HOW TO COMMUNICATE WITH STAKEHOLDERS ABOUT MARINE LITTER

A short guide to influencing behavioural change

Reflections from the MARLISCO project

MARLISCO
Stopping Marine Litter Together

SEVENTH FRAMEWORK PROGRAMME

SEA CHANGE WITH PLYMOUTH UNIVERSITY

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This guide offers recommendations for communicating with different stakeholders about the issue of marine litter and provides examples of communication and engagement practices which aimed at influencing attitudinal and behavioural change.

It brings together insights gained from large scale stakeholder surveys and the evaluation of several education and outreach activities conducted across Europe with a number of stakeholder groups, and summarises what factors can affect communication and engagement processes and influence attitudinal and behavioural change. The guide includes partner feedback reflecting on the stakeholder engagement process regarding the successes and challenges experienced during communication and interaction with different stakeholders.

It is hoped that this guide will inform future efforts to communicate with stakeholders and influence behavioural change regarding the issue of marine litter. For example, it is hoped that this report will be a useful resource for academic and applied audiences across the marine, environmental and social sciences, as well as for industry, Non-Governmental Organisations, and government organisations.

CONTENTS

Summary

Understanding societal perceptions and evaluating communication and engagement with different stakeholder groups is critical in order to develop better strategies to improve understanding about the problem and solutions surrounding marine litter and to influence behavioural change.

When communicating about environmental issues, in this case, the global issue of marine litter, then the work of social and behavioural scientists is highly relevant. Based on information gained from psychological research on communication and environmental attitude and behaviour, along with insights gained throughout the MARLISCO project on marine litter, this guide aims to help readers understand how to communicate more effectively with stakeholders and influence behavioural change.

If you've picked up this guide, you're probably already aware of the problems that marine litter poses to the marine environment, tourism, the economy and our wellbeing, and will be looking for ways you can communicate with other stakeholders and solutions that you can implement, to help address this issue.

Whether you represent an environmental NGO, a local authority, a national government, industry, or the education sector, this guide offers recommendations for communicating with different stakeholders about the issue of marine litter and provides examples of communication and engagement practices which aimed at influencing attitudinal and behavioural change.

Key recommendations

When communicating about marine litter

Try to:

- Find out what your audience already knows
- Provide a sense of collective action
- Provide achievable goals and think about immediate *and* longer term engagement
- Think of your target audience or stakeholder group to best tailor your communications, what are their goals, needs, commitments, and biases?
- Interpret media reports of the problem with a critical eye

When organising an education and outreach activity

- Don't try to re-invent the wheel, learn from activities that others have organised
- Provide opportunities for exchange and collaborate with other groups of people with similar goals
- Consider how the activity is likely to influence your target audience's attitudes and behaviour
- Make it solution- and action-oriented
- Capitalise on networks via social media, the press and organisation connections

When measuring success

- Define clearly what you want to achieve
- Evaluate how your programme is delivered – what it does (and does not) achieve
- Draw on principles and methods from the social sciences and look at what others have done your field
- Use and share what you learn to inform future communication and engagement attempts

Team ‘Plastic Pandemonium’ from North Berwick Wildlife Watch Club participating in the MARLISCO video competition

“We have been working with the Marine Conservation Society and the Scottish Seabird Centre on their Marine Protected Areas and Save Scottish Seas campaign. We collected lots of signatures and handed them into the Scottish Parliament and helped to organise a community beach clean. We thought making a film would be a great idea to share our learning and spread the message.”

Section 1

Understanding stakeholder perceptions

Why it is important to understand the perceptions of stakeholders in order to target communication and engagement activities effectively

Many attempts to communicate with stakeholders regarding environmental issues rely on presenting the 'facts' or increasing knowledge about the problem. Whilst this is important, alone it is often not sufficient to influence behavioural change.

Research undertaken by psychologists and other social scientists tells us that people need to understand the issue, feel concerned, responsible, motivated and able to take action and perceive that others are working toward a similar goal.[1]

Individuals will approach the issue with different levels of experience and understanding, different concerns and motivations, and different perspectives on the actions required to facilitate solutions. Therefore, it is vital to understand the perceptions of those who have some interest, in or responsibility for, marine litter (i.e., the stakeholders) in order to communicate effectively, target outreach and engagement practices and influence behavioural change.

Despite differences between individuals or between stakeholder groups, there are also a number of principles derived from the social sciences that can apply to most people when understanding how to communicate effectively about a topic that is complex, confusing, uncertain, sometimes overwhelming, and often emotionally and politically loaded. For example, humans have a strong visual system, they often take mental shortcuts rather than deeply analyse communications, they are influenced by other people around them etc. Therefore it is important to provide visual information, simple messages and make a link to other social groups.[1, 2, 3]

In the next section we draw on some of these principles and provide insights into **stakeholder perceptions about marine litter from a European-wide survey of 3876 respondents** conducted within the MARLISCO project across 16 countries and a number of stakeholder groups.[4, 5]

At each step we offer recommendations for communicating more effectively with stakeholders.

What are stakeholders' perceptions about marine litter? Key insights from Europe-wide surveys

Gauging problem awareness and concern

If people are aware and concerned about marine litter, they are more likely to appreciate the need for action and engage in pro-environmental behaviour.

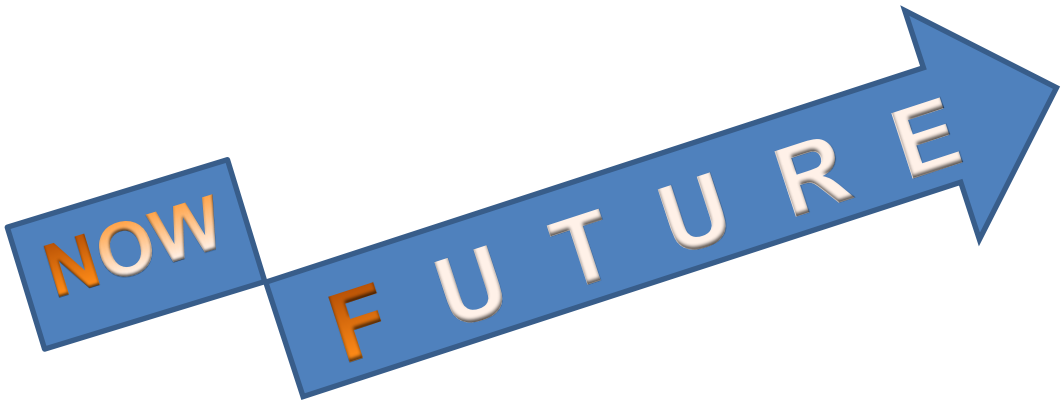
In our study…

87% of respondents ***agreed*** that ***"marine litter is an important problem"***

88% of respondents ***disagreed*** that ***"marine litter is only a problem for coastal communities"***

However, **23%** of respondents ***agreed*** that ***"marine litter is a future environmental threat rather than a present one***"

In other words, people are concerned about marine litter overall and acknowledge that it is a problem for everyone, **but are somewhat inclined to see it as a future threat**. The problem with this is that people tend to perceive immediate threats as more relevant and of greater urgency than future problems and discount the importance of future threats.[6]



Avoid overwhelming your audience

If problem awareness and concern about an issue are very high, without feeling able to help then there is a chance **that people may feel overwhelmed which can lead to inaction**.

People also have a **'finite pool of worry'** – a limited capacity for how many issues they can worry about at once.[3] So, as worry about one particular issue increases, worry about other issues may decrease.

Recommendations:

- Try to frame the problem as a current threat, not just a future one
- Be cautious about finite pool of worry, and numbing an audience to the issue

Bringing the message closer to home & relating threats to actions

Emotional appeals are often used when communicating about environmental issues. In the case of marine litter, such appeals tend to be used to illustrate threats, often posed to marine wildlife. There is not always an obvious or clear link between the negative impacts and our actions – both in terms of the actions that lead to, and the actions that can be taken to prevent such negative effects. With marine litter it is often harder to know what to do, and what action to take to help wildlife for example.

