

Towards a Clean Litter-Free European Marine Environment through Scientific Evidence Innovative Tools and Good Governance

Summary of Marine Litter Policy Options

Marine litter is a complex problem originating from a variety of land- and sea-based sources that negatively impact the environment, society and the economy. Mitigating this problem requires a policy mix addressing the sources and impacts of marine litter at the most appropriate geographical levels. To tackle this challenge, the CleanSea project developed a **portfolio of policy options** for the relevant authorities in the four EU marine regions: the Mediterranean Sea, Black Sea, Baltic Sea and North-East Atlantic Ocean. The resulting policy options aim to prevent and reduce marine litter and, in particular, to support the implementation of the **Marine Strategy Framework Directive**¹ (MSFD). They include not only those measures and practices that can be implemented quickly within the first MSFD cycle (before 2018), but also longer-term options to address structural gaps and shortcomings in the policy framework and institutional set-up.

Rank	Baltic Sea	Black Sea	Mediterranean Sea	North Sea	
1	Cigarette butts	Cigarette butts	Smoking related products (butts, packages, lighters)	String and cord (diameter < 1 cm)	
2	Caps/lids (total)	Crisp/sweet packets, lolly sticks (total)	Plastic bottles	Caps/lids (total)	
3	Foam sponge (total)	Drink bottles (total)	Plastic bags	Cotton bud sticks	
4	Other ceramic/pottery items	Caps/lids (total)	Aluminium beverage cans	Crisp/sweet packets, lolly sticks (total)	
5	Bags (e.g. shopping)	Drink cans	Packaging, food wrappers, containers	Rope (diameter > 1 cm)	
6	Food incl. fast food containers	Small plastic bags, e.g. freezer bags	Cups, plates, forks, knives, spoons	Nets and pieces of net < 50 cm	
7	Bottle caps	Food incl. fast food containers	Straws	Nets and pieces of net < 50 cm	
8	Cutlery/trays/straws (total)	Cups	Plastic pieces	Food incl. fast food containers	
9	Wood Crates	Clothing	Sanitary waste (cotton bud sticks, tampon applicators etc.)	Drink bottles (total)	
10	Crisp/sweet packets, lolly sticks (total)	Bottle caps	Fishing nets and fishing traps	Cigarette butts	

Key marine litter items in the four marine regions²

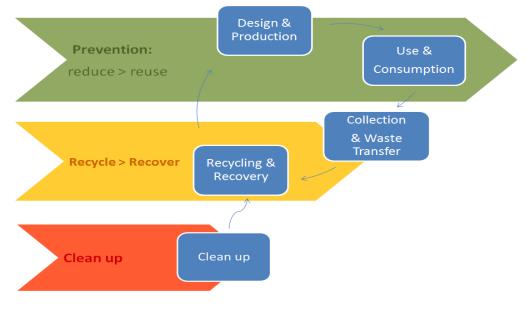
¹ Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy.

² Based on: Arcadis, Milieu & EUCC (2012), and the outcomes of the project *Technical and administrative* support for the joint implementation of the Marine Strategy Framework Directive (MSFD) by the EU Mediterranean Member States (Phase II).

Unlike previous studies, we focused on policy options to make product-to-waste chains in their entirety more sustainable and proposed **region-specific mixes of measures and practices** targeting the main drivers, sources and impacts of marine litter in each of the four EU seas. Our analysis builds on earlier research performed in the CleanSea project, including the analysis of institutional and legal gaps and barriers to marine litter reduction³ and the inventory of best practices in the EU.⁴

On top of the best practices identified in our earlier research, we have included existing as well as additional measures, taken from the Regional Action Plans (RAPs) developed by the Regional Sea Conventions and selected Programmes of Measures (PoMs) made by the EU Member States. The actual assessment has been performed by applying a multi-criteria analysis (MCA). This analysis resulted in lists of **best ranked measures and practices** per region in terms of (potential) effectiveness.

The assessment of measures and practices showed that major positive impacts are most likely to be achieved when the **focus is on specific marine litter types**. However, several of the **most abundant litter items** (see table) are not appropriately addressed as yet, such as cigarette butts, packaging, and single-use items (e.g. drink bottles and cans, plastic straws and cutlery, food containers and wrappers). Here, aside from economic instruments, stronger regulatory measures and increased support for innovation are important policy options.



