



MAELSTROM

MARinE Litter SusTainable RemOval and Management

Press Release

Beach Clean up

18/09/2021

Castelo do Queijo, Porto, Portugal

The **World Cleanup Day** will be celebrated on the 18th of September, being one of the biggest civic movements of our time, uniting 180 countries around the world for a cleaner planet. This is also the mission of the MAELSTROM project, **promoting on this date a beach clean-up, to be carried out at Castelo do Queijo Beach, in the city of Porto, starting at 9 am.**

The event is organized by the Interdisciplinary Centre of Marine and Environmental Research (CIIMAR) from the University of Porto and by the CIMA Research Foundation, both project partners, with the support of The Great Bubble Barrier®, the Municipality of Porto, Sea Life Porto, LIPOR-Intermunicipal Waste Management Service of Greater Porto, Atlantic Sailing Club, Águas do Porto (the utility responsible for urban water cycle management in Porto), and UNIFARDAS.

Marine ecosystems are under increasing pressure and, in this context, marine litter poses a major threat to environmental and human health, with at least 10 million tons of litter ending up in our oceans every year. About 80% of all marine debris are plastic, including microplastics that can enter in the marine ecosystem's food chains. This reality results in severe impacts on global ecosystems, people's health and marine life. Therefore, it is urgent to promote awareness, adoption of good practices, behaviours and responsible choices, essential for a sustainable society and future.

Funded by the European Commission, under the H2020 Programme, the MAELSTROM project brings together a consortium of 14 international partners which, over the next four years, will aim to investigate and implement



innovative technologies, such as a Bubble Barrier, for the identification, collection, recycling and integration of marine litter back into the market chain in the form of polymers and other regenerated materials. At the same time, the project proposes to create several awareness moments and activities on this topic, with the direct involvement of citizens.

The Castelo do Queijo beach clean up will start at 9 am with the reception of the participants, which will be followed by an introduction to the paradigm of marine litter and to the MAELSTROM project. This introduction will be followed by the beach clean up.

The interventions by the invited entities will begin at 11h45 and will start with the presentation of the removal technology of marine litter to be implemented in Portugal, by The Great Bubble Barrier[®] - a Dutch start up that developed an effective way to catch plastic in rivers using bubbles.

A brief educational activity for the children on the effects of marine litter and microplastics will close the event. It is also planned to place a real-sized whale made of recycled polyethylene, as an element of awareness, carried out by researchers from the CIMA Research Foundation with the support of the Ecopolietilene consortium of Italy.

Due to restrictions imposed by COVID-19, prior registration will be required to participate in the event.

The detailed event program can be found at: <https://www2.ciimar.up.pt/events.php?id=267>

Registration can be made at: <https://forms.gle/wkDX5uJxj8CB3uEeA>

Contact details:

Isabel Sousa Pinto
CIIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental
National Coordinator of the MAELSTROM Project
Email: ispinto@ciimar.up.pt

Luis R. Vieira
CIIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental
MAELSTROM Project Assistant Researcher
Email: bioluis@ciimar.up.pt

Isabel Gomes
CIMA Research Foundation
Responsible for the MAELSTROM project Communication
Email: isabel.gomes@cimafoundation.org

CIIMAR Communication Office
Email: divulgacao@ciimar.up.pt

Additional Information:



CIIMAR is one of the leading international research and advanced training institutions, working at the frontier of Ocean Knowledge and Innovation. Over the past 20 years, CIIMAR has been promoting awareness, adopting responsible practices and choices, involving several sectors of society, through Science and Society projects and programs. In the MAELSTROM project, CIIMAR leads the networking activities among existing European blue technologies and stakeholders in the field of marine litter. It will also ensure the assessment and monitoring of a pilot technology for the removal of marine litter to be installed by The Great Bubble Barrier in the Porto district.



The **CIMA Research Foundation** is an international research centre in the areas of risk disaster reduction and marine biodiversity based in Italy. Within the scope of the MAELSTROM project, it coordinates communication and dissemination activities, sensitizing citizens about the impacts of marine litter, promoting behaviour change in relation to plastic consumption and facilitating the involvement of all interested parties in the project's activities and results.



The Great Bubble Barrier developed a simple yet effective technology to catch plastic pollution in rivers before it flows into our oceans. The multi-awarded and growing Dutch start-up is also a partner of the MAELSTROM consortium. It will design and implement a Bubble Barrier in the Porto District, co-powered by sustainable energy. The presentation of this technology will be held at the event.