When we communicate about threats (to the marine environment, the appearance of the coast, human health, tourism, and fishing and shipping), it is important that we also **provide guidance on how to reduce these threats**, and how our actions will have direct or indirect influence.

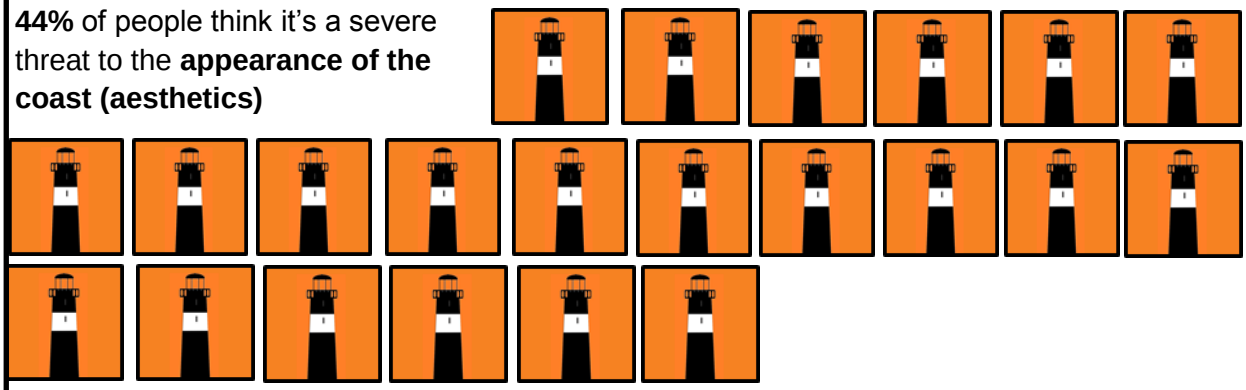
Recommendations:

- Beware the use of overly-emotional appeals – they may be good for short term engagement in the issue, but it can be hard to retain that level of interest.
- Communicate how marine litter has direct consequences for people, not just the marine environment, and consider referring to different impacts of marine litter to communicate the issue to different audiences so that it is more relevant and is more closely aligned with the actions they can take.
- Consider people's personal experience of the problem – people who visit the coast and witness marine litter more often are more likely to be concerned about marine litter and be more willing to engage in solutions.

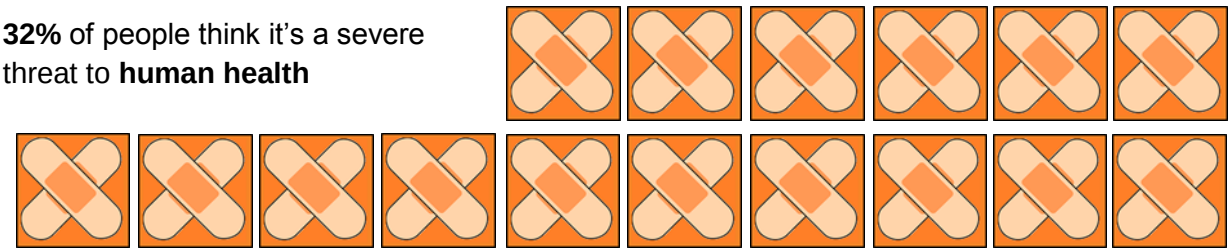
We asked our 3876 respondents about threats that marine litter poses…

80% of people think it's a severe threat to the **marine environment**

44% of people think it's a severe threat to the **appearance of the coast (aesthetics)**

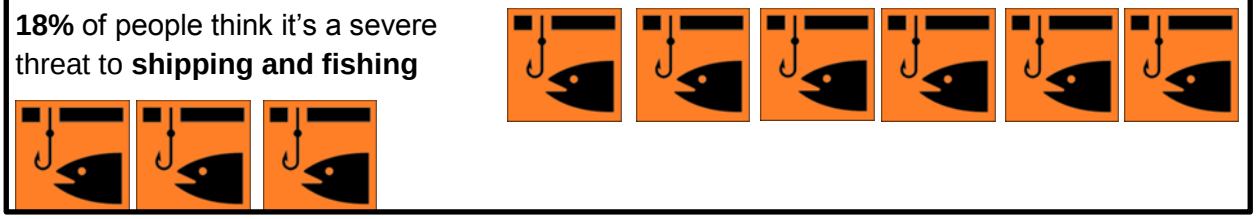


32% of people think it's a severe threat to **human health**



22% of people think it's a severe threat to **coastal tourism**

18% of people think it's a severe threat to **shipping and fishing**



Seeing the unseen

Marine litter can be a highly visible problem if you visit a beach and witness it first hand; **nearly 75% of people surveyed in our study reported that they notice marine litter on most or every visit to the coast.** However, one challenge in communicating the scale of the problem is that the majority of people are not going to witness marine litter on the seabed or floating on the surface out at sea, or when it is so small it is less visible (microplastics). Findings from our survey show that **people believe most marine litter to be near urban areas and on beaches, and the least in polar seas**.

We're more familiar with seeing litter on the beach and shoreline

We're less familiar with marine litter on the seabed and in polar seas

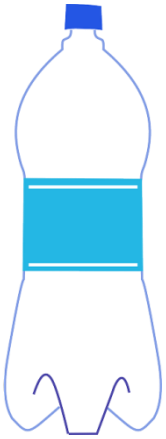
Is general knowledge lagging behind the science?

In order to understand the scale of the problem and to identify how best to tackle it, it is helpful to establish whether stakeholders have a grasp of the current state of knowledge and science on environmental issues.

As an example, the literature indicates that plastic typically constitutes around 75% of all marine litter, and it is regarded as one of the most problematic materials because of its abundance, longevity, and the fact that larger plastics break down into ever smaller parts termed 'microplastics'.[7]

…but does our knowledge about marine litter lag behind the statistics and what is known in science?

In our study, **survey respondents correctly identified that the majority of items of marine litter are plastic, but still greatly underestimated the actual percentage of marine litter that was plastic** – and this was true across a number of stakeholder groups (see illustration on the next page). This shows how people's knowledge can often lag behind the state of scientific data, even despite much media coverage of the issue.



Do stakeholders know what marine litter is composed of? Estimates from different sectors:

