

Cutting Edge Sustainable Marine Litter Management for a Competitive Europe

Highlights from the Conference and Exhibition • November 29 • 2010 • Brussels



Find out more

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The conference **Cutting Edge Sustainable Marine Litter Management for a Competitive Europe** in Brussels November 29, 2010 was organized by:

Tillväxt Bohuslän

Länsstyrelsen Västra Götaland

Region Västra Götaland

EU Comittee of the Regions

West Sweden



CONCLUSIONS FROM THE CONFERENCE

The European Marine Strategy Framework Directive clearly states that it is up to the member states, on their own and in cooperation, to solve the severe problem of litter in the marine environment.

In order to achieve “good environmental status” according to the Marine Strategy Framework Directive we need an international action plan for measures in order to deal with marine litter at the source. We know enough today to motivate that work with an action plan should start without delay. In order to bring about such an international action plan we need to co-operate with other countries.

Besides working within the process of the MSFD, there are opportunities to improve other relevant legislations as European directives are revised. Proposals for amendments in these legislations, with the aim to substantially decrease marine littering at the source, are an essential part of an action plan. For this purpose we need to pinpoint relevant legislations and their time tables and propose relevant changes.

We should raise this issue in OSPAR, where there already is a workgroup on litter (ICG-ML. Intersessional Correspondence Group – Marine Litter). The issue can be raised with national Heads of Delegation and national participants in the existing workgroup for marine litter. We also need to identify relevant co-operation partners in other OSPAR regions and search for means to finance the work on an action plan, a possible work for the Attractive Coast project. In order to exchange information on activities and explore possibilities for co-operation we should maintain contact, through the MIO-ECSDE, with Mediterranean countries.

Furthermore, the Bohus Coast should become a front-runner region in efforts to reduce littering at the local level (for instance to prevent emissions of plastics from local industry) and to gain knowledge of sources of littering and developing methods for this.

The report in English, from this conference, should be sent to OSPAR countries, other regions and the EU Commission. A similar report in Swedish should be sent to the Swedish government and local authorities in Bohuslän. We should also send press releases to relevant media.



PREFACE

Marine litter is a problem we need to solve together. At this conference people from various parts of Europe gathered to share experiences, concerns and ideas with other stakeholders and the EU institutions and to discuss how a centralized approach at the European level can be initiated to address the problem. The conference brought together over 60 participants from more than 10 countries across Europe.

The conference was organised by the Attractive Coast project that is run by local authorities in northern Bohuslän, Sweden in co-operation with the Region Västra Götaland and the County Administrative Board of Västra Götaland. This coastal area is seriously affected by marine waste and it has been estimated that more than 80 percent of the litter on the beaches does not originate from Sweden. The objective of the project is a co-ordinated environmental management and nature conservation for an attractive coastal area with clean beaches free of pollution that can harm the coastal and marine environment. However, action at an international level is also required in order to deal with the problem of marine litter at its roots.

BACKGROUND

Marine litter is one of the major threats to marine and coastal environments. The accumulation and fragmentation of plastics in our seas and on our shores has increasingly become a global cause for concern. On the local level marine litter has a considerable economic impact for coastal municipalities.

Due to the transboundary nature of marine litter “good environmental status” required by the Marine Strategy Framework Directive cannot be achieved by action at local or national level alone.

A sustainable marine litter management requires policies and measures aimed at effectively reducing marine littering at the source. In the shorter term, we also need to find sufficient funding for adequate beach cleaning operations.

The conference featured keynote presentations, workshops and an exhibition.

PLENARY SESSION

The conference was opened by the conference moderator Anders Carlberg from the Region Västra Götaland and the participants were welcomed by Sten Illeborg from the Committee of the Regions.

The County Administrative Board of Västra Götaland

In his speech Lars Bäckström, Governor of Västra Götaland, pointed out that the sea is our common resource but also our common responsibility. The problem with marine litter is not a national one, but international. That means that the solution is also international. He emphasized that we have a problem to solve together and that cooperation is the answer.



Lars Bäckström
Governor of Västra Götaland

“My message is:
If you have the will you can do it.”

Swedish Environmental Protection Agency

Björne Olsson, Head of the Marine Environment Unit at the Swedish Environmental Protection Agency presented an overview of the Marine Strategy Framework Directive and highlighted some aspects relevant to the issue of marine litter. One aspect was the requirement for cooperation between member states to ensure a coordinated development of marine strategies. Also, if there is an impact that cannot be managed at the local or national level the Commission should be informed. If Community action is required then appropriate recommendations should be made to the Commission and the Council.