The 'product-to-waste cycle'

³ Altvater, S., van der Grijp, N.M., Valkov, A., Kalfagianni, A., Hadzhiyska, D., Fernandez, P., Smith, L., Reid, A., Boteler, B., Skourtos, M. & A. Kontogianni (2013). Towards effective regional action plans and programmes of measures for marine litter in the EU: an analysis of institutional and legal gaps and barriers. EU FP7 CleanSea project, D5.13.

⁴ Kalfagianni, A., Altvater, S., Fernández Bautista, P., Krüger, I., Pavlova, D., Schmidt, S., Smith, L.O., van der Grijp, N.M., & Veiga, J.M. (2015). Best practices for marine litter reduction in the EU. EU FP7 CleanSea project, D5.14.

The most **powerful stages for intervening** in the current product–to-waste cycles are 'design and production' and 'use and consumption'. However, our study showed that these stages are currently less targeted than collection and clean-up. Policies should therefore be better steered to ensure that products are designed to be **long-lasting and reused, repairable and remanufacturable,** with the most effective use of resources, minimizing the use of virgin non-degradable materials and of toxic substances. The recently published **EU Action Plan for a Circular Economy**⁵ is an important first step in the direction of abandoning the current linear economy as it targets the volumes of un-recycled waste produced, resulting in lower volumes of waste becoming marine litter.

Most of the measures taken in the four EU marine regions have a limited geographical scope, as they mainly apply to the local or national level. If successful measures were to be **upscaled** and implemented more widely, their impact might increase significantly. However, it has to be kept in mind that measures that are successful in one region may not have the same impact in other regions, and therefore need to be adjusted to local contexts and circumstances. At the same time, there exist many commonalities between the four regions, which justify increased mutual cooperation to exchange information and **learn from each other's good and best practices**. Such cooperation may eventually require new joint institutional processes and a better use of existing institutions in the four regions.

The majority of the measures currently being taken have a **voluntary nature**, which means they are not legally binding and government has a less prominent role. These measures vary from local, one-issue approaches to ambitious, sectoral agreements. Although private stakeholders often have the lead in such initiatives, this does not mean that government should not be involved. On the contrary, the **role of government has proven pivotal in the success of voluntary initiatives** through the provision of targets in the context of broader regulatory frameworks, but also in terms of providing access to resources and people, and in some cases also financial support. It is therefore of major importance that Member States create institutional settings that facilitate partnerships and voluntary agreements, especially in the sectors that are the main drivers of marine litter. Such settings should also include adequate mechanisms for monitoring effectiveness.

Focusing on the assessments and policy mixes developed for each of the four regions, the outcomes can be summarised as follows. Our assessment for the **Baltic Sea region** showed that several measures and practices are already in place covering the most important marine litter items. In addition, various new measures are planned that are likely to address the most obvious gaps. However, a closer look reveals that many measures, especially those linked to the higher stages of the waste hierarchy, are implemented in a limited number of countries only (especially Sweden, Denmark and Germany). Thus, innovative approaches need to be spread more broadly among Member States in the Baltic. In order to achieve this, **political commitment** has to be strengthened and needs to be backed up by better compliance mechanisms and **control of effectiveness**.

The identified gaps in the current policy framework of the Baltic Sea region show a specific need for additional regulatory approaches in order to:

Promote prevention of waste by designing effective behaviour change interventions;

⁵ COM (2015) 614/2, <u>http://ec.europa.eu/priorities/jobs-growth-investment/circular-economy/docs/communication-action-plan-for-circular-economy_en.pdf</u>

- Develop specially designed legislation for eco-innovation and start-ups;
- Develop local regulatory mandatory requirements to reduce plastic waste, e.g. stricter regulations for event organisers to manage waste properly;
- Further develop regulatory frameworks and strengthen control, including bans and fees with a focus on certain types of marine litter (e.g. cigarette butts, single-use products, etc.);
- Create binding obligations for national administrations to include the marine litter topic into national school educational programmes.

In addition, **voluntary measures** that showed to be effective locally can be scaled-up. For example, intensified dialogue and networking with fishermen could be more effective than prosecution and fines. In addition, successful measures and practices from other regional seas (e.g. Courtauld Commitment, Green Deals, "Fishing for Litter" initiatives, etc.) could be adopted.

See the resulting policy mix for the Baltic Sea region in Annex A below.

