

Press release

January 6, 2023 | Ljubljana, Slovenia

Remedies for the future of our oceans through deploying plastic litter valorisation and prevention pathways

National Institute of Chemistry, in cooperation with 21 pan-European and 1 organisation from Africa started an ambitious innovation action project, “REMEDIES - Co-creating strong uptake of REMEDIES for the future of our oceans through deploying plastic litter valorisation and prevention pathways’. The REMEDIES is the first project selected from the newly created Horizon program Mission: Ocean, seas and waters. The European Commission allocated a budget of 7.999.644,75 Euros under its Horizon Europe programme (HORIZON-CL6- HORIZON-MISS-2021-OCEAN-03)¹ to monitor and collect plastic litter, as well as to lower the quantity of (micro)plastic in the Mediterranean sea.

The European Union has launched a new Horizon Mission programme aiming to restore, protect and preserve the health of our ocean, seas and waters by 2030. The Mission is designed to deliver on the European Union’s 2030 quantified and measurable targets for protecting and restoring ecosystems and biodiversity with actions for zero pollution, and for decarbonisation as well as net greenhouse gas emissions reduction towards climate-neutrality, within the EU’s ocean, seas and waters. This Mission supports many of the Sustainable Development Goals (SDGs): in particular restoring our ocean and waters related actions will directly contribute to SDG 14 - Life below water and SDG 6 - Clean water and sanitation, in addition to the SDG13 - Climate action.

The overall objective of the REMEDIES project is to attract public interest for deploying remedies of our seas. The efforts to monitor and collect plastic litter, as well as to prevent the generation of litter in the first place, should become mainstream and an everyday part of our lives. REMEDIES is thus aiming to create a trend of plastic prevention by exploitation of traditional and modern channels and with the help of citizen’s science fostering co-creation of participatory processes building a more plastic-conscious society. To reach this goal, we need to identify appropriate wording and target “pain relievers” of each relevant stakeholder. These REMEDIES will be reached through the following specific objectives:

- To monitor macro- and microplastic waste in 8 Mediterranean areas.

¹ Topic: HORIZON-MISS-2021-OCEAN-03-01 - Mediterranean sea basin lighthouse - actions to prevent, minimise and remediate litter and plastic pollution
Type of action: HORIZON Innovation Actions
Granting authority: EUROPEAN CLIMATE, INFRASTRUCTURE AND ENVIRONMENT EXECUTIVE AGENCY (CINEA)
Project starting date: 15 December 2022
Project end date: 14 December 2026
Project duration: 48 months

- To collect and valorise >422 tons of plastic litter.
- To prevent the further deposition of an equivalent of >61 tons of plastic.
- To reach >250,000 people and activate >2,000 citizens.
- To scale and replicate zero-waste innovations in ~50 more sites.

**insert Figure 1*

The REMEDIES consortium (see Figure 1) is coordinated by the National Institute of Chemistry from Slovenia and builds its innovation actions around the three main pillars of monitoring plastic litter, its collection and valorisation, including the prevention of the distribution of non-degradable plastics. Twelve (4 per pillar) breakthrough innovations will be showcased in the next four years as the project focuses on technology readiness level from validation and demonstration in relevant environment to system prototype demonstration in operational environment (i.e. TRL 5-7). All innovative solutions will be tested in 9 demonstration sites in 8 Mediterranean countries. After validation, they will be scaled up in 33 new sites in order to implement them across the whole Mediterranean (see Figure 2).

**insert Figure 2*

For our planet, the most promising aspect of REMEDIES is the activation of citizens, especially those affected by the plastic pollution directly on the shorelines. They will be informed, educated and guided to becoming plastic entrepreneurs. Through workshops and mentoring with a deeply rooted knowledge base and the right tools they will be able to start their own businesses focused on valorisation of collected plastic litter and the provision of zero-waste solutions to all actors (see Figure 3). Moreover, two types of open calls will be launched in order to boost the deployment of plastic litter collection and valorisation schemes as well as to push towards the development of zero-waste supply chains that will enhance the prevention of plastic litter. The calls will provide financial support to third parties in the form of grants. As required by call topic conditions, financial support will only be awarded to local and/or regional authorities from an associated region. The 1st call for Collection & valorisation will be launched in September 2023 with a total budget €200.000 (cca 10 grants) and 2nd call Prevention & zero waste in March 2024 with a total budget €300.000 (cca 15 grants).