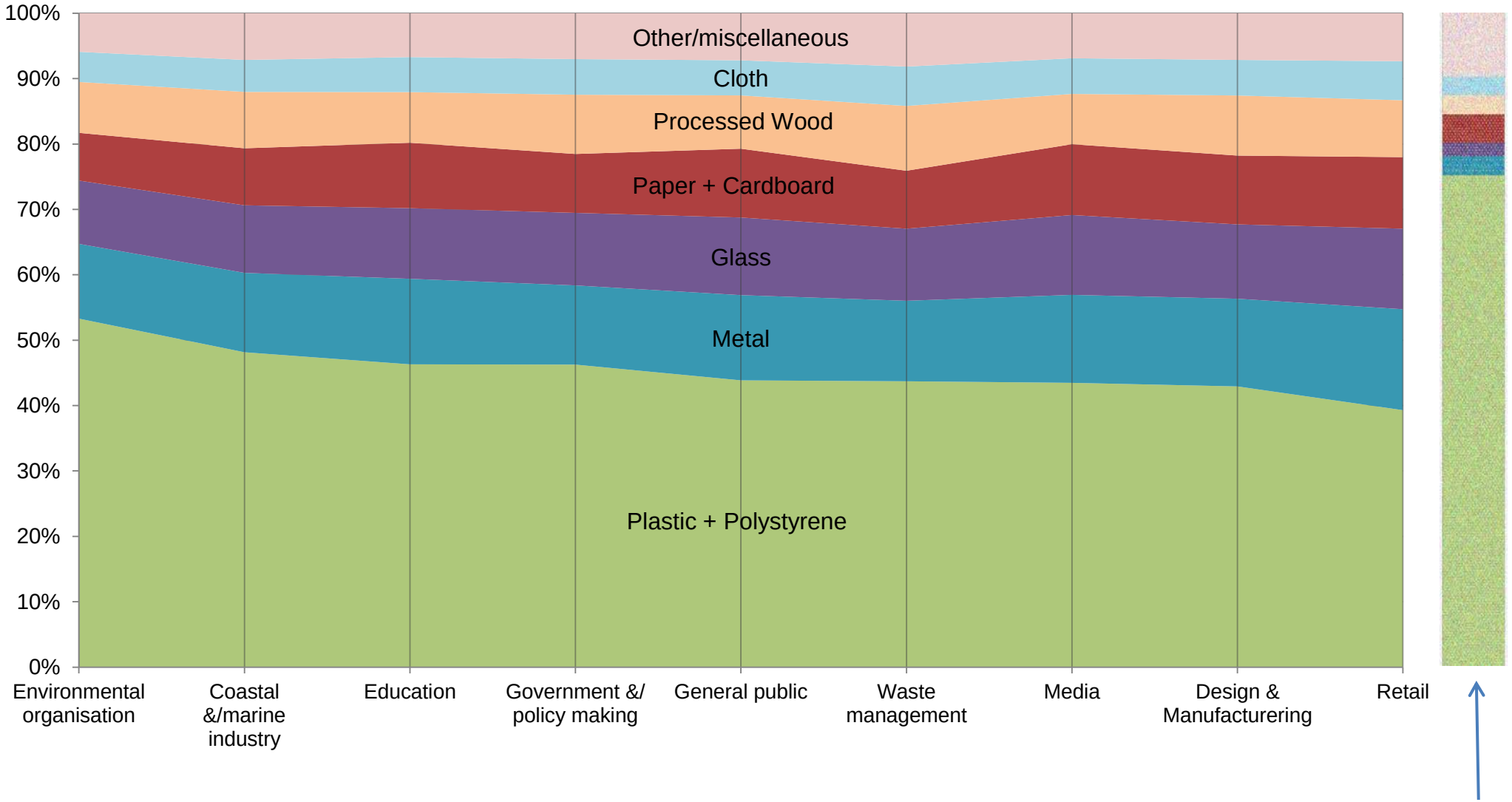
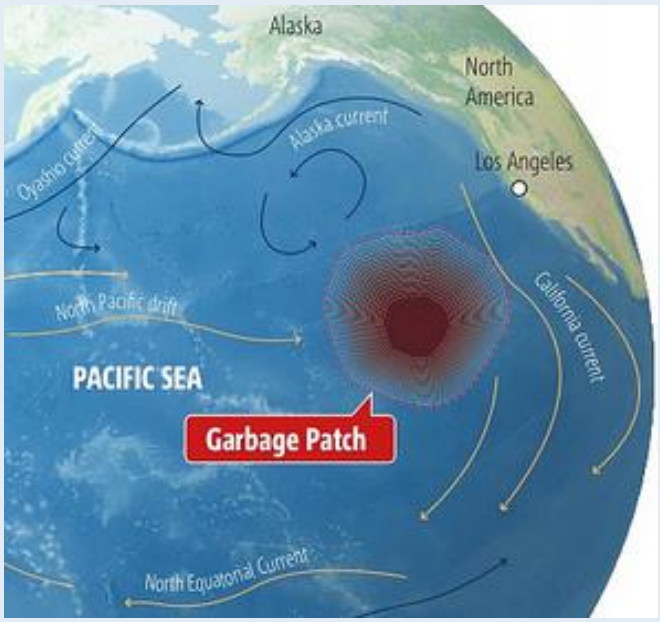


Illustration of actual composition figures from OSPAR (2007)[8]

Uncertainty and the desire for simple ‘facts’ to communicate about a complex issue can lead to inaccuracies

Whilst there are many marine litter monitoring programmes implemented globally to record the type and quantity of marine litter, **we don’t know the exact pathways litter takes and what the trends are**.

This uncertainty, combined with the desire to simplify the issue when communicating with stakeholders (particularly the general public), can lead to **scientific data being misrepresented**.[3, 9]

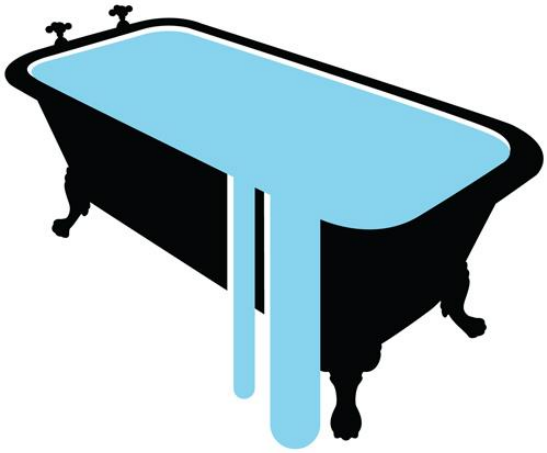


…One well known example frequently referred to in the media and other sources is that there is an island of trash in the Pacific ocean the size of Texas, often labelled as ‘the great pacific garbage patch or ‘pacific trash vortex’.

This may grab people’s attention, but is not quite accurate.

There are certainly substantial accumulations of marine litter at the centre of oceanic gyres where ocean currents converge and lead to accumulation of buoyant items, but it is difficult to give a meaningful estimate of size since in reality there is litter in most locations in the ocean.[9]

There are a range of solutions to marine litter. Some people believe that solutions should prioritise cleaning up and removing litter from certain 'hotspots', but litter is in most locations in the ocean, so some experts believe that the ultimate goal should be to **prevent more litter reaching the marine environment in the first place**.



… prioritising cleaning-up marine litter rather than preventing it getting there in the first place is like trying to overflowing bath when the tap is still running

Other uncertainties include questions about how long it takes different items of marine litter to breakdown and degrade (for which we only have estimates), and confusion about how to interpret what it means when an item claims to be 'biodegradable'.[9]

Recommendations:

- Interpret media reports with a critical eye, and look up the sources of the information yourself to ensure accuracy
- Scientists and researchers can help simplify information, communicate uncertainties, and try dispel any myths and inaccuracies as they arise in order to preserve accuracy
- Take care to communicate scientific information – avoid the temptation to exaggerate or oversimplify scientific findings

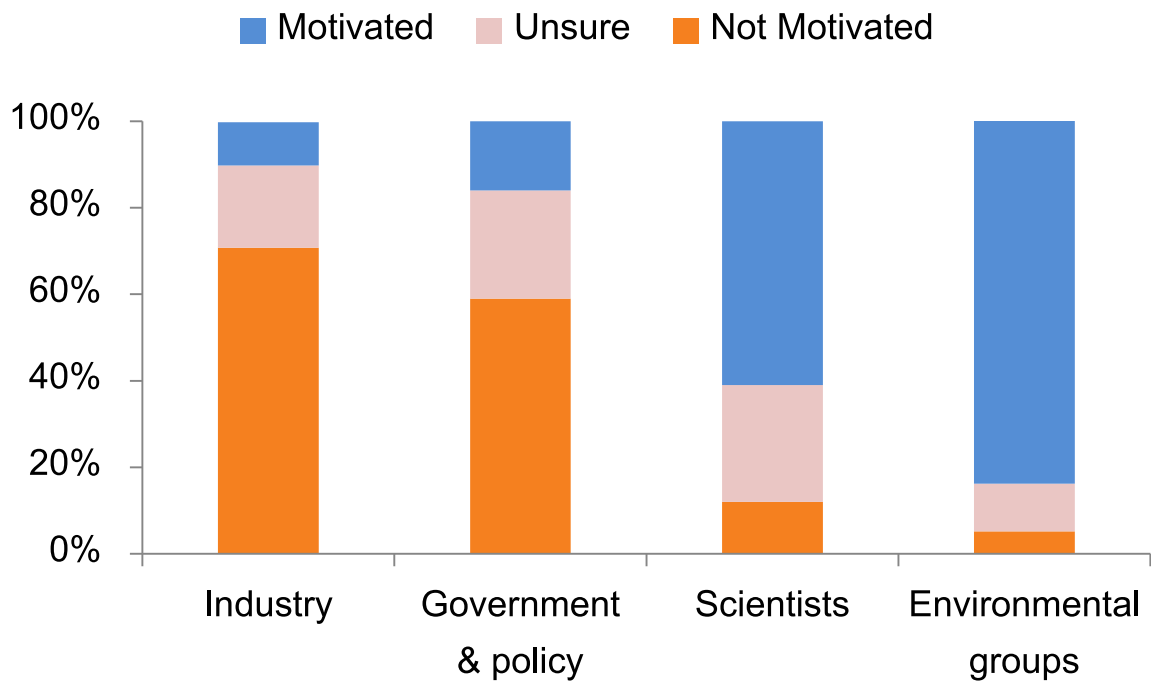
It is important to communicate that the uncertainties, such as exactly how much litter is in the ocean and how long it takes to degrade, do not change the confidence that scientists have that human behaviour is causing the accumulation of marine litter and that preventative measures are needed.