For the **Black Sea region**, it can be concluded that in parallel with strengthening the political commitments in the region, increased effort should be allocated on specific regulatory measures, such as:

- Further development of the regulatory framework and strengthening of control, including bans and fees with a focus on certain types of marine litter (e.g. cigarette butts, single-use products, etc.).
- Promote **prevention** of waste and increase **waste management** efforts.

In terms of further marine litter reduction, it is also essential to scale-up voluntary types of measures that showed to be effective elsewhere in the region and to adopt successful measures and practices from other regional seas (e.g. Green Deals, port-reception fees, "fishing for litter" initiatives, etc.).

Additional measures addressing **institutional gaps** and enhancing **stakeholder involvement** may include to:

- Transfer knowledge from other regional seas and improve regional and inter-regional cooperation with responsible authorities to achieve an improved state of marine waters.
- Improve public awareness and stakeholder involvement in the marine litter issue. Businesses should be actively involved and recognised as important stakeholders with capacity to influence the early stages of the 'product-to-waste cycle' – design and production as well as packaging - and to potentially provide financial support to relevant marine litter initiatives.
- Improve institutional capacity and build up specific expertise on marine litter within the administration.
- Develop a plan for **monitoring the effectiveness** of the measures implemented.

See the resulting policy mix for the Black Sea region in Annex B below.

The assessment for the **Mediterranean Sea region** identified the need for **stronger regulatory measures**, as there is currently a predominance of voluntary approaches. Although the new measures proposed in the RAP already show a more balanced combination of regulatory and non-regulatory measures, urgent governmental action is still required in order to:

- Address the earlier stages of design & production to achieve waste reduction;
- Tackle waste produced in the sectors of tourism and recreation as well as maritime transport more effectively;
- Address litter originating from aquaculture, agriculture and industrial activities;
- Improve collection, in particular relating to specific, most common litter items; promotion of recyclability and improvement of recycling rates;
- Target specific categories of litter, such as smoking-related items (e.g. cigarette butts), single-use packaging and service items (e.g. drink bottles and cans, plastic straws and cutlery, food containers and wrappers).

See the resulting policy mix for the Mediterranean Sea region in Annex C below.

With regard to the **North-East Atlantic region**, the analysis showed that there are already **many examples of existing measures and practices**, and that some additional ones are planned where the needs for an extra effort are the highest. The major challenge in this region is now to upscale successful measures and practices and to **implement them more widely and evenly** throughout the region. In addition, a major effort is needed to monitor these measures and practices for their effectiveness.

Focusing on the top 10 items found in the North-East Atlantic region, it is evident that the existing measures and practices cover them quite adequately or are expected to do so in the near future. However, there is a need for additional measures to prohibit littering on beaches, especially focused on **cigarette butts, balloons** and **plastic bags**.

Additional measures that could **strengthen the preventative approach** and have a longer time horizon relate to stimulating enhanced corporate responsibility and environmental liability, marine-friendly innovation and product development, and smart packaging. Policy instruments that may serve as catalysts for such developments are the well-targeted spending of **EU structural funds** and the **greening of public procurement**. Finally, an urgent appeal on citizens to deal more responsibly with waste could be strengthened via educational activities aiming to achieve an **anti-littering culture**. More coercive measures, such as putting fines on undesired behaviour and mandatory participation in clean-up activities, could be effective, particularly in the short-term.

See the resulting policy mix for the North-East Atlantic region in Annex D below.

Annex A: Policy Mix for the Baltic Sea region

Legend:

Implemented Measures that can be extended Foreseen Measures (PoM) New measures (e.g. innovative or from other regional seas (RSs)

Regulatory measures

Soft/co-management measures

Sources:

- 1 HELCOM RAP
- 2 Proposals from former CleanSea reports, CleanSea Stakeholder Workshop Baltic Sea
- 3 PoM Germany
- 4 PoM Sweden
- 5 Other EU region
- 6 cross-regional (e.g. USA)