Contact: press@thegreatbubblebarrier.com



Located in the city of Porto, **SEA LIFE Porto** has focused its activity on projects that aim to promote and disseminate the conservation and preservation of marine species and habitats, boosting several sustainability initiatives such as awareness actions, beach clean-ups and distinguishing become the first space in Portugal with a positive carbon footprint.

Contact: Pedro.Pita@merlinentertainments.biz



LIPOR is the entity responsible for the management, recovery and treatment of urban waste produced by the eight municipalities that comprise it: Espinho, Gondomar, Maia, Matosinhos, Porto, Póvoa de Varzim, Valongo and Vila do Conde. Being committed to Sustainability, LIPOR assumes as the purpose of its Vision “to create trends for a sustainable future”. In this sense, it links its business strategies to the global priorities of the United Nations 2030 Agenda, namely to SDG 14 - Protecting Marine Life, through the implementation of actions with the community and the promotion of Ocean Literacy.

Contact: Susana.Lopes@lipor.pt ; Cristina.Santos@lipor.pt.



The **Atlantic Sailing Club** is a reference in Portugal, promoting the practice of sailing, which is based on training sailors with a spirit of moral integrity and healthy camaraderie. Located at the Marina Porto Atlântico, in Leça da Palmeira, it has played a fundamental role in promoting the conservation of the oceans, fostering environmental awareness in trainees and practising partners.

Contact: mail@clubevelaatlantico.pt.



The **Águas e Energia do Porto** (the utility responsible for urban water cycle management in Porto) is one of the largest Portuguese water supply companies, responsible for the integrated and sustainable management of the entire urban water cycle in the Municipality of Porto, as well as for the definition and execution of the municipal energy strategy, after the change of its corporate purpose at the end of 2020. Through its Sustainability department, it intends to actively contribute to environmental, social and cultural sustainability, ensuring the involvement of the community and employees, through the development of education and awareness-raising actions for a sustainable development, reinforcing, in this way, the importance of water and energy as factors of the city promotion.

Contact: nuno.lemos@aguasdoporto.pt



UNIFARDAS is a Professional Clothing manufacturer that promotes the reduction of the carbon footprint throughout its supply chain. It develops main actions to protect the environment, including the development of sustainable workwear collections, as well as internal awareness-raising actions regarding this issue.

Contact: clienteportonorte@unifardas.pt

The MAELSTROM Project

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The mission of the MAELSTROM project is the implementation of innovative and environmentally sustainable technologies to remove, recycle and return marine waste to the market chain.

The **MAELSTROM** project brings together 14 international partners from 8 EU countries:

- CNR-ISMAR (Italy)
- CIIMAR (Portugal)
- UM-ISE (Malta)
- Gees (Italy)
- CIMA Research Foundation (Italy)
- ALPHA (Italy)
- ST (Italy)
- MAKEEN (Denmark)
- Deltares (Netherlands)
- ISDI Group (Malta)
- Venice Lagoon Plastic Free (Italy)
- Tecnalía (Spain)
- The Great Bubble Barrier (Netherlands)
- CNRS-LIRMM (France)

With the objective to promoting a circular economy, the marine litter will be removed and recycled, combining innovative processes and technologies: (I) in pilot areas in Portugal and Italy, litter trajectories will be modelled to identify critical accumulation points; (II) innovative trash removal technologies will be implemented at these critical points; (III) the waste removed will then undergo advanced recycling processes; (IV) recycled products, such as polymers, will return to the industrial supply chain as a new resource.

The project will implement two different technologies for the removal of marine debris: an underwater robot that will be placed in Venice and a Bubble Barrier that will be placed in the Porto district

The Bubble Barrier prevents plastics from floating down the river and entering our ocean. It works 24/7 and consists of a bubble curtain, a catchment system and an air supply. It also increases the oxygenation of the water and doesn't disturb river activities.

The successful installation and operations of this technology could further enhance the implementation of this solution at an international level.

Links:

<https://www.maelstrom-h2020.eu/>
<https://www2.ciimar.up.pt/projects.php?id=163>
<https://www.worldcleanupday.org/>
<https://www2.ciimar.up.pt/>
<https://www.cimafoundation.org/>
<https://www.cm-porto.pt/>
<http://www.visitsealife.com/Porto/>
<https://www.lipor.pt>
<https://www.aguasdoporto.pt/>
<https://clubevelaatlantico.pt/>
<https://thegreatbubblebarrier.com/>
<https://unifardas.pt>