How are the different players perceived?

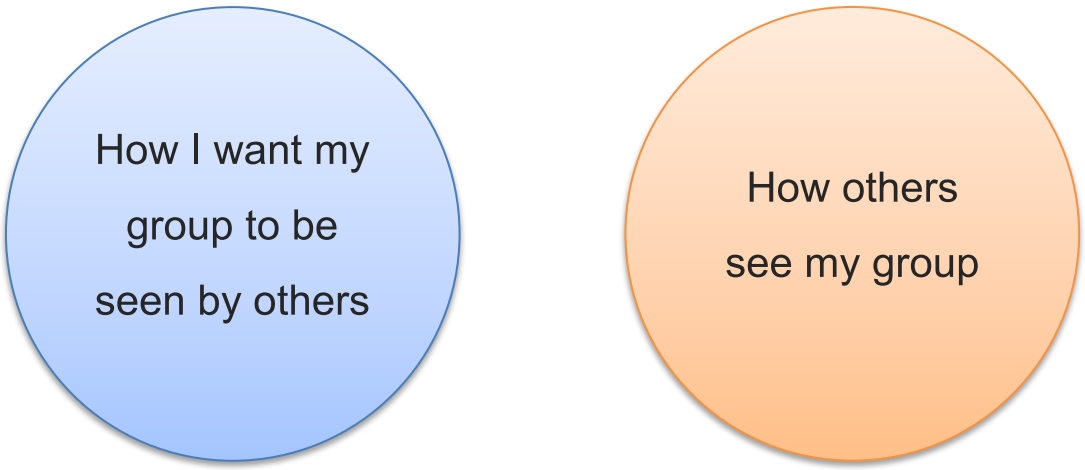
Like all other environmental challenges, solutions to marine litter will have to involve concerted efforts across multiple stakeholder groups. Any sector's effort will be interpreted in light of perceptions about their motivation, responsibility and competence.[10]

However, there are **differences in how we perceive different stakeholder groups** that have some interest in, or responsibility for environmental issues. If people do not think that others are pulling their weight or that they are "just one person or group" who cannot make a difference, they can become demotivated and disengaged.

In our study, **ENVIRONMENTAL GROUPS and SCIENTISTS** were seen as **HIGHLY MOTIVATED** to tackle the problem of marine litter. **INDUSTRY and GOVERNMENT/POLICY MAKERS** were seen as somewhat **UNMOTIVATED** to help.



There is an opportunity for stakeholder groups to appreciate the importance of how they are perceived by others and develop ways to communicate better and establish a more positive image.



Recommendations:

- Strive for solutions that will reduce marine litter together, where everyone is working toward a similar goal
- Organisations that are perceived as less motivated to tackle the problem of marine litter should take steps to remedy these perceptions and improve their image

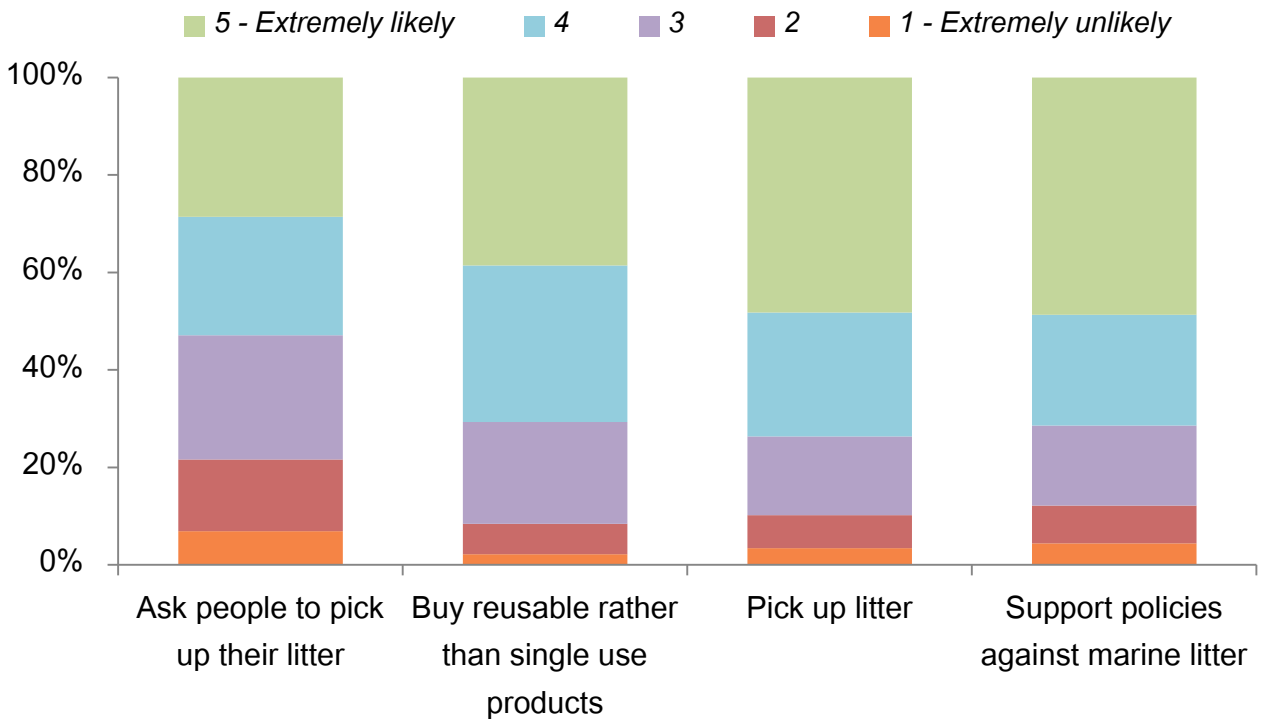
Actions, solutions

We've seen how it is important to understand stakeholder perceptions in order to communicate the issue effectively. It can be useful to consider how concerned your audience already is about the issue in question, whether they view the problem as a current and observable vs. future and out of sight threat; whether they have accurate knowledge and understanding about the problem; and how other groups are perceived. These can all help your audience understand and aid communication.

…but what actions are people willing to take to help reduce the causes of marine litter?