	POLICY MIX BALTIC SEA REGION				
	Design	Use &	Collection	Treatment	Clean un
	& Production	Consumption	& Waste Transfer	& Recycling	Clean-up
Smoking related items	Substitution of cigarette butts (cellulose-acetate) through natural materials ⁴	Smoking ban on beaches ⁵ Green Deal b		te management, clean-u .g. <i>Adopt-a-Beach, My E</i> reduce beach recreation	Beach) ⁵
Caps/lids	Green Deal be Voluntary agreements with retailers & suppliers to reduce packaging and waste, including selling products in bulk and reusing containers (e.g. Courtauld Commitment, UK) ⁵ Certification and awards of service providers to include specific criteria on single-use, disposable items and on prevention of ML		 Garbage deposit refund scheme on festivals² (Germany, Denmark) Community-based waste management, clean-up and monitoring of beaches, e.g. <i>Keep Europe Clean⁶; Keep Denmark Tidy²; Keep Sweden Tidy²</i> (Sweden, Denmark) 		
Foam sponge	Extended Producer Re	(e.g. <i>Green Key</i>) ⁵ esponsibility Strategies req life-cycle of t	beaches (e uiring producers to be res	te management, clean-u .g. <i>Adopt-a-Beach, My E</i> sponsible for the entire	
String & cord		Environmental assessment of requirements to reduce balloons in the public ⁴	Message in our bottle ⁶	'Jutbakken' (large waste bins on beaches)⁵	

		Ban on balloons ⁵			
		Substitution of plastic string for balloons by natural materials ⁴	beaches, e.g. Keep E	te management, clean-u Europe Clean ⁶ ; Keep Den En Tidy ² (Denmark, Swed	mark Tidy²; Keep
				reduce beach recreation	waste 5
	Extended Producer Responsibility Strategies requiring producers to be responsible for the entire life-cycle of the product ¹				
	Ban on oxo- degradable carrier bags⁵	Refillable containers for food (Germany, Denmark, Sweden)		Awareness campaigns to encourage supermarkets for recycling containers (Denmark)	
Plastic bags			beaches, e.g. Keep E	te management, clean-u Europe Clean ⁶ ; Keep Den En Tidy ² (Denmark, Swed	mark Tidy²; Keep
	suppliers to reduce including selling prod	nents with retailers & packaging and waste, ucts in bulk and reusing ainers ¹		Composites Europe 2014/2015 ² (Germany)	
		New	plastic bags recovery rou	ites ²	
			Zero Plastics	s to Landfills ⁵	
	Plastic Cycle Ch	ain Agreement to achieve Nether		plastics (e.g. PoM	
Food packaging incl. fast food containers	Product design studio project: This Too Shall Pass	Ban single-use products (e.g. from	Garbage deposit refund scheme on festivals ² (Germany,	Awareness campaigns to encourage supermarkets for	

	(packaging has the same life plan as the food they contain) ²	certain areas) ^{2,3}	Denmark)	recycling containers⁵	
			Zero Plastics	s to Landfills ⁵	
	suppliers to reduce including selling produce	nents with retailers & packaging and waste, ucts in bulk and reusing auld Commitment, UK) ⁵	Cooperation for estab Refund Schemes for I car	bottles, containers and	
		Certification and award to include specific crit disposable items and (e.g. Gree	eria on single-use, I on prevention of ML	Clean River a	oproaches⁵
			beaches, e.g. Keep E	te management, clean-u Europe Clean ⁶ ; Keep Der n Tidy ² (Denmark, Swed	mark Tidy ² ; Keep
		Green Deal be	each recreation sector to	reduce beach recreation	n waste ⁵
			Message in our bottle ^{2, 6}	Composites Europe 2014/2015 ²	
	Plastic Cycle Ch	hain Agreement to achieve Netherl		plastics (e.g. PoM	
Bottle caps	suppliers to reduce including selling produ	nents with retailers & packaging and waste, ucts in bulk and reusing auld Commitment, UK) ⁵ Certification and award	Cooperate on the establishment and/or further development of deposit refund systems for bottles, containers and cans ¹	Clean River a	oproaches⁵

