



Participatory Session

**ADDRESSING MARINE LITTER
IN THE MEDITERRANEAN REGION**

***Stakeholder insights into the most adequate and effective measures
on key marine litter items***

Introduction

Marine litter is an emerging issue of concern, with considerable ecological and socio-economic impacts but also with not yet fully-understood risks for human health. Addressing the issue of marine litter requires an integrated approach, at different levels of the life-cycle of the products (from design, to disposal). Different approaches to prevent waste production, to improve waste management and to directly mitigate marine litter exist.

Objectives

This participatory workshop/roundtable aimed at gathering insight from the stakeholders participating in the conference on the adequacy of policy options and implementation aspects of measures to address specific marine litter items in the Mediterranean area. This helped to better shape and validate the final outputs from the FP7 Project CleanSea, in respect to this Regional Sea. The workshop was facilitated by Joana Veiga and Pedro Fernandez, from EUCC Mediterranean Centre.



Participants

29 people attended this workshop, mostly related to research (around 50%) and followed by associations/foundations (25%) and administration at different levels (25%). Participants were randomly allocated to **8 groups**.



Approach

Part I

Brief presentation of the project CleanSea, in particular the project components to which the workshop would feed into and the objectives of the participatory session.

Part II

Participants were randomly assigned to one of the 8 formed groups at the start of the session, which were identified by a marine litter item among the most commonly found on Mediterranean beaches.

Groups were invited to: select one type or group of marine litter items to focus on; discuss and come up with 3 measures that could be implemented to prevent or reduce the selected marine litter items. These 3 measures should result in: 1) a reduction in the consumption of those items; 2) an increase in the collection; and 3) an increase in its removal from the beach/sea.



Figure 1 – Some of the most frequently found marine litter items in Mediterranean beaches

Each group presented briefly in plenary the title of their proposal and provided a short description of what it entailed. The different proposals were listed and grouped in the 3 categories. Finally, individual participants were invited to vote for those proposals that they considered the most effective (4 votes - red) and those most feasible (4 votes – green).

Outcomes

A total of 23 different measures were proposed by the groups, across the 3 defined general approaches (Fig. 2).

PROPOSALS			PROPOSALS			PROPOSALS		
Reduction of CONSUMPTION	Votes		Increase of COLLECTION	Votes		REMOVAL OF ML	Votes	
	Eff ectiveness	Feasibility		Eff ectiveness	Feasibility		Eff ectiveness	Feasibility
Polystyrene: Mainstreaming the toxicity of polystyrene (production & use)	4	2	Polystyrene: Valuation (create a market for used containers, recycling)	6	5	Cotton bud sticks: improve Waste Water Treatment Plants to retain sticks	8	8
Cigarette butts: Increase legal age of buyers and increase awareness, specially among youngsters	5	3	Cigarette butts: Penalties to improper disposal of cigarette butts	9	0	Mussel nets: Aquaculture sector to take responsibility for removing nets from the seafloor (scuba diving)	10	3
Cotton bud sticks: Discourage the use	3	2	Cotton bud sticks: Visual warning on the package on potential ML	1	1	General: Encourage cleanups by stakeholders by awarding, advertising, labelling	1	7
Mussel nets: Change the material to cotton	7	4	Mussel nets: Deposit-Refund scheme to increase the collection	7	7	General: Involve as many stakeholders as possible in cleanups	3	2
Plastic bottles: Drinkable tap water available (e.g. fountains) to refill bottles; system in place to refill other type of drinks (e.g. soda)	6	6	Plastic bottles: Deposit-Refund scheme for plastic bottles and cans	7	14			
Plastic bags: Image/sign on the plastic bag warning on potential litter generation (required to producers)	6	10	General: Educational programmes for proper disposal. Improve governmental performance/comm of recycling	3	3			
Aluminium cans: Restaurants not serving drinks in cans but in rafts or refillable containers	2	2	Straws: Promote collection of straws for recycling with energy recovery	0	0			
Straws: Ask consumer before giving straws with the drink by default	1	7	Straws: Use straws/other items as material for art pieces serving for awareness	2	0			
Packaging: Product design enabling for reuse/biodegradable	3	1	Polystyrene: Encourage consumers to use adequate containers to dispose packaging	2	2			
Packaging: Promote use of refillable containers (food, detergent, cosmetics...)	12	13						
TOTAL VOTES	49	50	TOTAL VOTES	37	32	TOTAL VOTES	22	20

Figure 2 – List of measures proposed by the participants and votes on their effectiveness and feasibility

