' preferences, expressed by their willingness to pay for a policy change; 2) the fishing sector (in Spain) and the mariculture sector (in Madeira). Interviews are being/will be carried out by phone or on the field on a face-to-face basis.

Monitoring of marine litter and data management

CleanAtlantic has been progressing in the field of monitoring according to the planned schedule. <u>Ifremer</u> organised an internal workshop to present the application for two data collections - beach and seafloor litter- to create interfaces compatible with current marine litter data reporting systems and to harmonise and facilitate data collection and processing. The workshop was held in Vigo on 6th May gathering all partners involved in this task.



Our partners from <u>CEFAS</u>, <u>INTECMAR</u> and <u>ARDITI</u> are currently working on the development of Apps for the monitoring of marine litter. For seabed litter, CEFAS is developing an App that will be addressed to researchers and could also be adapted to fishers. Regarding floating litter, ARDITI is creating an App for the monitoring based on gamification for tourists (nautical tourists or whale watchers). INTECMAR has developed an App for litter accumulation on beaches (hotspots).

Interaction of marine litter with fauna













photos: IFREMER and S. Canese/ISPRA

Our partners from Ifremer have recently proposed a protocol for the observation of marine organisms entangled/ strangled/ covered by marine litter during ROV campaigns, which is currently under review by the consortium. The protocol will be tested this summer by ARDITI during their annual marine surveys, and IEO will perform some tests by using videos recorded in previous campaigns.

The impact of cigarette filters and cotton buds in the marine environment

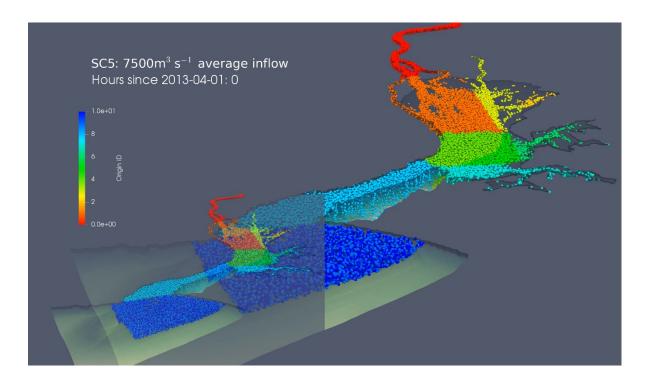
Some preliminary studies on behaviour and degradation of butts in the sediment and water column have been carried out by our colleagues from <u>Cedre</u>. Results will shed light on the environmental impact of these types of marine litter that are frequently found in beaches. They are also carrying out chemical analysis, developing leaching experiments and working on the ecotoxicological effects of cigarette butts on fauna. Up to date, Microtox assays were performed, and ecotoxicity was evaluated in borrowing organisms (amphipods and Donax sp.) and on filter-feeding organisms (oyster).

Marine litter as vector for Non-Indigenous Species (NIS)

A scientific publication is under development by our colleagues from ARDITI who are working on the analysis of the association of biota in different marine litter types, NIS identification and nuisance ranking, and spatial analysis. Results will be based on existing data compiled from opportunistic sampling.

Modelling and mapping marine litter

There is a wealth of scientific literature addressing mapping and modelling of marine litter. In order to facilitate the development of the mapping and modelling activities in the framework of CleanAtlantic, our partners from <u>USC</u> have set up a <u>Mendeley Group</u> with public access that compiles relevant scientific literature dealing with this subject.



A first version of the transport model designed to predict marine litter hotspots in the Atlantic Area, which is being developed by <u>IST</u> in collaboration with USC, has been completed. The model aims to provide an easy-to-use Lagrangian Tracer model, with a suite aimed specifically at litter modelling in offshore and coastal environments, by incorporating relevant processes such as degradation, buoyancy, and beaching models.