Culery, trays & straws	Alternative materials for single-use straws ⁵ Re-usable straws ^{1/3/5} Extended Producer Re	to include specific cri disposable items and (e.g. <i>Gre</i> Don't provide straws with the drink by default ⁵ sponsibility Strategies req	d on prevention of ML en Key) ⁵ Garbage deposit refund scheme on festivals ² (Germany, Denmark) uiring producers to be rea	sponsible for the entire	
		life-cycle of t Ban single-use products (e.g. from certain areas) ⁵	Community-based was beaches, e.g. <i>Keep E</i>	te management, clean-u Europe Clean ⁶ ; Keep De En Tidy ² (Denmark, Swed	nmark Tidy ² ; Keep
Fishing & aquaculture gear	Alternative for a	ll kind of nets ^{1/3/5}	Higher penalties for improper disposal of fishing gear (backed by communication strategy) ²	Jutbakken' (large waste bins on beaches) ⁵	Clean-up actions of beaches (e.g. <i>Boskalis Beach</i> <i>Clean-up Tour</i>) ⁵
-		Green Deal fis		Fishing-for-Litter ⁵ val of old or abandoned ew products (e.g. <i>Heal</i> fishing waste ⁵	
Snack		sponsibility Strategies req life-cycle of t	the product ¹	·	
packets & Lolly sticks	suppliers to reduce p	ents with retailers & backaging and waste, lots in bulk and reusing	beaches (e	te management, clean-u .g. <i>Adopt-a-Beach, My l</i> te management, clean-u	Beach) ⁵ ;

	containers (e.g Courta	auld Commitment, UK) ⁵		Europe Clean ⁶ ; Keep Der In Tidy ² (Sweden, Denma		
	Plastic Cycle Ch	Netherl	in Agreement to achieve a circular economy for plastics (e.g. PoM Netherland) ⁵			
		Certification and awards of service providers to include specific criteria on single-use, disposable items and on prevention of ML (e.g. <i>Green Key</i>) ⁵				
			Zero Plastics	s to Landfills ⁵		
	Product designed for reuse ^{2, 3}		beaches, e.g. Keep E	te management, clean-u Europe Clean ⁶ ; Keep Der In Tidy ² (Denmark, Swed	mark Tidy ² ; Keep	
	Modification/substituti on of products to reduce the negative impact of marine litter on the environment and find alternative materials ³	Reduction of plastic waste by local regulatory mandatory requirements (e.g. polluter-pays- principle for pathways of plastic, stricter approval requirements for event organiser) ³		Regular removal of ML in accumulation and sensitive areas ^{1,2}		
General	Plastic Cycle Ch	ain Agreement to achieve Netherl		plastics (e.g. PoM	Clean-ups at river mouth area ²	
	Reduction of the input of plastic waste into the marine environment (development of existing waste treatment systems, improvement of sustainable product and packaging designs) ³			Coordinated Clean-up Day for the Region ⁵		
	with business and ind	During revision of municipal waste plans: identify and highlight how waste management can contribute to reducing the emergence of marine litter and establish objectives for such work ⁴		Dive Against Debris ²		
	QMilk ² Eco Design Refills ⁶	Linking the topic of marine litter to learning	National and local waste management plans: to		Regular clean-up campaigns ^{1,2}	

Awaren	objectives, curricula and teaching material ³ ess raising activities on	marine marine litter and potentia	e litter ³ I <mark>l solutions (e.g. MARLIS</mark>	CO)⁵
the EU Ecolabel and exchange with inte	existing labels such as d the Nordic Ecolabel, rnational certification emes ¹	Improved storm water management ¹		Recover macro- waste before disposal of dredged sediments ^{2,4}
			e of the contribution of up ronment and identify sui	

Annex B: Policy Mix for the Black Sea region

Legend:

Implemented Measures that can be extended Foreseen Measures (PoM) New measures (e.g. innovative or from other RSs) CleanSea Stakeholder Workshops Black Sea Regulatory measures

Soft/co-management measures

Sources:

- 1- PoM (transboundary context Bulgaria and Romania)
- 2- Stakeholder workshops
- 3- Other EU region
- 4- Elsewhere

	POLICY MIX BLACK SEA REGION				
	Design & Production	Use & Consumption	Collection & Waste transfer	Treatment & Recycling	Clean-up
Cigarette butts		Ban smoking on beaches ³ (France)			
Snack packets, lolly sticks, straws	Alternative materials for single-use straws Re-usable straws				
Drink bottles	Voluntary agreements v	vith retailers & suppliers	Cooperation for establishm	ent of Deposit-Refund	