Björne Olsson
*Head of the Marine Environment Unit
at the Swedish EPA, referring to the
Marine Strategy Framework Directive*

“Environmental damage should, as a priority,
be rectified at source and the polluter should
pay.”



Dr Richard Thompson
*School of Marine Science and
 Engineering at the University
 of Plymouth*

“There is an urgent need to change our patterns of production, usage and disposal.”



John Mouat
*KIMO (Local Authorities
 International Environmental
 Organisations)*

“Costs are significant and increasing and, currently, the polluter does not pay”

Theme 1. Plastics, the environment and human health: concerns and solutions

Dr Richard Thompson School of Marine Science and Engineering at the University of Plymouth, began by saying that plastics offer considerable benefits. But, he continued, it is evident that our current approaches to production, use and disposal are not sustainable and present concerns for wildlife and human health. Although many uncertainties remain, we already have considerable knowledge about many of the environmental hazards and human health effects. End of life plastic is accumulating. It is possible to retain benefits of plastic but action is needed to reduce the use of non renewable resources, to reduce the requirement for disposal and the hazards for humans and the environment. Design for end of life recyclability, label packaging accordingly and using materials with high end of life recyclability are examples of suggested solutions. A key message was that there is no single solution.

Dr Thompson concluded by saying that the challenge for us and the next generation in ‘Our Plastic Age’ is achieving a more sustainable use of resources. In the first 10 years of this century we will have produced more plastic than in the entire century that proceeded. There is an urgent need to change our patterns of production, usage and disposal.

Theme 2. The Economic Impacts of Marine Litter

John Mouat from KIMO (Local Authorities International Environmental Organisations) started by pointing out that impacts of marine litter can be environmental, social, economic and on health and safety. Furthermore there is a broad spectrum of economic impacts: Ecosystem degradation and loss of biodiversity, invasive species, increased costs to coastal industries, losses to fishery and aquaculture operators, costs for clean up, recovery and disposal, costs to shipping and losses to tourism.

He then proceeded to present results from a research report “Economic Impacts of Marine Litter” recently published by KIMO. This study was based on the answers to questionnaires sent to key sectors of human activity that could be affected by marine litter. As an example, the total cost for coastal municipalities in the UK of removing marine litter was estimated to be in the region of €17,936,000. It was also found that average cost has increased by 37.4% increase over the past 10 years. Removing beach litter costs municipalities in the Netherlands and Belgium a total of €10.4 million per year. An example from a different sector is the cost of marine litter to Scottish fishing vessels which was calculated to €11.7 - 13 million.

The conclusion was that costs are significant and increasing, that currently the polluter does not pay and that the organisations responding to the questionnaires stated that the current level of marine litter is unacceptable.

Marine litter in the Mediterranean

Dr Thomais Vlachogianni, MIO-ECSDE, The Mediterranean Information Office for Environment, Culture and Sustainable Development started by stating that the Mediterranean Sea faces a very serious marine litter problem. Even the remotest parts of the Mediterranean are affected by marine litter. This is caused mainly by lack of proper management of land based littering activities and waste contributed by beach users, ships and fisheries. There are clear indications that marine litter is increasing in the Mediterranean. She also described how the marine litter issue is dealt with by the Mediterranean countries, why it has not been effectively addressed, what has been done so far, recommendations on how to address the issue and activities undertaken by MIO-ECSDE.

Marine debris – a threat to Europe’s coastal environment and seas

Leo de Vrees, Policy Officer, DG Environment, European Commission, after outlining some urgencies and impacts related to marine litter mainly focused on Marine Strategy Framework Directive in his presentation. This Directive establishes a framework within which the EU Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment. This shall be accomplished by the year 2020 at the latest. For marine litter good environmental status requires that marine litter does not cause harm to the coastal and marine environment. Each EU Member State must progressively put in place its own action plan. They must cooperate among themselves and with neighbouring countries and where possible within Regional Sea Conventions. Leo de Vrees finished by presenting knowledge gaps, possible solutions and information about ongoing work and EU responses related to the issue of marine litter.



Dr Thomais Vlachogianni
MIO-ECSDE (The Mediterranean Information Office for Environment, Culture and Sustainable Development)

“The Mediterranean Sea faces a very serious marine litter problem”



Leo de Vrees
Policy Officer, DG Environment

“It’s up to the Member States to co-operate when a problem can’t be dealt with on the local or national and then submit proposals to Commission.”

