



**KNOW  
FEEL  
ACT!**  
to Stop Marine Litter

## INTRODUCTION, SCOPE & CONTENTS

### The Marine Litter Issue

Marine litter or any persistent solid material discarded, disposed of or abandoned in our seas and coasts emerges as an increasing threat to the environment, human health and safety, and our livelihoods. Fortunately, while it is one of the most challenging problems facing the world's seas, it is also one for which each of us can become part of the solution. That is because all marine litter can be traced back to a single source, people. Indeed, the problem stems from the prevailing production and consumption patterns and from how we deal with our wastes. It is important that we act now to minimise litter, keep it out of our seas and waterways and safeguard the marine environment and wildlife.

### Scope and Vision of the Educational Material

As becomes evident by its title, the educational material "Know Feel Act! To Stop Marine Litter" has been prepared to inform, sensitise and enable European teachers and students to take action to tackle the problem of litter in our seas and coasts.

It is a joint product of the MARLISCO partnership and within the project duration (2012-2015) it is expected to be translated and applied in the 15 partner countries. It contains 17 learning activities examining the characteristics, sources, effects and possible ways to tackle the problem, addressing it from an environmental, societal, cultural and economic point of view. It has been designed to primarily serve youth aged 10-15 yrs, but can be used also by educators outside the formal schooling system.

Formal and non-formal educators are invited to use this material as a tool to develop observation, curiosity, imagination, creativity and action skills to young learners, on the topic of marine litter, and not only: in line with the principles of Education for Sustainable Development (ESD), the material views marine litter as a piece of the wider picture of today's environment and sustainability challenges. Bottom line, using as a "vehicle" the tangible issue of marine litter the authors aspire that the material will prove useful in talking about more subtle issues having to do with the prevailing production and consumption models of our modern societies, and ultimately help in shaping the informed, critical thinker, and active citizen of the future.

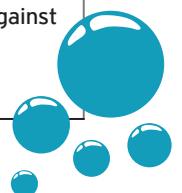
The following table presents an overview of the activities of the material, the educational objectives and the main methodologies applied in each.

TITLE	Educational Objectives	Type of activity (main methodology applied)
Introduction, Scope and Contents	This section presents the scope and contents of the educational material, as well as the partners, sponsors, etc.	
Notes for the Educator	This how-to-use section contains tips and methodological guidelines for the educator, to support him/her in the implementation of the activities	
<b>SECTION A: GETTING TO KNOW MARINE LITTER</b> <b>Learners get to know marine litter, observe it and examine its types and characteristics.</b>		
A1 Identification and Classification of Marine Litter	<ul style="list-style-type: none"> <li>- To practise description and classification skills.</li> <li>- To develop expression and communication skills.</li> <li>- To discuss ways of generating marine litter and attempt to define it.</li> </ul>	TEACHING THROUGH OBJECTS: Learners play games to describe and classify marine litter. They also BRAINSTORM to develop its definition.
A2 Experimenting with Litter Items	<ul style="list-style-type: none"> <li>- To experiment with certain characteristics/properties of marine litter.</li> <li>- To examine how litter's characteristics may affect where it is found in the environment.</li> <li>- To find out the decay time of various types of marine litter.</li> </ul>	Learners carry out simple EXPERIMENTS.
A3 Tracking Marine litter	<ul style="list-style-type: none"> <li>- To find out that marine litter is an issue with no borders, "travelling non-stop" from place to place.</li> <li>- To trace possible end destinations of marine litter, e.g. garbage islands, etc.</li> <li>- To think of possible behaviours that could have prevented marine litter generation.</li> </ul>	Learners engage in MAPPING activities with real and fictional maps to trace the "routes" of litter.
A4 Guessing the Top-10	<ul style="list-style-type: none"> <li>-To make hypotheses, work on data and find out the most commonly found marine litter items.</li> <li>- To practise reading and comparing data and charts.</li> <li>- To reflect on how a shift in our own behaviour can prevent waste generation.</li> </ul>	Through EVOLVING GROUP WORK learners make hypotheses and test them. Part of the activity takes place outdoors.
<b>SECTION B: LAND &amp; SEA BASED SOURCES</b> <b>In this section, learners examine the ways through which marine litter enters the marine environment and investigate the regional variations.</b>		
B1 Seeing the Unseen...	<ul style="list-style-type: none"> <li>- To practise in observing, collecting data, classifying and making charts.</li> <li>- To reflect on how waste generation can be prevented at source.</li> <li>- To recommend actions for remediation and prevention.</li> </ul>	The activity takes place outdoors in the neighbourhood. Learners do MONITORING, DATA ANALYSIS & SYNTHESIS of their results.
B2 The Root Causes of Litter	<ul style="list-style-type: none"> <li>- To discover where marine litter typically comes from and how it finds its way into the marine environment.</li> <li>- To learn how litter that is not properly handled or disposed of on land can become marine litter.</li> <li>- To identify the destination of litter depending on people's habits.</li> </ul>	Learners conduct bibliographic / internet RESEARCH on marine litter.
B3 Diving Deeper: Critical Thinking and Media Literacy	<ul style="list-style-type: none"> <li>- To analyse causes of marine litter in detail based on a real case, preferably local.</li> <li>- To practise analyzing and synthesizing information from written texts.</li> <li>- To develop media literacy.</li> </ul>	Learners carry out a TEXT ANALYSIS of articles published in the media.
B4 Taking Inventory of Our Habits	<ul style="list-style-type: none"> <li>- To conduct a survey to explore people's behaviours related to marine litter (people's habits related to waste management, consumption and sensitivity towards the condition of the coastal/ marine environment).</li> <li>- To explore how waste that is not properly handled or disposed of can become marine litter.</li> <li>- To think of possible anti-consumption habits that could prevent marine litter generation.</li> </ul>	Learners do a SURVEY through questionnaires and/or interviews.