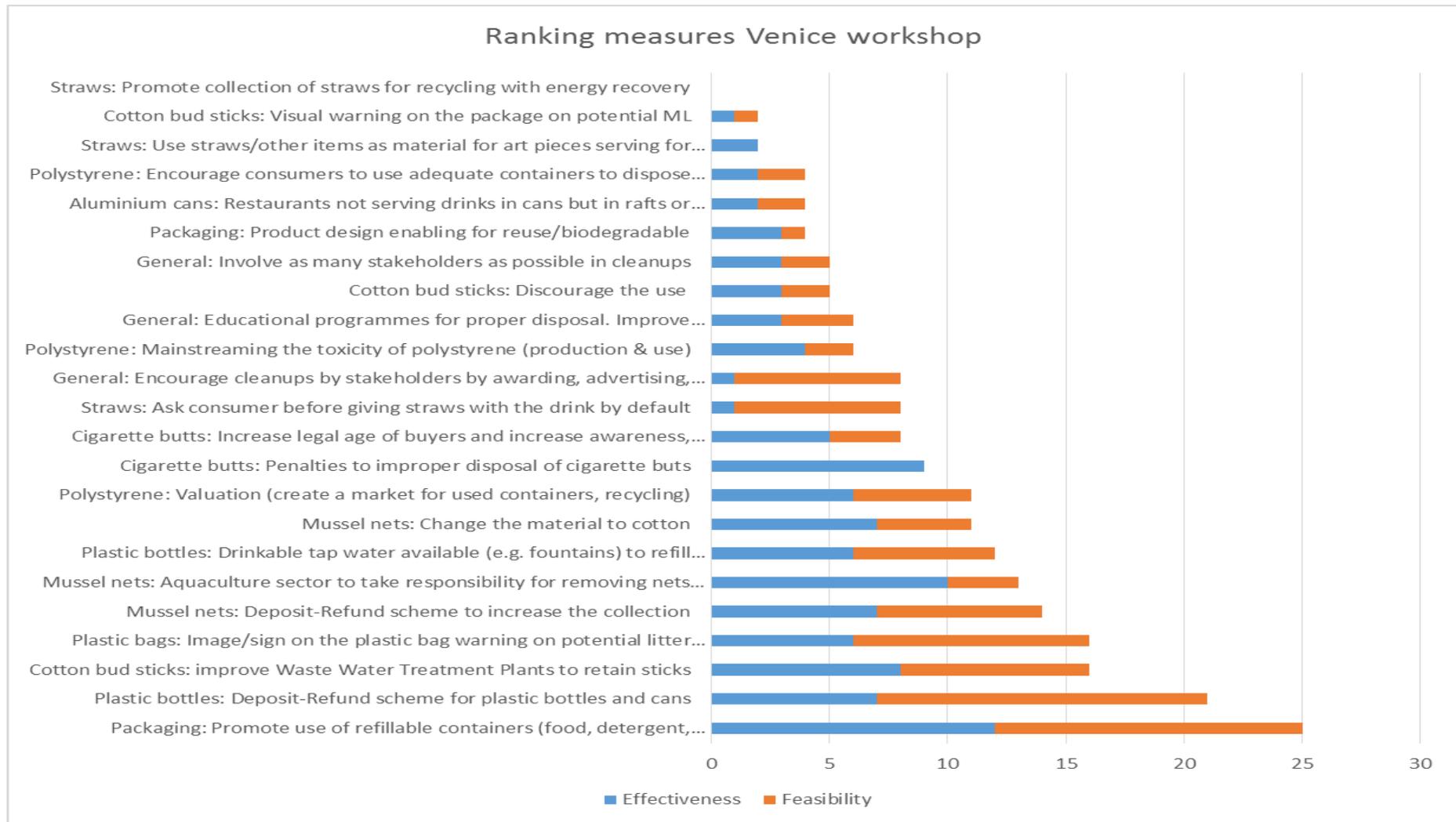


Figure 3 – Ranking of proposed measures with the combined effect of effectiveness and feasibility votes

Analysis of results

The types of measures put forward represent a balanced mix between regulatory/ "top-down", economic instruments (e.g. deposit-refund schemes for particular items), educational or voluntary initiatives and technological improvements.

Considering the 5 stages of the life-cycle of products targeted by the proposals presented, we can see that the 10 most voted measures target these different stages and that participants chose to target more intensively earlier stages of design and consumption rather than treatment and clean-up (Fig. 3).

