

Adaptive Marine Policy (AMP) Toolbox

A one-stop repository of guidelines and resources to develop adaptive policies in the Mediterranean Sea

Coastal and Maritime tourism a threat or a growth opportunity? Importance of dialogues among multi-sectoral stakeholders

Source: Tourism is the biggest maritime sector (i.e. gross value added and employment) .

Problem: Overwhelming presence of plastics

Impacts: Aesthetic , ecological (e.g. loss of biodiversity) and socio-economic impacts (e.g. loss of tourism and related revenues, endangerment of human health and safety and losses for the fishing sector).

Beach of Levante in Benidorm (Spain) in 1965 and 2010 respectively. Photograph: Pedro Armestre/Greenpeace.



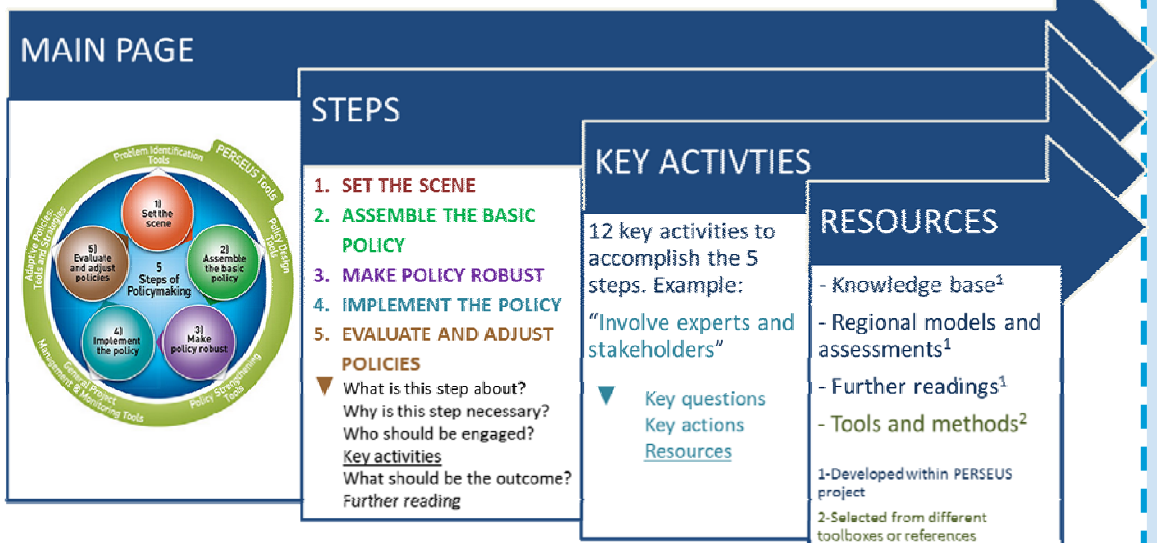
Response: Coastal and maritime tourism sector has been identified as a potential sector for sustainable growth. It is expected to grow by 2-3% by 2020.

Accordingly, to promote a sustainable growth of this sector, while conserving the marine ecosystems and the services they provide, ADAPTIVE POLICIES are necessary.

AMP Toolbox in brief

FOR WHOM: Policymakers.

WHY: Different European Directives and Regional conventions require the application of adaptive measures according to the *Ecosystem Based Approach (EBA) to manage marine and coastal activities such as Tourism.*



WHAT: A one-stop repository of guidelines and resources to develop *adaptive* marine policies in the Mediterranean and Black Seas. *Adaptive means:* (i) using scenario planning methods; (ii) stakeholder involvement; (iii) scientific knowledge; (iv) cyclical or formal review.

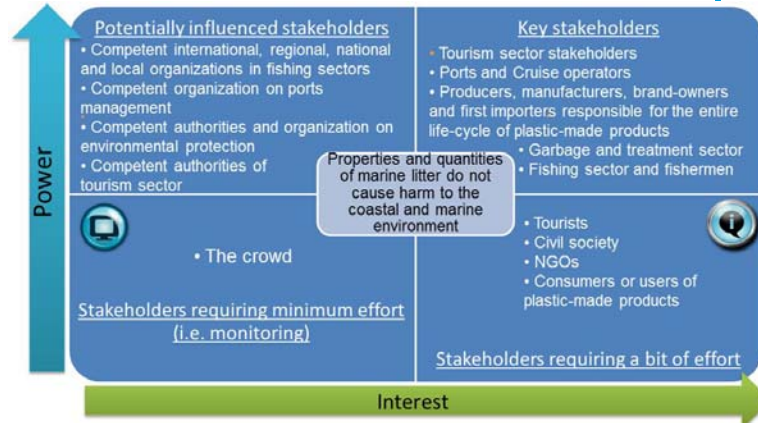
HOW: Guiding policymakers designing and implementing adaptive policies in 4 levels.

Look inside to see the usefulness of the AMP Toolbox and the importance of stakeholders participation !

necessary to engage public consultation and active partnerships from the beginning of the process"

Step 1: Set the scene

▲ Example of "Stakeholders analysis".