WORKSHOPS

Three thematic workshops were organised

Workshop 1

Marine litter – a threat to coastal attractiveness for residents and visitors

The moderator divided the workshop into three parts (see appendix 1). The question of sources of marine litter was discussed. The conclusion was that it is very hard to clarify the exact sources and that we need more research on this. Another problem is that there are no surveys on how visitors react to littered beaches. The most popular beaches are cleaned regularly and therefore there is no public opinion on this issue. The general feeling, however, was that if beach cleaning should stop, there would probably be a public outcry.

Reports demonstrate the significant costs to coastal communities and that the polluters are neither being caught nor being made to pay for their actions. The general opinion was that it is unfair for municipalities alone to bear these costs. The workshop also discussed different ways of decreasing littering and funding the costs of measures to reduce the problem.

Workshop 2

What do we know and what do we need to know?

The focus of the group work was to assess existing information and information gaps on Marine Litter, to suggest research tasks and priorities, and to suggest information and development schemes for solutions. The moderator presented an approach to guide the group discussions based on two matrices, one focusing on research tasks, and one focusing on possible solutions.

Starting with two blank matrices, a short brainstorming session resulted in 4 prioritised research areas and 6 solutions. The members of the group were also asked to rank the importance of different research tasks and solutions; each member could give 2 and 1 points respectively to the two most important items in each group. The filled in matrices with summed priority ranks are presented in appendix 2.

Workshop 3

The role of marine litter in the Marine Strategy Framework Directive and other legislation

The workgroup was informed that the EC has appointed a technical subgroup assigned to address the question of good ecological status for marine litter. There are suggestions of a future working group focusing on solutions. Also, the Port reception directive is soon established and the IMO waste management on ships (annex 5) is being reviewed with more stringent amendments. A variety of different questions and measures were also discussed. As an example it was proposed that we need to raise the required percentage of recycled plastics in waste directive.

An important issue that was discussed was whether current legislation and in particular the Marine Strategy Framework Directive and the Water Framework Directive are sufficient to deal with the problem of marine litter. Because of the transboundary nature of marine litter a country cannot deal with the problem through measures on the local or national level. The answer to this was that the Marine Strategy Framework Directive is a framework that can be used (see appendix 3).

It will identify the problems and set the targets. Any necessary legislative measures have to be accomplished through other legislations. Member states can start working on an action plan right away and have a responsibility to do so if urgent action is required. In this process the member states should cooperate and jointly submit proposals for legislative changes to the Commission.

The conclusion of the workshop was that we need to pinpoint relevant legislations and their time tables and propose an action plan.

More information on the conference and the project can be found at:
www.tillvaxtbohuslan.se/page/1578/attraktivkust.htm

APPENDIX 1

The moderator divided the workshop into three parts with the following issues:

Impact of marine litter

- What is the level of marine litter in your region?
- Has beach usage been affected by marine litter?
- Do you know the sources of litter in your area?
- What level of litter do you find acceptable?
- How would your area be affected if litter levels were to go up?

Economics of marine litter

- How does marine litter economically affect your sector / area?
- What are the costs and do you know of any investigations?
- What additional research do we need in this area?
- Who should pay for clean up operations?

Solutions to Marine Litter

- How is beach cleaning organised funded in your area?
- How can the tourism industry become involved?
- How do we ensure the polluter pay?
- Economic instruments such as plastic bag taxes can reduce the problem have these been implemented in your area and should they be used more widely?
- Do you know of other innovative solutions?



APPENDIX 2

Research area	Why it matters	What is known	What is not known	Research priority	Priority points
Sources of marine litter	Regulation / change / prioritisation	Types of litter, mainly on beaches	Sources, who is the polluter	Identify sources in relation to types and quantity of marine litter by region in standardised way	14
Sinks of litter	understanding effects: clean-up	Types of litter on shoreline	Seabed, deep sea, intertidal other than beaches, microplastics	Prioritize in relation to sediment transport and oceanography	5
Effects of microplastics	understanding for ecosystem and human health		Extent as vector for contaminant transfer	Define in relation to baseline	11
Set into context with other pollutants					1

Solution	Why it matters	What is known	What is not known	Research priority	Priority rank
Awareness (education) raising about / waste (e.g. recycling)	May increase motivation to dispose of litter properly	Previous successful examples of campaigns		Establish target groups	9
Giving waste a value	may increase motivation to reuse/recycle		Value for consumer How to incentivise opportunity cost of clean seas	Social research	5
Waste infrastructure	Motivation / efficiency of resource recovery	Infrastructure not good in many places	How to optimize infrastructure use for different categories (e.g. general public, industries, municipalities)	infrastructure design in relation to social value perspective	4
Enforcement of legislation	Lack of compliance with established regulations			Social research on how to make enforcement more efficient and accepted	6
Link producer responsibility to abundance of waste by category	Motivation to reuse/recycle				7
Use biodegradable material, meeting environmental standards	The term biodegradable could be misleading Need to define environmental standards		Effects in the environment compared to non-degradable material	Environmental effects, pathways of degradation in nature	2

APPENDIX 3

An important issue that was raised in workshop 3 was whether current legislation and especially the Marine strategy Framework Directive and the Water Framework Directive are sufficient to handle the problem of marine litter. Because of the transboundary nature of marine litter it will be difficult to achieve Good Environmental Status through action at local or national level.