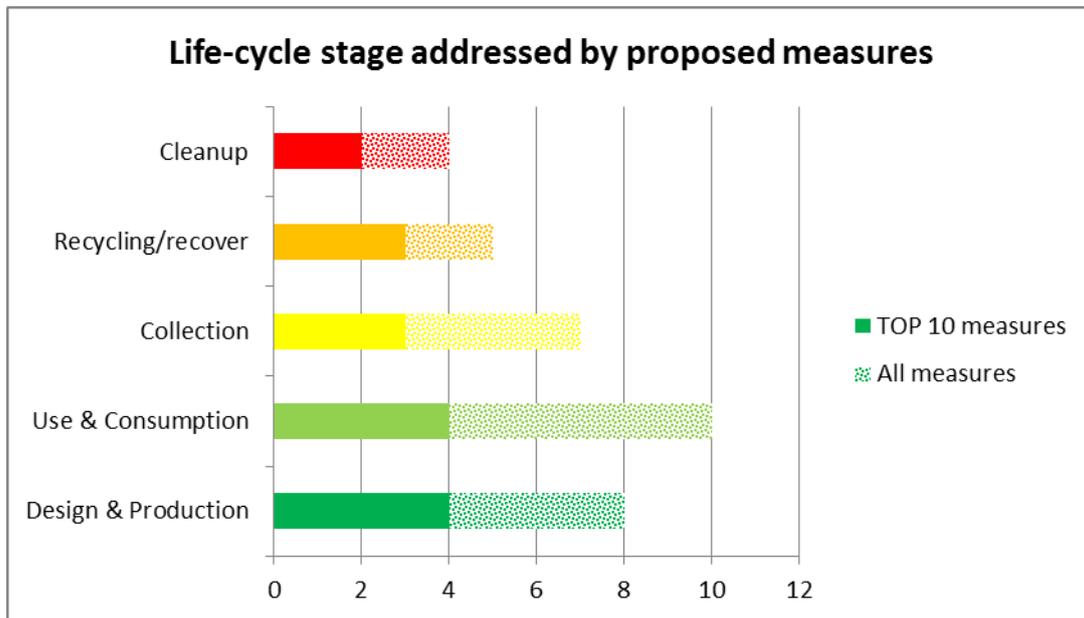


Figure 4 – Stages of the life-cycle of products targeted by the TOP 10 most votes measures (solid colour) and all the measures proposed by participants (shaded colour)

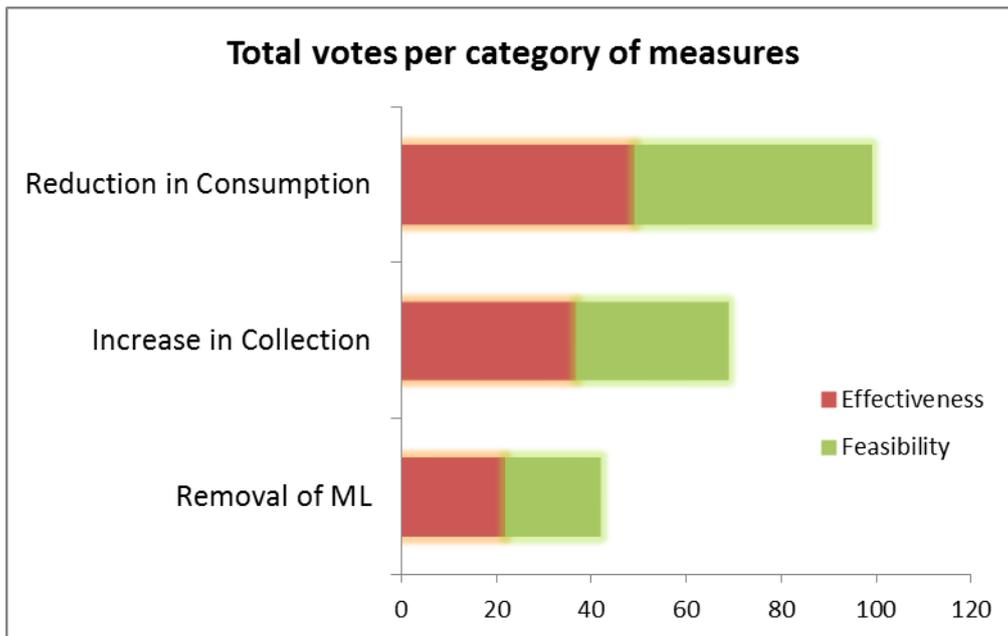


Figure 5 – Total votes per category of measures regarding their effectiveness and feasibility

Conclusions

Workshop participants proposed a mix of options across different life-cycle stages of products but **favoured approaches that target upstream / earlier stages, i.e. production and consumption.**

Measures that lead to a reduction in consumption were the most voted, not only in terms of effectiveness but feasibility. This preference is well in line with the **waste hierarchy**, in which prevention of waste should take priority in relation to waste treatment and remediation.

Solutions need to be local and product specific, according to the **items and materials of most concern in the area** and considering the waste management infrastructures in place, e.g. proposal for alternative materials for *muschel socks*, which appear often as marine litter in the Mediterranean.

These results will help developing the CleanSea ‘policy mix’ for litter-free seas.

The organizers would like to thank participants for their enthusiastic and positive attitude in this workshop.