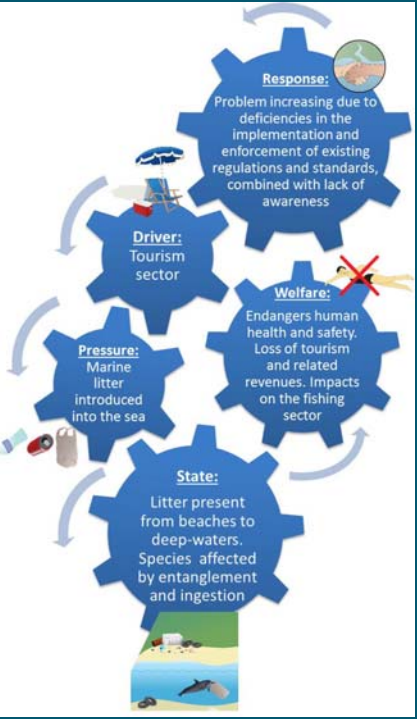


(i) First step is to acknowledge that there is an activity (tourism) causing a problem (marine litter) with important impacts that merits further analysis or "Gather information and determine existing conditions" and enhanced management. For this purpose the "DPSWR framework" tool is proposed within the Toolbox.

(ii) Moreover, it is necessary to "Involve experts and stakeholders" to make them understand the problem and create the "political will" to support potential actions. The "Stakeholders Analysis" tool is suggested for this purpose.

(iii) Then, it is necessary to "Develop a mutual understanding and define principles and goals". For example, to reduce the amount and impact of:

- ⇒ Tourism sources of marine litter
- ⇒ Accumulated marine litter on coastal and marine ecosystems



▼ Example of "DPSWR framework" tool.

"Measures inventory" of the toolbox. Search drivers-Tourism; Impacts-Marine litter.

Indicative list of potential 10 criteria to select policy options. Source: Ten Brink et al. (2009).

"The most important thing is to discuss and define the right set of criteria against the different options will be assessed"

Step 2: Assemble the basic policy

Canoeing, kayaking	Other physical disturbance	Marine litter	Romania's Ecotourism Certification System
Marine cruising	Other physical disturbance	Marine litter	Friend of the Environment label established by the Croatian Ministry of Tourism together with the Ministry of Environmental Protection
Marine cruising	Other physical disturbance	Marine litter	Tourist charges (in general): 1) Tourist taxes 2) Car park fees 3) Waterfront business charges
Sailing	Other physical disturbance	Marine litter	Croatian Nautical Tourism Development Strategy 2009-2019
Waste water discharge areas	Other physical disturbance	Marine litter	Award-based incentives for coastal villages with Integrated Waste Management (IWM)

(i) Then, it is necessary to "Identify measures" and develop a list of possible solutions, based on the policy's objectives. For this purpose, the "Measures inventory" of the toolbox can be consulted.

(ii) Information on different appraisal approaches (e.g. IA, CEA, CBA, MCA) can be found within the "Prioritize/assess new measures" key activity. The "Marine valuation database" of the toolbox also contains valuations of different management strategies.

Instrument	Type of Instrument	1	2	3	4	5	6	7	8	9	10	Index
Port reception fee	Fee	4	4	4	5	5	5	4	4	4	5	44
Incentives for fishermen (for reporting and removal)	Subside	4	4	1	4	5	4	5	3	5	5	40
Award-based incentives for coastal villages with Integrated Waste Management systems	Award	4	4	1	4	5	3	5	3	5	5	39
Tourist taxes	Tax	5	4	5	5	5	5	4	5	5	5	48
Car park fees	Fee	5	4	5	5	5	5	4	5	5	5	48
Waterfront business charges	Charge	5	4	5	5	5	5	4	5	5	5	48
Award-based incentives for eco-tourism	Award	4	4	1	4	5	3	5	3	5	5	39

Legend:
 5 Completely agree
 4 Agree
 3 Neutral
 2 Disagree
 1 Strongly disagree

“To identify key factors affecting policy performance, it is necessary to develop a deliberative process with multiple stakeholders and experts; as well as those who are affected by the policy”

Step 3: Make the policy robust

Policy measures must be assembled into a robust policy against future conditions.

(i) For this purpose, it is necessary to identify key factors affecting policy performance and the way these factors might evolve in the future (i.e. scenarios).

(ii) Additionally, monitoring is a key component to evaluate if targets are achieved and trigger policy adjustments; and, to facilitate information and learning after decisions.

The European Commission, for example, have proposed 4 indicators to study the trends in the amount of litter:

	Mass tourism demand	Luxury tourism	Local/cultural tourism	Eco-tourism
Business as Usual	0/+	0/+	0/+	0
Convergence with proactive environmental management	-	+	++	++
Convergence with reactive environmental management	++	++	++	--
Heterogeneity with proactive environmental management	0/+	0/+	+	+
Heterogeneity with reactive environmental management	+	-	-	0

▼ **Direction of change for Tourism sector for the five scenarios developed within PERSEUS project for the Mediterranean Sea (2030).**

(a) washed ashore and/or deposited on coastlines.