The Marine strategy Framework Directive

The following paragraphs in the Marine strategy Framework Directive provide some answers to this question:

Co-ordination and co-operation

(13) By reason of the transboundary nature of the marine environment, Member States should cooperate to ensure the coordinated development of marine strategies for each marine region or subregion. Since marine regions or subregions are shared both with other Member States and with third countries, Member States should make every effort to ensure close coordination with all Member States and third countries concerned. Where practical and appropriate, existing institutional structures established in marine regions or subregions, in particular Regional Sea Conventions, should be used to ensure such coordination.

Advancing an action plan and support from the Commission

(14) Member States having borders on the same marine region or subregion covered by this Directive, where the status of the sea is critical to the extent that urgent action is needed, should endeavour to agree on a plan of action including the earlier entry into operation of programmes of measures. In such cases, the Commission should be invited to consider providing supportive action to Member States for their enhanced efforts to improve the marine environment by making the region in question a pilot project.

Problems that cannot be handled at local or national level

(31) The second special case refers to the situation where a Member State identifies an issue which has an impact on the environmental status of its marine waters, perhaps even of the entire marine region or subregion concerned, but which cannot be tackled by measures taken at national level or which is linked to another Community policy or to an international agreement. In such a case, arrangements should be made to inform the Commission of this within the framework of notification of programmes of measures and, where Community action is needed, to make appropriate recommendations to the Commission and the Council.

The Water Framework Directive

Another issue was that coastal waters are dealt with by the Water Framework Directive which does not in any way address the problem of marine litter. An answer to this can be found in the Marine strategy Framework Directive, introductory paragraph (12), which states that Coastal waters are covered this directive if they are not already addressed through Water Framework Directive.

(12) Coastal waters, including their seabed and subsoil, are an integral part of the marine environment, and as such should also be covered by this Directive, in so far as particular aspects of the environmental status of the marine environment are not already addressed through Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (2)

or other Community legislation, so as to ensure complementarity while avoiding unnecessary overlaps.

Participants at the conference Marine litter November 29, 2010 in Brussels

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PROGRAMME

November 29, 2010

08:30 – 09:30 Registration

09:30 – 12:30 **PLENARY SESSION**

Conference moderator: Anders Carlberg, Region Västra Götaland

Welcome address from the Committee of the Regions

Steen Illeborg, Director for Registry

The County Administrative Board of Västra Götaland

Lars Bäckström, Governor of Västra Götaland

Swedish Environmental Protection Agency

Björne Olsson, Head of the Marine Environment Unit

Theme 1 Plastics, the environment and human health

Dr Richard Thompson, Professor, School of Marine Science and Engineering, University of Plymouth

Theme 2 Impacts of marine debris – economic and social costs to coastal communities

John Mouat, KIMO (Local Authorities International Environmental Organisations)

Marine litter in the Mediterranean

Dr Thomais Vlachogianni, MIO-ECSDE, The Mediterranean Information Office for Environment, Culture and Sustainable Development

Marine debris – a threat to Europe's coastal environment and seas

Leo de Vrees, Policy Officer, DG Environment, European Commission

Summary

12:30 – 14:00 **EXHIBITION • LUNCH**

14:00 – 16:00 **WORKSHOPS**

Workshop 1 Marine litter – a threat to coastal attractiveness for residents and visitors

Moderator: John Mouat, Rapporteurs: Anders Svedberg, The West Sweden Tourist Board/ Elsie Hellström, Tillväxtsekretariatet Norra Bohuslän

Workshop 2 What do we know and what do we need to know ...

Moderator: Richard Thompson, Rapporteur: Per Nilsson, The Swedish Institute for the Marine Environment

Workshop 3 The role of marine litter in the Marine Strategy Framework Directive and other legislation

Moderator: Björne Olsson, Rapporteur: Lena Tingström, The County Administrative Board of Västra Götaland

Coffee will be served during the workshops

16:00 – 17:00 **Workshop Summaries. Conclusion.**

Closing Remarks by Region Västra Götaland/The County Administrative Board of Västra Götaland