Fishing for litter pilot actions



In order to launch the planned Fishing for Litter activities, our colleagues from <u>CETMAR</u> have approached the Galician Fishing sector to identify working areas and fleets to implement these activities. The fishing guild from the Illa de Arousa was contacted and has agreed to participate in the removal actions of marine litter on both passive and active schemes. The activities related to passive schemes were already launched in mid-May. Regarding the active scheme, preparations are ongoing and are planned to be launched during the 2nd semester of 2019. These will also tackle actions

for the removal of abandoned, lost or otherwise discarded fishing gears (ALDFG).

Additional Fishing for litter actions are also expected to be carried out in the UK. Our colleagues from CEFAS are currently assessing the projects Fathoms Free & Odyssey Innovation to learn about the initiatives, protocols used, data managed, costs, waste management, etc. to plan future actions.

Best practices for beach litter clean-up

In order to identify initiatives, actions and measures related to beach clean-up from the five countries of the Atlantic Area (France, Ireland, UK, Portugal and Spain), our colleagues from Cedre are preparing a dedicated questionnaire to be sent to local authorities, NGOs and private companies. This survey will also target means used for collecting litter (techniques, tools, logistics, etc.). The results of the questionnaire will be published in the form of guidelines for manual and mechanical beach litter clean-up for local authorities.

Awareness-raising activities

Several awareness-raising activities are taking place in the CleanAtlantic countries, particularly in Portugal (carried out by <u>DGRM</u>) and in Spain (by IEO and CETMAR). In Portugal, DGRM is complementing the work carried out by <u>DOCAPESCA</u> on Fishing for Litter, and are targeting fishermen, schools and local community. Activities developed include presentations and scientific lectures, beach clean-ups, visit to fishing ports, school exhibitions, etc.



In connection with the planned Fishing for Litter activities in Galicia (Spain), CETMAR has contacted training and educational centres in Illa de Arousa (Galician Institute of Aquaculture, Illa de Arousa High School and the primary school), to propose the development of some awareness raising activities addressed to scholars. These schools confirmed their participation and interest in the CleanAtlantic activities, and more meetings are planned to define the activities that will be carried out and the time schedule.

3 | Project Events

CleanAtlantic 4th Coordination Meeting

The CleanAtlantic consortium met in Vigo (Spain) on the 7th and 8th of May to host the 4th Coordination Meeting. The meeting consisted of a 2-day event in which partners reviewed and discussed the progress on activities and tasks to achieve the project objectives. The meeting was held in the CETMAR facilities and was co-organised by CETMAR and USC.

Several discussion groups were coupled to the meeting during both days, focused on the technical activities of the project (Monitoring and data management, Modelling and mapping of marine litter.



Workshop: Advances in Monitoring and modelling marine litter

Coupled with the coordination meeting, CleanAtlantic organised the <u>workshop "Advances in Monitoring and Modelling of marine litter</u>" that was held on 9th May in the CETMAR facilities, in Vigo (Spain). The workshop was organised by IEO supported by CETMAR, and gathered local and regional

stakeholders in the field of marine litter.

The seminar consisted of three main parts: 1) Part I focussed on the CleanAtlantic project and the work that is being carried out by project partners in relation to the monitoring and modelling of marine litter, 2) Part II showed examples of other marine litter initiatives in Galicia, and 3) a round table at the end of the event that gathered inputs from the workshop participants.

4 | External Events

During the last four months CleanAtlantic attended numerous events and was presented in a number of international and national forums, workshop, conferences and symposiums that organised special sessions dedicated to marine litter. Below it is the list of events where CleanAtlantic objectives and activities were presented:

Cedre InfoDay 2019

CleanAtlantic was invited to participate in the <u>Cedre Information Day</u> that this year was held on 5th March in Paris, La Défense. The event addressed public and industry policies (notably under the Marine Strategy Framework Directive and the OSPAR Convention) on reducing litter in the marine environment as well as the contribution of litter monitoring networks and European research projects intended to improve knowledge about litter and its effects.

