

Actions of cities and regions in the Mediterranean Sea area to fight sea pollution


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The Mediterranean Sea is a semi-enclosed basin with high population density, intense urbanisation along the coasts and significant maritime traffic. This unique geography, coupled with the oceanographic setting and inefficient waste management practices, leads to a high level of marine pollution in the region. Marine pollution can take different forms, including physical pollutants that are not necessarily involved in chemical or biological reactions, chemical substances that are involved in chemical reactions such as pesticides, and biological pollutants such as bacteria.

Main observations

The study

reviews the most common types of marine pollutants in the Mediterranean Sea. It presents the actions taken and provides policy recommendations.

The Mediterranean Sea is currently facing a severe marine pollution crisis, a critical social- environmental challenge in the region. This study has summarised the scientific knowledge and actions to be taken by Mediterranean EU countries to combat this threat. One of the primary objectives is to fight

the accumulation of marine litter and plastic pollution, and monitor emerging pollutants that require science-based regulation. Due to its specific oceanic circulation and geomorphological configuration, the Mediterranean Sea acts as a natural trap for marine litter. An alarming 80% to 90% of marine litter in the basin is made of plastic, and it is estimated that 230,000 tonnes of land-sourced plastic leak into the sea each year. This pollution affects all abiotic compartments from the shores, to the surface waters, the water column and the seabed.

Different authors have shown that the management of cooperation in the Mediterranean involves a combination of regional cooperation agreements and the application of European Union Law. The EU's strategy, which targets consumption patterns, the production model, and natural capital, is crucial for

achieving sustainable resource extraction, production, consumption, and waste disposal practices. The EU's mandatory policies with specific pollution reduction targets have resulted in positive outcomes at the local level, exemplified by the implementation of the Directive on the reduction of the impact of certain plastic products on the environment. However, while stimulated local policies can be customised to meet the specific needs of a city, updated mechanisms for implementing and monitoring policies at the local level are necessary. Nevertheless, binding regional



agreements lead to quantifiable measures being applied at the local level over time. Despite this progress, cooperation among member states relies too heavily on voluntary actions and may lack clear targets and indicators for measuring progress. Therefore, to ensure effective implementation and surveillance of these policies, Member States must identify new mechanisms to improve policy effectiveness.

Conclusions and policy recommendations

Implementing effective land and maritime policies to fight marine pollution is crucial for protecting the marine environment, ensuring the sustainability of economic activities and promoting the wellbeing of people who rely on the Mediterranean Sea. Such policies can help manage natural resources, protect biodiversity, and reduce the negative impacts of marine pollution on


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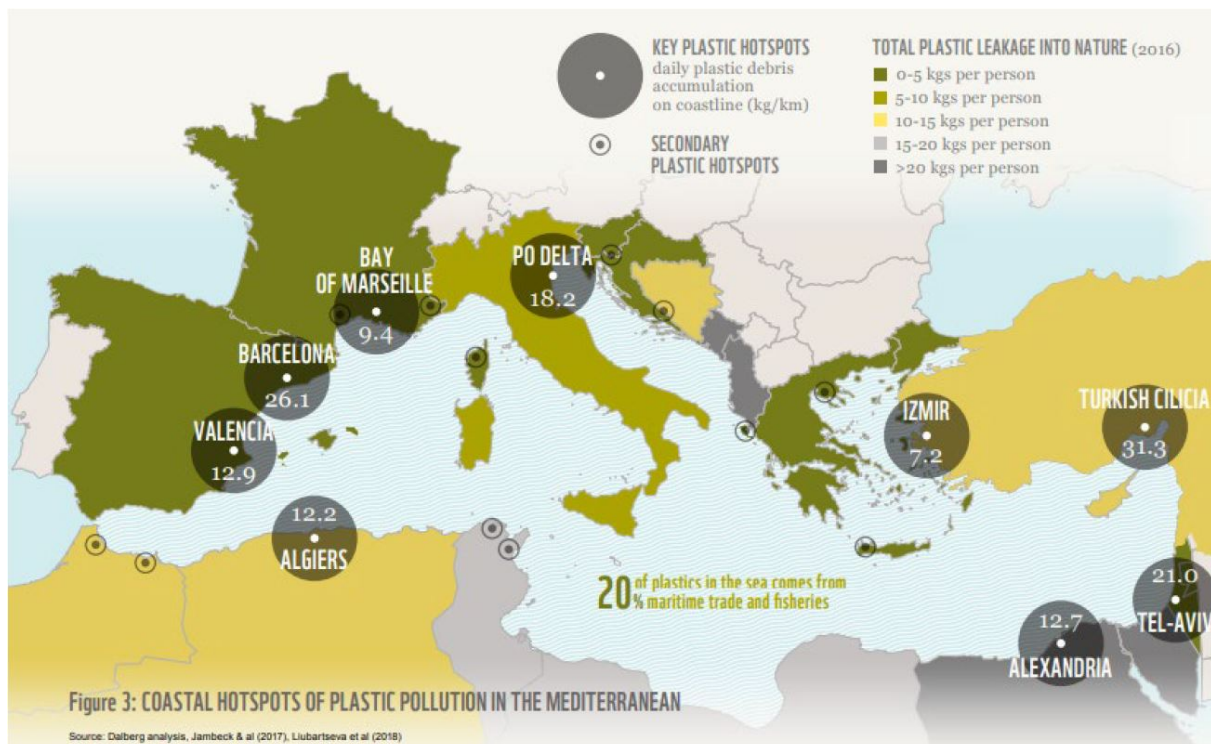
marine ecosystems and human health. Therefore, the following recommendations could be considered:

- In the first phase (actions on emerging pollutants and policy gaps), the lack of specific regulations for the growing problem of emerging pollutants due to limited knowledge must be addressed. It is recommended that microplastic pollution is made a priority, with the establishment of bans and reduction targets on the manufacture of fabrics and cosmetics that contribute to microplastic pollution. Additionally, the use of unnecessary single-use plastics should be reduced or banned. This action could be expanded to include the main pollutants in aquaculture and agriculture.
- For the second phase (the political or decision-making phase), it is crucial to update existing EU regulations and international agreements to ensure their effectiveness in combatting marine pollution. Given the interconnectedness of land- and sea-based activities affecting estuaries, coastal zones and the marine environment, a holistic and integrated approach to coastal planning, management, protection and restoration is necessary. While there are already policies and

information in place, the challenge lies in their implementation by the Member States, particularly given the varying levels of economic development among the Mediterranean nations. To address this, improvement of existing regulations could include implementing a cyclical approach, such as reusing treated effluent for agriculture to reduce spending on fertilisers, ensuring that it is safe for use, and creating a specific regulation for the excess of nutrients in aquaculture.

- Finally, in the third phase (the management phase), waste management, data collection and unification are the main concerns that require action. At the local level, possible actions include the surveillance of debris and litter on the main Mediterranean commercial routes, and monitoring and evaluation of the impact of tourism on the environment, through indicators such as water and energy consumption and waste generation.

It is essential to ensure that the fight against marine pollution in this basin is endorsed by all Mediterranean countries. Effective cooperation and collaboration are essential to implementing regulations and the common goal of combatting marine pollution.



Source: WWF Report 2013 "How Mediterranean countries can save the ocean"

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