TITLE	Educational Objectives	Type of activity (main methodology applied)
<b>SECTION C: EXPLORING THE IMPACTS</b> Learners explore the effects of marine litter on organisms, ecosystems as well as its socio-economic impacts.		
C1 All Tied Up	<ul style="list-style-type: none"> <li>- To “experience” entanglement by marine litter as experienced by wildlife.</li> <li>- To practice empathy (the capacity to recognise emotions that are being experienced by another being).</li> <li>- To become aware of entanglement threats that marine litter poses on marine life.</li> </ul>	Learners do <b>SIMULATIONS</b> through various kinetic activities.
C2 Animal Tales	<ul style="list-style-type: none"> <li>- To become aware of ingestion and entanglement threats of litter on marine life.</li> <li>- To “experience” how marine species feel like when confronted with marine litter items.</li> </ul>	Through <b>ROLE CARDS</b> representing marine life learners foresee possible threats that litter poses to them.
C3 How Harmful is It?	<ul style="list-style-type: none"> <li>- To be open to the views of others.</li> <li>- To explore the effects of marine litter on animals, habitats, humans, etc.</li> <li>- To understand the role of natural conditions in terms of potential harm caused by litter.</li> <li>- To understand that certain types of marine litter items may have greater effects than others but that all have the potential to be harmful.</li> </ul>	Learners engage in individual and group <b>RANKING &amp; PRIORITISATION</b> activity and <b>MATH</b> calculations to find out the degree of harm of various litter types.
C4 Can we Afford Marine Litter?	<ul style="list-style-type: none"> <li>- To work on a case-study presenting economic impacts of marine litter.</li> <li>- To analyse information and draw conclusions.</li> <li>- To strengthen decision-making skills.</li> </ul>	Learners engage in <b>ISSUE ANALYSIS</b> (text analysis).
<b>SECTION D: WORKING TOWARD SOLUTIONS</b> Learners are informed about steps they can take to prevent marine litter, investigate what individuals and organizations are doing to tackle the issue (at national and international level) and explore ways to educate others about possible solutions.		
D1 Policy Tools to Fight Marine Litter	<ul style="list-style-type: none"> <li>- To understand that marine litter is a global issue and to know about related EU, regional and international efforts (initiatives and policies).</li> </ul>	Learners carry out <b>INTERNET RESEARCH</b> .
D2 Envisioning the Future	<ul style="list-style-type: none"> <li>- To recognise there can be an alternative future for our natural surroundings.</li> <li>- To recognise similarities and differences in the visions of others.</li> <li>- To understand the difference between probable and preferred futures.</li> <li>- To explore the necessary steps in order for a preferred future to become a reality.</li> </ul>	Learners engage in <b>ENVISIONING</b> exercises at individual and group level.
D3 Opportunity for Change	<ul style="list-style-type: none"> <li>- To investigate why often although we know the responsible thing to do, other factors restrain us from doing so.</li> <li>- To identify our personal driving motives and values behind our consumption habits.</li> <li>- To consciously decide and practice a new habit relating to littering behaviour for a given time.</li> </ul>	Learners engage in <b>BARRIER ANALYSIS</b> to identify their underlying values behind habits and try to overcome their own “resistance to change”.
D4 Joint Action!	<ul style="list-style-type: none"> <li>- To join collective efforts for a common cause (clean up).</li> <li>- To design and implement an activity to bring change in the school/ community.</li> <li>- To stimulate creativity while being involved in the activity.</li> </ul>	In this outdoor activity learners practice <b>PARTICIPATION</b> in an organised clean-up activity.
D5 Going Public!	<ul style="list-style-type: none"> <li>- To analyse the factors in developing appealing visual messages for an environmental campaign.</li> <li>- To conceive, design and organise an awareness-raising campaign or event at the level of school, beach, local community.</li> <li>- To encourage awareness and pro-environmental behaviour in others.</li> <li>- To communicate marine litter challenges and possible solutions effectively.</li> <li>- To stimulate creativity.</li> </ul>	Learners apply various <b>CAMPAIGNING TOOLS</b> to set up their own campaign against marine litter.