(b) in the water column and deposited on the sea-floor.

(c) distribution and, where possible, composition of micro-particles.

(s) composition of litter ingested by marine animals.

In addition, operational targets should be defined regarding to the nature of the management action required; or to assess progress towards full implementation of a specific measure. For example:

⇒ Amount of marine debris collected at ports.

⇒ Percentage of touristic establishments promoting eco-tourism.

Step 4: Implement the policy

Implementing a policy, does not only consist on getting the legal text ready, but also ensuring enforcement and commitment from all actors. Accordingly, “Draw up an implementation plan”, planning the actions necessary for putting the policy into practice is highly important.

Task name	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Designate and Formalize Roles and Responsibilities											
Designate stakeholder to take into account											
Develop an initial assessment of the state of the problem											
Identify drivers and consequences of actual state											
Review environmental legislation and other requirements											
Gain management approval and define the scope of the policy											
Define and prioritize measures											
Assess policy success looking for future uncertainties											
Identify and Develop Operational Controls / Emergency Plans											
Implement the planned policy											
Implement monitoring strategy											
Document and record monitoring results											
Take corrective actions											

“Stakeholders and experts who were involved in the earlier activities need to be included in the implementation to ensure enforcement and commitment”

Step 5: Evaluate and adjust policies

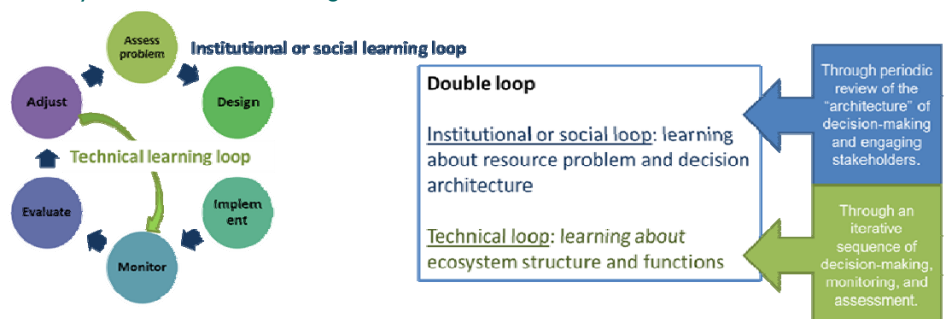
“Stakeholders create both insights on the effectiveness of the policy and, on the issues that might change”

Finally, evaluation and adjustments are key aspects of adaptive policies. This step involves investigating whether and to what extent the policy is effective and how much of the problem has been addressed (“Evaluate ongoing policy”) and what more needs to be done (“Adjust the policy”).

Evaluate: Data recorded with monitoring plan > knowledge accumulation about the sources, transport, fluxes and impacts of marine litter; and increase confidence of the models or the future scenarios.

Apart for this technical learning, the plan should also facilitate cyclical assessment and revision of the targets, as well as the rest of the elements of the policy (institutional learning).

Adjustments: can be performed following briefly the processes described in Steps 2,3 and 4; or the whole cycle for fundamental changes.





PERSEUS

POLICY-ORIENTED MARINE ENVIRONMENTAL RESEARCH IN THE SOUTHERN EUROPEAN SEAS

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Policy-oriented marine Environmental Research for the Southern European Seas (PERSEUS) is a research project that assesses the dual impact of human activity and natural pressures on the Mediterranean and Black Seas. **PERSEUS** merges natural and socio-economic sciences to predict the long-term effects of these pressures on marine ecosystems. The project aims to design an effective and innovative research governance framework, which will provide the basis for policymakers to turn back the tide on marine life degradation.

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ABSTRACT

To operationalize the design and implementation of adaptive policies and translate adaptive management into decision tools according to the Ecosystem-Based Approach (EBA) to the management of human activities impacting marine and coastal ecosystems, the Adaptive Marine Policy (AMP) Toolbox has been developed.

The objective is to provide policymakers with the necessary framework and resources to develop environmental policies and specifically adaptive policies. Key components and mechanisms that define adaptive policies include: (i) forward looking analysis to discover robust policies across multiple future scenarios; (ii) the translation of cross-disciplinary and integrated scientific knowledge; (iii) a process where management contributes to learning; and, (iv) the engagement of the broader stakeholder communities. In fact, transparent decision making which is inclusive of stakeholders at all stages and enjoys high levels of cooperation and coordination is criti-

cal to meaningful development and implementation of the EBA.

One of the most important coastal and maritime activities in the Mediterranean Sea in terms of employment and gross value added is Tourism. Though, the lack or ineffective management strategies of this activities can lead to important ecological and socio-economic impacts.

Accordingly, the objective of this factsheet is to: (i) give insight into the AMP Toolbox using the case of the coastal and maritime tourism as an example; and, (ii) to underline the importance of stakeholders involvement at all levels of the policy-making process, according to the EBA.