**insert Figure 3*

REMEDIES is not only an innovation action project for scientists or entrepreneurs. Its ambition stems from including all relevant stakeholders that wish to contribute to a plastic free future. By implementing their own ideas and projects. By becoming a future plastic entrepreneur. By changing their lifestyle to spread the zero waste way of living. Your participation will make a difference. Together we can have an enormous impact on the local and global community. With joint forces we will prevent and reduce plastic litter and microplastics in the Mediterranean Sea to preserve our planet. Lead by example. Each contribution counts.

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Figures



Figure 1: REMEDIES consortium of 23 partners from 12 countries



REMEDIES
MEDITERRANEAN SEA BASIN LIGHTHOUSE



Co-funded by
the European Union



Figure 2: REMEDIES demo sites with the employed innovation on monitoring, collecting, and preventing plastic litter and microplastics in the Mediterranean Sea basin by 2025.

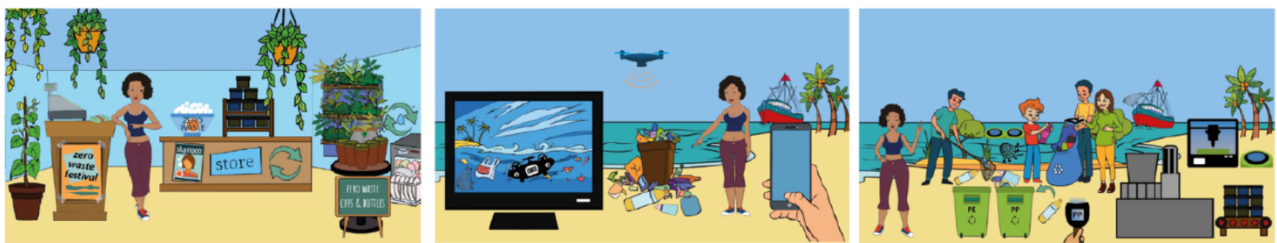


Figure 3: The pillar of prevention (left), monitoring (middle) and collection (right). All-in-all, we plan to map out the area of 170 km² for plastic litter, reach circa 100,000 citizens, collect around 400 tons of plastic waste, and build up plastic prevention pathways through scaling and replication for an equivalent of 61 tons of plastic.

LIST OF ALL PARTNERS:

- 1 National Institute of Chemistry (NIC) - RTD Slovenia
- 2 University of Maribor (UM) - UNI Slovenia
- 3 Alchemia-nova Greece (ANGR) - SME Greece
- 4 Clera.One (CLERA) - SME Slovenia
- 5 Wasser 3.0 (W30) - NPO Germany
- 6 Mold Srl (RC) - SME Italy
- 7 Bio-Mi (BMI) - SME Croatia
- 8 Cittadini (CIT) - SME Italy
- 9 Next Technology Tecnotessile (NTT) - RTD Italy
- 10 AITIIP (AITP) - RTD Spain
- 11 Venice Lagoon Plastic Free (VLPF) - NGO Italy
- 12 CIBOS Innovation (CIB) - SME Greece
- 13 Consiglio Nazionale delle Ricerche (CNR) - RTD Italy
- 14 Vlaamse Instelling voor Technologisch Onderzoek (VITO) - RTD Belgium
- 15 Small Islands Organisation (SMILO) - NPO France
- 16 Environmental & Territorial Management Institute (ETMI) - NGO Albania
- 17 Exit Foundation (EXIT) - NPO Serbia
- 18 National Technical University of Athens (NTUA) - UNI Greece
- 19 Marine Conservation Greece (MCG) - SME Greece
- 20 Impact Hub Athens (IHA) - NPO Greece
- 21 F6S Network Ireland Ltd (F6S) - SME Ireland
- 22 Mohammed First University (MOH) - UNI Morocco
- 23 Infordata (INFOR) - SME Italy