Regional Stakeholder Seminar on Blue Economy "Towards a Common Maritime Agenda for the Black Sea"



CleanAtlantic participated in the Regional Stakeholder Seminar on Blue economy "Towards a common maritime agenda for the Black Sea" organised in Istanbul (Turkey) on the 19th March by the Facility for Blue Growth in the Black Sea. CETMAR presented the project at the event.



CPMR Islands Commission

On the 21st and 22nd of March the CPMR Islands Commission held its <u>annual general meeting</u>, which was attended by 60 representatives from member regional authorities. Our colleagues from ARDITI presented the CleanAtlantic project in the thematic session "Island Biodiversity Protection".



Inter-basin Cooperation on Marine Litter: a focus on the Danube River and the Black Sea



The CleanAtlantic project was presented by CPMR in the <u>ICMML</u> <u>event</u>, that was held on 4th April, in Sofia, Republic of Bulgaria. The event aimed at facilitating inter- and intraregional cooperation at policy, business and research levels, to improve marine litter management in the region.



MARLICE International Conference 2019



MARLICE, the International Forum on Marine Litter and Circular Economy, was held in Seville on the past 10th - 12th April, gathering public authorities, research institutes, private sector and environmental organizations. It was organised by AEBAM (The Spanish Marine Litter Association) and served as a platform for projects in the Atlantic and Mediterranean area promoting synergies between different sectors, countries and regions.

The Atlantic Sessions Block was organised by the <u>Gipuzkoa Provincial Council</u>, <u>Surfrider Spain</u>, and CETMAR on behalf of CleanAtlantic. Globally, the programme was designed to portrait the status of marine litter in the Atlantic Area as well as highlight latest progress achieved around the monitoring and modelling of litter in marine, coastal, estuarine and river environments in this region. After the presentations of invited speakers, discussions with the audience were encouraged to identify main challenges for the future.



CleanAtlantic collaborated in the organisation of the conference and led Session I of "Block 3: Atlantic Region Sessions", that took place on Thursday the 11th of April (see the agenda below). The project also contributed to Session II where Marisa Fernández (CETMAR) acted as cochair, Garbiñe Ayensa from INTECMAR presented "Looking for marine litter hotspots in shellfish growing areas" and Ramiro Neves from IST presented "Modelling the fate of plastic debris in rivers and estuaries, the highway to the sea".

Visit from the primary school "Virxe do Rocío"



The Primary School "Virxe do Rocío" from Vigo, visited CETMAR in the frame of the celebration of the "Science and Technology Week" in this school on the 12th of April. CleanAtlantic organised a thematic workshop addressed to students (aged 6-12 years old) illustrating the marine litter pollution threat. Students participated in an activity with a box filled with beach sand in which the top-ten single-use plastic items most found in beaches were buried. They were invited to look for plastic items within the sand with closed eyes and,

once they found one, to guess what it was and how it can reach the beach. They were also asked to guess what their degradation time would be in the sea, and reminded about their correct way of disposal. In addition, a transparent box with a selection of marine litter items collected from Galician beaches was shown to students.

G7 Environment Minister's meeting on plastic pollution in the oceans



CleanAtlantic project was presented by Cees Loggen, Regional Minister of Noord-Holland Province and Vice-President of the Conference of Peripheral Maritime Regions (CPMR), at the G7 Environment Ministers' meeting on plastic pollution in the oceans, on 5th May in Metz (France). Mr Loggen was invited by Commissioner Karmenu Vella in charge of environment, maritime affairs and fisheries, to join the European Union delegation for this meeting.

He also participated in a meeting of civil society actors chaired by Brune Poirson, French Secretary of State for ecological transition. In his speeches, Cees Loggen highlighted the CleanAtlantic project as a concrete example of actions supported by regions and the CPMR. The <u>conclusions</u> of the G7 Ministerial Meeting in Metz express an ambition to improve international coordination on the knowledge of the oceans, raise awareness on related issues among citizens and decision-makers, and reduce pressures on the ecological state of the oceans.