## MARLISCO Raising Awareness across the European Seas

MARLISCO project (MARine Litter in European Seas: Social Awareness and CO-Responsibility) aims to raise public awareness, facilitate dialogue and promote joint responsibility among key actors towards a shared vision for the sustainable management of marine litter across the four European Regional Seas (North-East Atlantic, Baltic, Mediterranean and Black Sea). MARLISCO'S activities are organised by a 20-partner consortium located in 15 coastal countries.

From June 2012 to June 2015, MARLISCO develops a diverse range of actions including a study on the sources and trends of marine litter, a collection of best practices, a public perception survey, a video contest for youth, a web-documentary as well as a series of national debates, workshops, festivals and clean-ups. Additionally, several educational tools are being developed such as an e-game, a travelling exhibition, the current material and more. Find out more about MARLISCO [www.marlisco.eu](http://www.marlisco.eu).

### Credits

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*Citation: Alampeï Iro, Malotidi Vicky, Vlachogianni Thomais & Scoullos Michael*

*"Know, Feel, Act! to Stop Marine Litter: Lesson plans and activities for middle school learners", MIO-ECSDE, 2014*

© MIO-ECSDE, 2014 ISBN 978-960-6793-16-5

Special thanks to all MARLISCO partners that enriched the material with their ideas, especially Luigi Alcaro, Flávia Silva, Demetra Orthodoxou, Tom Doyle and UCC colleagues Kathrin and Damien, Joana Veiga, Isabelle Poitou, Ryan Metcalfe and Bonny Hartley. Sincere thanks to Richard Thompson for his valuable evaluation comments.



### MIO-ECSDE and MEDIES

The Mediterranean Information Office for Environment, Culture & Sustainable Development (MIO-ECSDE), is one of the largest Federations of NGOs from the Mediterranean. Since its establishment in 1995 MIO-ECSDE acts as a technical and political platform for representation and intervention of Civil Society in the Euro-Mediterranean scene. It is based in Athens, Greece.

Launched in Johannesburg (WSSD, 2002), the Mediterranean Education Initiative for Environment and Sustainability (MEDIES) is MIO-ECSDE's primal education initiative, with the objective to provide capacity building on ESD through publications, trainings and the facilitation of an e-network of educators.

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