



# OCEAN POLLUTION & WASTE SOLUTIONS

Providing solutions to ocean pollution  
One of the main challenges/threats to the oceans

*Version of November*

*21*

## DETECTION, MONITORING & REMOVAL OF WASTE

Macro waste	Microplastics	Ammunition dump
<i>Detection, monitoring and removal of macro waste from the marine environment</i>	<i>Detection, monitoring and removal of microplastics from the marine environment</i>	<i>Development of methods to safely remove dumped ammunition from the marine environment</i>
<b>Topics</b> <ul style="list-style-type: none"> <li>- Stopping waste at source (harbours &amp; rivers), possibly by means of natural collection systems</li> <li>- Remote sensing for pollution detection</li> <li>- Alternative methods for using marine waste as a raw material</li> <li>- Socio-economic impact of marine litter (North Sea)</li> <li>- ...</li> </ul>	<b>Topics</b> <ul style="list-style-type: none"> <li>- Automated, cost-efficient detection methods for microplastics</li> <li>- Technologies for the selective removal of microplastics from matrices (sediment, dredgings, air, biota ...)</li> <li>- ...</li> </ul>	<b>Topics</b> <ul style="list-style-type: none"> <li>- Screening of clean-up scenarios</li> <li>- Automated recognition and monitoring of (buried) ammunition</li> <li>- Development of an underwater explosion chamber</li> <li>- Development of special equipment for the removal of ammunition</li> <li>- ...</li> </ul>
<ul style="list-style-type: none"> <li>- Business model for the removal of (macro) waste</li> <li>- Processing and recycling of the waste collected (intercluster)</li> </ul>		

PLUXIN (cSBO)

## GENERAL OCEAN HEALTH

Pollutants	Ocean system
<i>Development of methods to safely remove pollutants from the marine environment</i>	<i>Accumulation of knowledge about the general state and health of the sea at a time when wide ocean systems are under pressure</i>
<b>Topics</b> <ul style="list-style-type: none"> <li>- Bio-remediation – biological solutions for addressing pollution (polluted sediments and water, etc.)</li> <li>- Detection, monitoring and removal of pollutants such as oil (in harbours or coastal waters)</li> <li>- ...</li> </ul>	<b>Topics</b> <ul style="list-style-type: none"> <li>- Quantification of the ecological impact of offshore activities (<b>ecosystem approach</b>)</li> <li>- Local solutions to acidification, warming and CO2</li> <li>- Reduction of noise pollution during the construction of marine infrastructure &amp; shipping</li> <li>- ...</li> </ul>

DIOS

DBC Project

*Project observer*

Project pipeline