Visits to the CEIP Humberto Juanes

CETMAR also visited the primary school CEIP Humberto Juanes in Nigrán (Spain) on 29th March and 7th May. The first visit was addressed to 5-year-old children, and the second one to 10- and 11-year-olds. In both visits CleanAtlantic presented the project raising awareness materials and proposed activities to students to raise awareness.



ADRIASPILLCON 2019

On the 29th of May, CleanAtlantic was invited to attend the "4th Adriatic conference on spill prevention, preparedness & response" in Opatija (Croatia). The conference was organized under the auspices of the Ministry of Maritime Affairs, Transport and Infrastructure of the Republic of Croatia. Marisa Fernández (CETMAR) presented CleanAtlantic in Session II "Preparedness and response to HNS spills & marine litter".



Workshop on marine litter in Asturias and involvement of the fishing sector

CleanAtlantic was invited to participate in the Workshop on marine litter in Asturias and the involvement of the fishing sector ("Jornada Basuras Marinas en Asturias e implicación del Sector



<u>Pesquero</u>") that was held in Gijón (Spain) on June 1. The workshop was organized by the Federation of Fishermen's Guilds of the Principality of Asturias (FECOPPAS) and <u>WWF</u>, and aimed to analyze the current state of knowledge about marine litter in Spain, as well as the involvement of the fishing sector in the actions to tackle this environmental threat. Luis Gomez (CETMAR) presented the activities carried out in CleanAtlantic regarding these topics.

European Maritime Day 2019



This year, the <u>European Maritime Day</u> took place on 16-17 May in Lisbon (Portugal). Our colleagues from IST presented the project in the Workshop "Marine Litter: gaps, barriers, solutions, innovation" that was aimed at presenting, showcasing and co-defining the existing gaps, barriers, potential solutions for the prevention, reduction, monitoring, quantification, recovery and transformation of marine litter.

Fisherman's Day – CleanAtlantic awards in Sesimbra

During the celebrations of the Fisherman's Day organized by the Municipality of Sesimbra (Portugal), on May 31st, the students of Escola Básica do Castelo (6ºE) involved in the CleanAtlantic project



awarded the fishing vessels participating in <u>Docapesca</u> project "A Pesca por um Mar sem Lixo".

The thirty-nine CleanAtlantic awards, designed by the students and inspired on the litter collected by them on Meco beach, suggested different species of freshly caught fish. The support of the various teachers of the class was felt throughout the process, and the coordinating teachers, Carla Faneco and Paula Jorge, were present at the ceremony.

PONTENCIENCIA 2019

The Spanish Institute of Oceanography (IEO) in Vigo participated in the <u>Pontenciencia event</u>, a science dissemination event aimed at children in the University Campus in Pontevedra (Spain) on the 31st of May. The IEO-Vigo organised an educational workshop to raise awareness on the marine litter problem among the students of the Primary School San Martiño (CEIP San Martiño) and presented the CleanAtlantic project activities.



OSPAR ICG ML meeting 2019



Our partners Cedre, DGRM and DROTA attended the last meeting of the OSPAR Intersessional Correspond Group on Marine litter (held in Iceland on 12th and 13th June), and informed their members about the project developments on those linked to OSPAR RAP ML actions, namely action 48 (Potential harm of butts and buds) and action 55 (maps of marine litter hotspots).

Dissemination event in the closing ceremony of the CONCIENCIA project



CleanAtlantic participated in the dissemination activity of the closing ceremony of the project CONCIENCIA, organised by Galp Costa Sostible, and held in Muros, A Coruña (Spain) on June 19th. Our colleagues from IEO made a presentation about the importance of the fight against marine litter and the work that is being carried out in the framework of the CleanAtlantic project, and participated in the assessment of the projects carried out by the students in relation to this topic.











