People will approach the issue of marine litter with different perspectives on the actions required to facilitate solutions, and what actions they are personally willing to take. People also tend to simplify their decision making, and often decide to take one action, even when it provides only part of the solution. For example, although picking up litter is important, it should be part of a range of behaviours to reduce marine litter, such as recycling, using reusable shopping bags and packaging, and encouraging others to change. This is called the **"single action bias"** and it may occur because people feel like they are already doing enough to help and don't feel the need or responsibility to take further action.[3]

In our study, survey respondents were **most willing to support policies against marine litter and to pick up litter**, **quite likely to buy reusable products**, and **least likely to ask others to pick up litter…**



Challenges and successes engaging stakeholders in this process, and recommendations:

- Respondents to surveys are often already interested in the subject, concerned, and motivated, which can bias results – to overcome this, consider providing incentives to get a wider sample or audience interested to take part and share their views
- Some stakeholder groups can be difficult to access – collaboration with groups who might have good contacts and experience working with other sectors can be invaluable


?
How concerned are you about marine litter?
How motivated & responsible are the different stakeholders in your view?
What actions have you taken in the last week to reduce, reuse, and recycle?

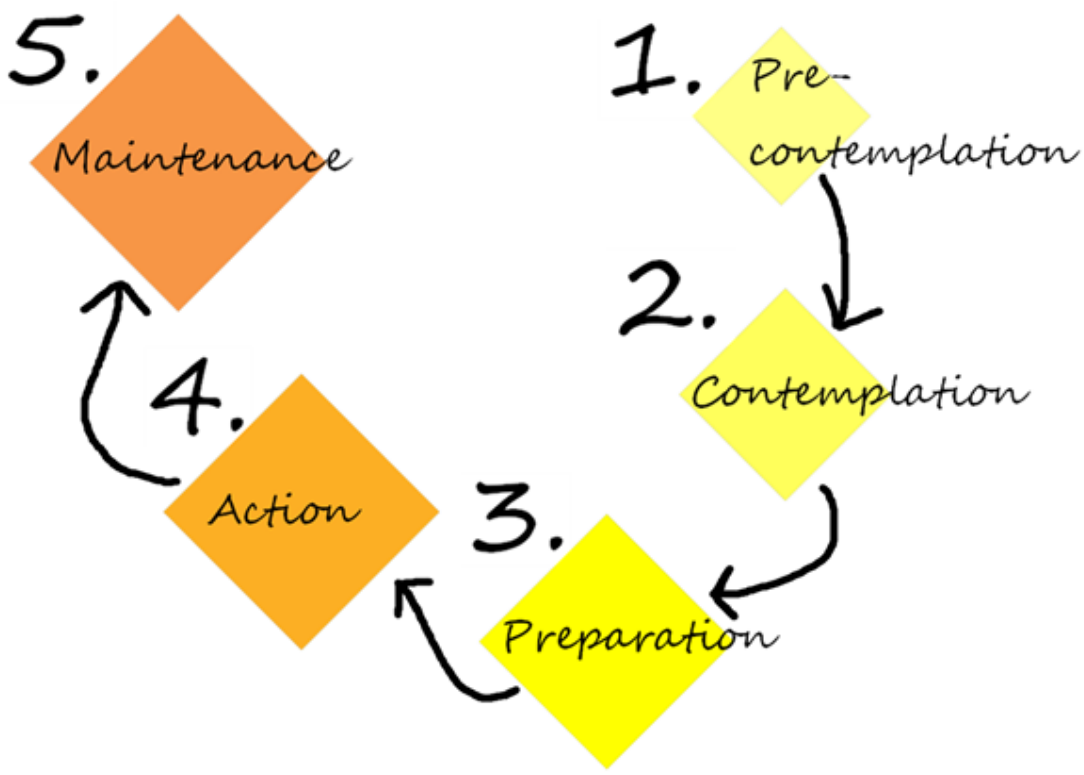
Section 2

Communication and engagement

Communication and engagement activities for attitude and behavioural change

Section 1 highlighted some key principles derived from the social sciences regarding effective communication of environmental issues, and provided insights from our European-wide study of stakeholder perceptions about marine litter. Now, in Section 2, we turn to some specific attempts to **influence attitudinal and behavioural change** with a number of stakeholder groups, summarising best practice for effective communication and engagement.

The activities we refer to in Section 2 were conducted within the MARLISCO project across 12-16 countries and **designed specifically to engage the public, educators, young people, and to facilitate stakeholder interaction and dialogue to achieve change**. [11, 12]



Engaging the public

Communication with members of the public about environmental issues can flow via various routes in the traditional media, including **television, newspapers, and radio**, and increasingly via **social media, such as Twitter, Facebook, and Google+**. This form of communication can reach a large number of people globally, but is largely **passive**.

Communication via outreach and engagement events, such as exhibitions, beach cleans and community events offers opportunity for a **more active, hands-on and interactive experience**.

An excellent example of such an activity is the implementation of the MARLISCO public exhibitions which have travelled to a wide variety of locations within 14 European countries, including museums, aquariums, galleries, research centres, schools, and beaches. The exhibitions aimed to engage the general public in the issue of marine litter and raise awareness about the problems and solutions. The Exhibitions were designed to **inform and inspire action** in the general public in an **accessible** and **engaging** medium with **scientific information** and **collaboration with national artists**.

The exhibitions applied a number of principles that we introduced in Section 1 for effective communication:

Brought the message closer to home – engaging communities across each country and using the knowledge and expertise of those in the local area

Framed the issue as a current and pressing problem, but one that is **avoidable** and which requires **joint responsibility**

Communicated the solutions not just the threats posed by marine litter

Used **prevention** (avoid/never) AND **promotion** (use/buy) **framing** for the pledges to **increase the chances of reaching a greater number of people**

Simplified scientific information and **communicated uncertainties** to dispel myths and preserve accuracy

Encouraged visitors to make **several pledges to take action**, to **overcome the single-action bias**

What are people happy to commit to?

(data from our survey of 1842 visitors to the European-wide exhibition in 2013 – 2015)

✓88% pledge to avoid using plastic bags in the supermarket.

✓79% pledge to separate litter for recycling.

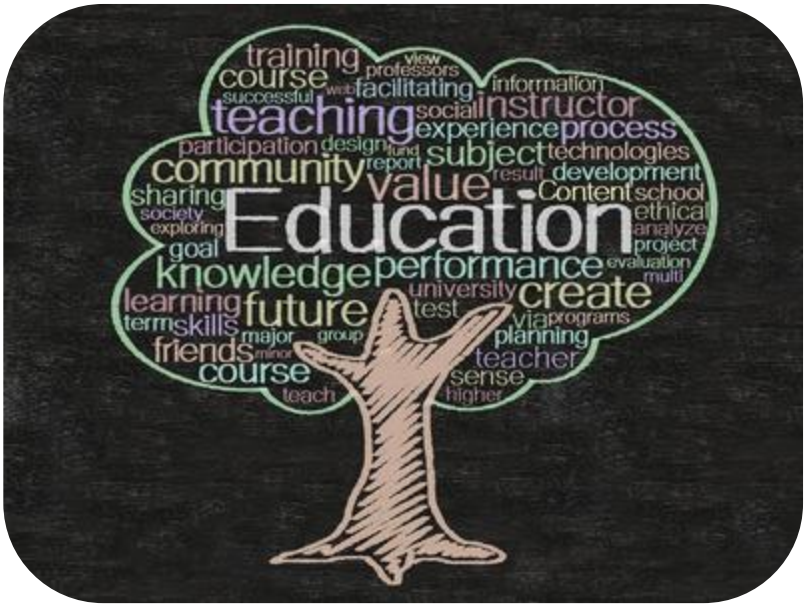
✓74% pledge to buy items with less packaging.

✓67% pledge to pick up litter.

✓52% pledge to encourage family and friends to make changes that will benefit the environment.

Engaging educators

Environmental education is a potentially powerful tool for raising awareness and knowledge about pressing environmental issues, such as marine litter, and for facilitating greater understanding of the solutions to these problems in order to enable action. Educators are a key **driver of change in society** and formal and non-formal educators play a vital role in helping to **encourage students to be knowledgeable of the environment and problems**, **aware of the solutions to these problems**, and **motivated and equipped to solve them**.[13]



Here we outline some insights gained from working with educators throughout the MARLISCO project in developing an educational pack and programme designed to train educators how to use the resources, and increase confidence and intentions to integrate marine litter education in their teaching practice.[14]

Making it easier for educators

Educators have many commitments and are under numerous demands and restrictions within and outside the curriculum. Therefore, educators may want to include more environmental education into their teaching but often do not have the time or resources to do so. It is important to think of ways to make it easier and reduce the workload needed by educators.

In the MARLISCO educational training we did this by providing **ready-to-use lesson plans, practical steps, and resources**, and demonstrated example activities that can be integrated within or outside the formal classroom and curriculum. We treated the **educators as experts**, where the role of the trainer was to empower and facilitate, helping educators feel confident in their skills and abilities to teach about marine litter.

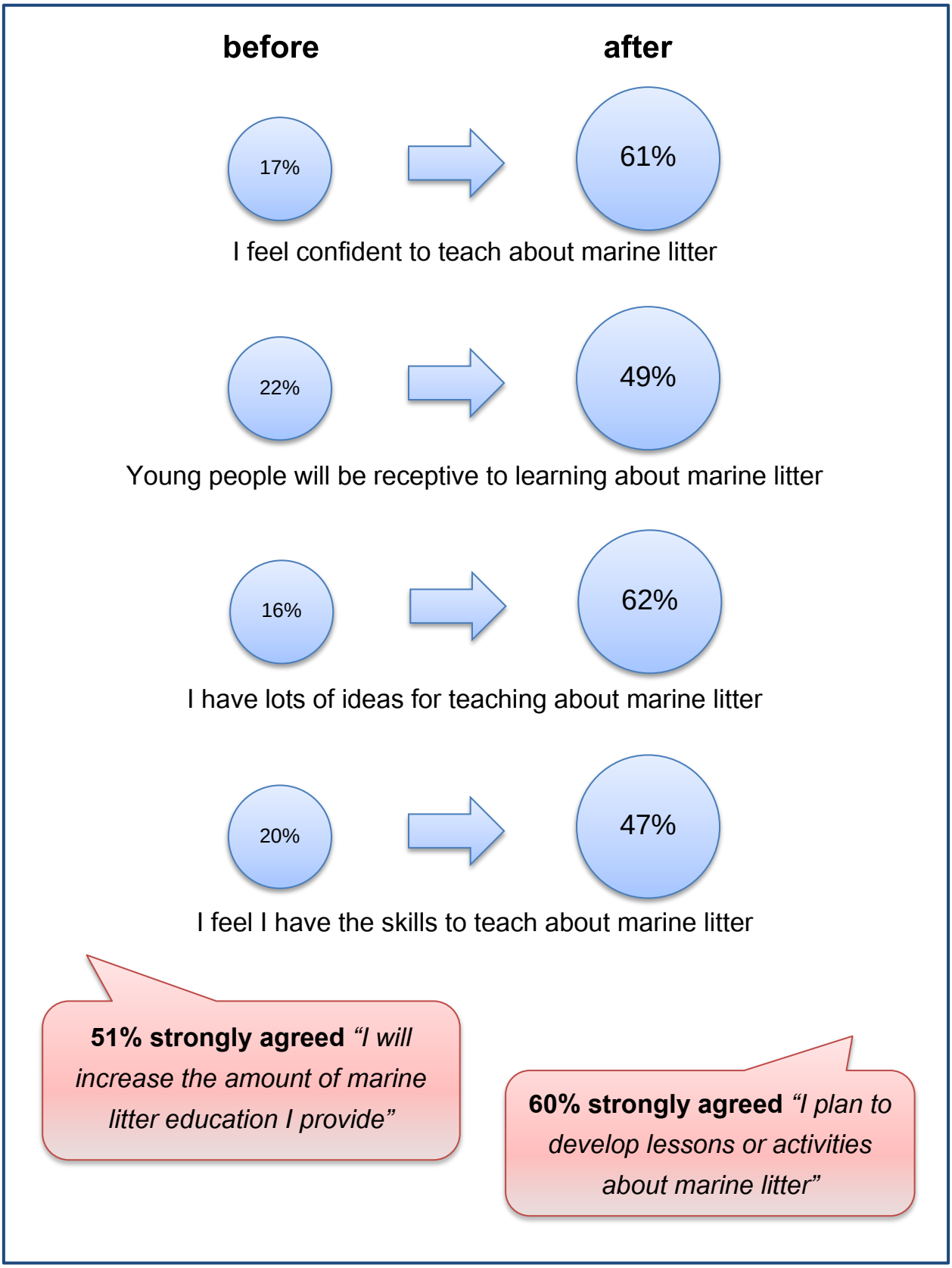
Support network

It is vital that educators feel supported so they become and remain motivated to provide environmental education. Educator training can be face-to face, but is increasingly being provided online via e-courses. This allows educators from across the globe to work together in an **online community** and **share best practices, ideas, and experiences**. It provides a **support network** and common group identity which is important in maintaining motivation and engagement.

Our study showed that educators felt significantly more able and confident to teach about marine litter after completing an online interactive e-learning course, and reported intentions to integrate marine litter education into their teaching and encourage others to do the same – see illustration on the next page.[11, 12]

How does educator training influence attitudes & intentions?

(data from our survey of 72 formal & non-formal educators across Europe in 2015)



Reaching out to educators who are not already engaged

In the majority of our engagement activities with educators, we have recruited learners for training that are already aware of the problem of marine litter and interested in understanding how to integrate the topic into their teaching; they want to take part in the training and volunteer. A common challenge is reaching out to educators who are not already aware of or engaged in the topic. Both top-down and bottom-up strategies can help address this challenge:

TOP DOWN

Better incorporation of marine litter in the **curriculum and formal teacher training process** would give educators greater time, resources and confidence to teach about the topic. Greater promotion of and support for schemes, such as EcoSchools, would also help establish a norm for schools to consider environmental issues and take action.

BOTTOM UP

By engaging educators who are already interested in marine litter and/or who have received resources and undergone training (such as the MARLISCO educational pack and course), and encouraging them to share their experience and skills with fellow educators, there is potential for a snowball effect – **educators become the 'trainers', and the network of educators that are reached should continue grow**.

Of the 72 educators on our training course…

62% strongly agreed

"I will encourage other educators in my network to consider including marine litter as a topic in their teaching"

Think beyond the individual you are training so that **educators share their experiences, skills, motivation and resources with their network** - after all, messages from people similar ourselves are often better received.

Engaging young people

Young people are aware of various environmental problems such as pollution and litter, they worry about environmental issues and tend to report behaving in an ecologically responsible manner.[15] Children are also an **important source of social influence**, with the potential to shape the environmental values, knowledge, attitudes, and behaviours of peers and family.[16]

We outline some insights gained from working with young people throughout the MARLISCO project, and in particular, on a European-wide video competition to engage students in the topic of marine litter.

Participating students were asked to prepare a 2 minute video on the issue of marine litter, considering some key themes, including: Why is marine litter a concern?; What can be done?; What has been done in our school/local community to deal with it?

Placing the learner at the centre of their education

It is important to consider the age group you are trying to engage, and the best medium by which to communicate about a particular environmental concern. In the MARLISCO video competition the educational activity allowed learners of different ages, backgrounds, levels of knowledge and cultures to participate.

Students could **investigate and take learning into their own hands**, and educators acted as facilitators. This is consistent with constructivist pedagogy, where learners are **active** participants in their education.

Instilling a sense of citizenship and empowerment

The competition also brought the marine litter message closer to home. Young people **worked co-operatively together with their peers and local community** to examine the problem *and* the solutions.

The role of incentives and institutional support

Incentives can help engage your audience – there were trophies, certificates, cash prizes, and a trip to the 'Bremen European Maritime Day Celebration' up for grabs for the winners of our video competition. This not only provided incentive for students and their schools and teachers to take part, it also rewarded their hard work. Institutional support provided by the schools and clubs who participated also meant that engagement was maintained.

"It was brilliant shooting on location and actually seeing the problem for ourselves. I didn't realise it was so bad. Now I've become aware of the extent of the litter I've actually become quite obsessed about taking steps to reduce it"

(Lauren Kelly, team 'Sea Quest' from Assumption Grammar School, Northern Ireland)

It is often difficult to evaluate how engaged young people have become in environmental issues, and whether communication has influenced attitudinal or behavioural change. Methods often simply demonstrate satisfaction and enjoyment in the environmental education activity, rather than measuring changes in outcomes.[17]

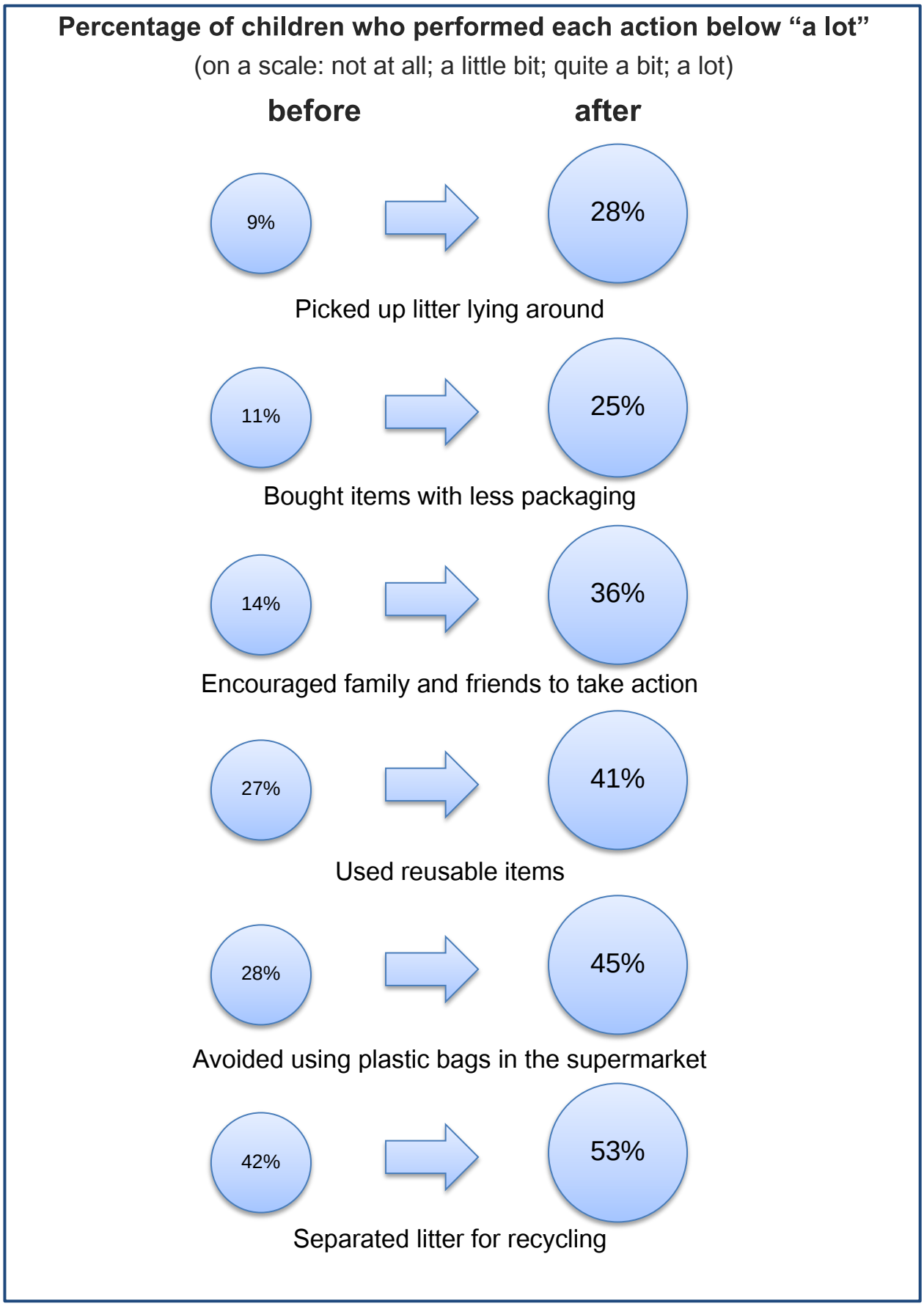
Our study showed that after participating in the educational activity, students were significantly more concerned and reported engaging in more actions to reduce the potential causes of marine litter – see illustration on the next page.[11, 18]

How did the educational activity influence behavioural change?

(data from our survey of 238 students across Europe in 2013-2014)

Percentage of children who performed each action below "a lot"

(on a scale: not at all; a little bit; quite a bit; a lot)



Facilitating stakeholder interaction to achieve change

Like all other environmental challenges, in order to effectively tackle the problem of marine litter, there is the need for a concerted approach to encourage co-responsibility through a **joint dialogue** between the many players.

We outline some insights gained from fostering **interdisciplinary collaboration** and communication with multiple sectors within the MARLISCO project, and in particular, during the national fora (debates) conducted in 12 European countries.[19] A diverse group of stakeholders attended each national forum and acted as representatives of their sector, including industry; users of coastal and marine waters; waste management and recycling; Regional Sea Commissions and EU representatives; local municipalities; citizens' groups; environmental NGOs; and social and natural scientists.

Joint responsibility and group discussion

Communication within groups allows stakeholders with a range of knowledge, skills and experience to share their views and work on a problem together. It provides an environment for discussion and **acknowledgement of joint responsibility**. **Group discussion** increases the likelihood that multiple sources of information and perspectives will be considered when making decisions about problems and solutions to environmental issues such as marine litter. There also tends to be greater **commitment to decisions** and implementing solutions following group discussion.[3]

Of the 238 stakeholders surveyed at the European national fora in 2014 – 2015…

✓ **100%** of stakeholders **agreed that:**

… "to tackle the problem of marine litter, the different sectors NEED TO work together"

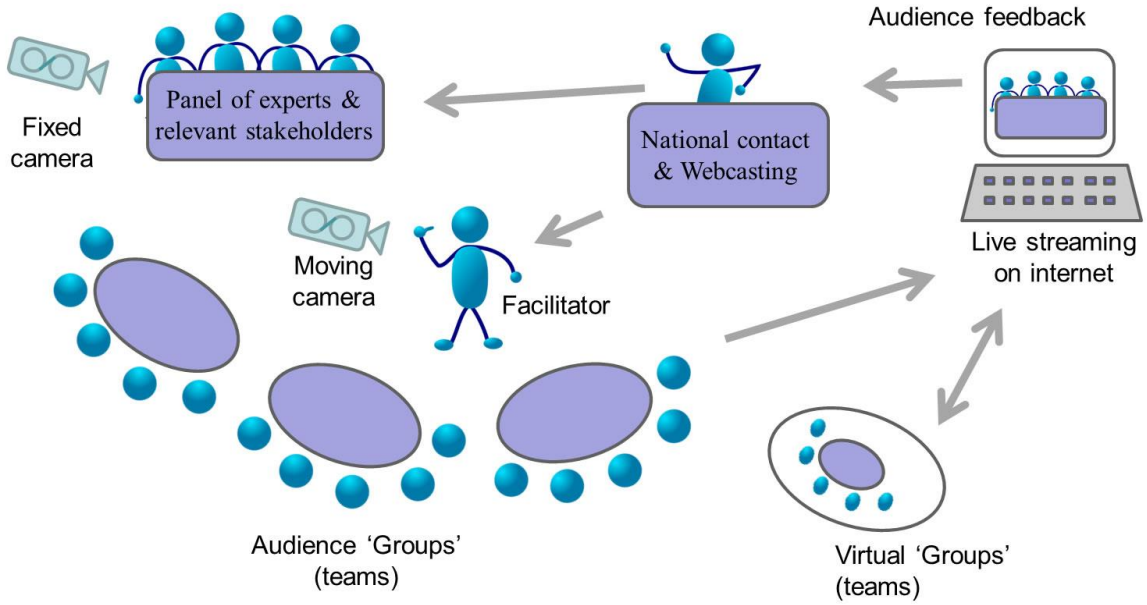
X However, only **19% agreed that:**

… "the different sectors ARE working together effectively to tackle marine litter"

Facilitated communication

Eliciting participation from the various stakeholders present in group discussions is vital when trying to make decisions. People can take on different roles in group discussion and decision making, and there are inevitably going to be some members of the group who are more vocal and others who are quieter. It is important to **represent all viewpoints** and give everyone the opportunity to speak. Facilitators play an important role in **keeping the discussion on topic** and soliciting participation from everyone.

Small group break-out sessions and **interactive activities** can also help initiate discussion and generate dialogue between participants. Stakeholders who feel included, valued, and part of the discussion process are more likely to support the outcome. Using group discussion to generate solutions allows stakeholders to bring their unique experience to the table and then work together through knowledge exchange and consensus building, in order to develop actions that are agreeable to all.



?

- Can you think of how these principles of communication and engagement map on to your activities?
- How could you use these examples in your communication with different audiences (the public, educators, or young people?)

Conclusion/Section 3

Challenges and opportunities in achieving effective stakeholder communication and engagement

Common challenges and successes experienced during communication and interaction processes

When trying to communicate with a diverse group of stakeholders about environmental issues, such as marine litter, it is common to come up against some challenges along the way. In this section, we summarise insights gained from partner feedback collected throughout stakeholder engagement processes. Specifically, we reflect on the strengths and pitfalls experienced during communication and interaction with stakeholders in order to guide future efforts.

Preaching to the converted?

Common methods, such as snowball and convenience sampling, tend to lead to **over-representation of those already interested in the issue of marine litter** – they are more willing and likely to take part in surveys and engagement activities. They are also likely to be more concerned and have a greater understanding of the topic. This can **skew results intended to be representative** of the wider group being surveyed. This can be particularly problematic when trying to assess general public perceptions and behaviours.

The challenge is to achieve participation from individuals who are representative of their group, in order to understand everyone's perceptions, especially individuals and stakeholders who are not already engaged. However, it is also important not to overlook the vital role that certain (minority) groups play in creating change and influencing others who are less aware of problem and solutions.[20]

Cooperation and joint responsibility vs. debate and blame

Stakeholders who feel they might be vilified in relation to the marine litter issue may be less inclined to take part in communications and engagement events. This was a particular challenge for our national fora events, where for **fear of being criticised or singled-out**, stakeholders representing parts of industry who are perceived as responsible were more reluctant to attend, or allow recordings of the event to be released publically.

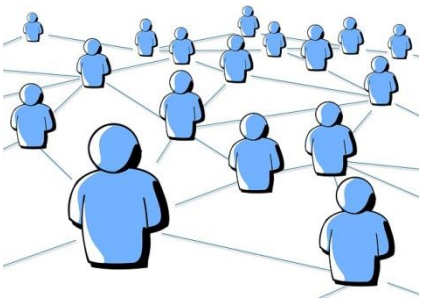
It is vital to have participation from these sectors, because without them, solutions are not possible. It was important to **assure stakeholders** that the aim of the fora was to provide **joint dialogue** between the many players and was intended to **increase cooperation** rather than be a debate or blaming exercise.

Personalised communication

There is always a compromise between sending out a big generic recruitment email, versus the more time consuming personalised letter, email or telephone call. The **personalised contact** is certainly superior when potential stakeholders have any uncertainty about taking part – which in turn **helps mitigate the common problem of under-recruitment** from certain sectors. However, personalisation can prove less feasible when you need to survey large numbers of individuals (as was the case for our surveys designed to assess the perceptions of thousands of stakeholders).

Established networks and captive audience

Taking advantage of networks and databases that already exist can allow you to **reach a large number of stakeholders quickly and in a systematic manner**. This was particularly useful for recruiting educators and young people in our projects. For example, consulting your relevant national institute for education can open up a database of schools and educators to contact in order to disseminate information and recruit for outreach and engagement activities. Regional authorities, teachers unions, and environmental education support networks are also useful in finding and recruiting teachers already motivated to teach children about marine litter. For other communication and engagement activities, such as the national exhibitions, it can be **advantageous to stage events at locations that already attract many visitors**, such as aquariums, and museums.



Cultural differences

Cultures can differ in their **norms of communication** and in their experience with different forms of engagement. We found that some countries and stakeholders are less familiar with completing surveys online, and were less accessible via email.

To prevent this having a negative effect on participation, **utilising several forms of communication**, such as phone or postal surveys and direct face-to-face contact can be more effective.

Intrinsic appeal and promotion

If an activity promises to be notably educational (e.g., video competition or educator training), interesting and well designed (exhibition), or professional and well structured (national forum) then it will be easier to recruit people. With some good **promotional materials** (e.g., flyers, an attractive invitation etc.) and **publicity** in the local and/or national press (newspapers, radio, and social media), individuals and **organisations will actively recruit themselves**. If a little more promotion is needed, incentives can be effective at sparking initial interest, but this should be followed up with more communication to ensure engagement is maintained.

Conclusion

This guide provides an overview of how to communicate with stakeholders about the issue of marine litter in order to raise awareness, promote responsibility, influence behavioural change, and encourage stakeholders to work together. We have drawn on some key principles derived from the social sciences regarding effective communication of environmental issues, and insights gained from large scale stakeholder surveys and the evaluation of several education and outreach strategies conducted across Europe. We have also reflected on stakeholder engagement processes regarding the successes and challenges experienced during communication and interaction with different stakeholders.

We hope that this guide will inform future efforts to communicate with stakeholders and influence behavioural change regarding the issue of marine litter, and that it will help you with ideas on how best to approach and influence your target audience. There are many other activities being implemented globally, and you can find some of them in the 'Further reading and resources' section which follows.

The approaches summarised in this guide can be used to address the problems associated with marine litter and can also be applied more widely to other challenges where there are substantial benefits to be achieved through better communication and societal integration among researchers, stakeholders and society.

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Further reading and resources

Psychology, communication and behavioural change

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Policy and legislation

- European Commission, Marine Strategy Framework Directive http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm
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Organisations and campaigns

- MARLISCO website http://www.marlisco.eu
- Berlin Conference Practices http://www.marine-litter-conference-berlin.info/toolbox_show.php
- Marine Conservation Society https://www.mcsuk.org/
- Surfers Against Sewage http://www.sas.org.uk/
- The Ocean Conservancy http://www.oceanconservancy.org/
- NOAA Marine Debris Program http://marinedebris.noaa.gov/
- KIMO International http://www.kimointernational.org/Home.aspx
- United Nationals Environnement Programme on marine litter http://www.unep.org/regionalseas/marinelitter/
- The Centre for Research on Environmental Decisions (CRED) and their 2009 guide *'The Psychology of Climate Change Communication'*
- Project AWARE http://www.projectaware.org/project/marine-debris
- Marine LitterWatch http://www.eea.europa.eu/themes/coast_sea/marine-litterwatch
- Marine Litter Solutions http://www.marinelittersolutions.com/the-marine-litter-issue.aspx
- EcoSchools http://www.eco-schools.org/
- Clean coasts Ireland http://cleancoasts.org/
- My Beach, Netherlands http://www.beachcleanuptour.nl/mybeach/
- Operation Clean Sweep http://www.bpf.co.uk/Sustainability/Operation_Clean_Sweep.aspx
- Surfrider Foundation Holland http://surfriderfoundation.nl/

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