Caps/lids	to reduce packaging and waste, including selling products in bulk and reusing containers (e.g Courtauld Commitment, UK; MED RAP)	Schemes for bottles, contai	ners and cans (inc. lids)	
Drink cans			Cleaning of unguarde waste is us	
Small plastic bags	Voluntary agreements with retailers & suppliers to reduce packaging and waste, including selling products in bulk and reusing containers (e.g Courtauld Commitment, UK; MED RAP)			
Food containers	Certification and awards of service providers to include specific criteria on single-use, disposable items and on prevention of ML (e.g. Green Key) ³			
Cups	Ban single-use products (e.g. from certain áreas) ⁴		Cleaning of unguarde waste is us	
Clothing				
Bottle caps			Cleaning of unguarde waste is us	
		Cooperation for establishm Schemes for bottles, co		
	Plastic Cycle Chain Agreement to achieve a c	ircular economy for plastics (F	PoM Netherlands) ³	
General	Coopera	roving the ecological status of ation between institutions (Bu	Igaria) ²	Voluntary beach clean-up (e.g. Coastwatch Constanta; <i>Let's do</i> <i>it, Romania!; Let's do</i> <i>it, Europe</i>)
	Inclusion of marine litter and	d its impacts in waste manage	ement plans (HELCOM) ³	

			ed beaches- collected used for art
		al Marine litter Action Plan (joint methodology for qua tion of sources, prosecution of offenders, etc.) (PoM	ntifying the marine litter,
		Zero Plastics to Landfill ³ (Spain, OSPAR RAP)	Regular removal of ML in accumulation and sensitive areas ³ (MED RAP)
		Regular (annual) campaigns for encouraging an activities and improved Marine litter monitoring or BG&RO)	
		Waste management in port facilities	Port seabed clean- up by divers ²
		Marine litter waste collection and management organised by boats, Turkey	Sea surface marine litter cleaning (e.g. Turkey)
	STH Harem B	each cleaning rehabilitation and conservation project	(e.g. Turkey)
	Awareness raising act	<i>"My Black Sea</i> " awareness campaign ivities about the issue of marine litter and potential so	olutions (e.g. Marlisco)
Annual awareness raisi	• • •	l to business (commercial, beach users, fishermen, e ts, children, etc.) (PoM BG&RO)	tc.) and public (tourists,

Annex C: Policy Mix for the Mediterranean Sea region

Legend:

Implemented Measures that can be extended Foreseen Measures (e.g. RAP, PoMs) New measures (e.g. innovative or from other RSs) CleanSea Stakeholder Workshop MED Regulatory measures Soft/comanagement measures

Sources

1 – MED RAP

2 – Project for joint implementation of MSFD in the MED, Phase II (ENV.D.2/FRA/2012/0017)

3 – Stakeholders' Workshop (Venice, October 2015 and Madrid, November 2015)

4 – PoM France

5 – OSPAR Area or RAP

6 – HELCOM Area or RAP

7 - Elsewhere (e.g. USA)

		POLICY MIX MEDITERRANEAN SEA REGION			
	Design & Production	Use & Consumption	Collection & Waste transfer	Treatment & Recycling	Clean-up
Smoking		Ban smoking on beaches	Higher penalties for improper disposal of cigarette butts ³		
related items	Eco-design: Biodegradable cigarette filters ³ (e.g. France)		Awareness raising and modes to collect cigarette butts (e.g. astray distribution in beaches)		
Voluntary agreements with retailers & suppliers to reduce packaging and waste, including selling products in bulk and reusing containers (e.g Courtauld Commitment, UK) ^{1,5}					
Plastic bottles		Cooperation for establish Schemes for bottles,			
		Drinkable water publically available for refills ³			
	Ban on oxo-degradable carrier bags				
Plastic Bags	S Voluntary agreements with retailers & suppliers to reduce packaging and waste, including selling products in bulk and reusing containers (e.g Courtauld Commitment, UK) ^{1,5}				
Aluminum drink cans		Cooperation for establish Schemes for bottles,	-		
		Certification and awards			

Food wrappers & containers	Ban polystyrene packaging 3,7	of service providers to include specific criteria on single-use, disposable items and on prevention of ML (e.g. Green Key)	
Plastic cups	Voluntary agreements with reduce packaging and waster in bulk and reusing cont Commitmen	e, including selling products ainers (e.g Courtauld	
& cutlery		Ban single-use products (e.g. from certain areas) ⁷	
		Certification and awards of service providers to include specific criteria on single-use, disposable items and on prevention of ML (e.g. Green Key)	
	Design & market Re	e-usable straws	
	Alternative materials for single-use straws	Straws are only provided with drink upon request ³	
Straws		Ban single-use products (e.g. from certain areas) ⁷	
	Voluntary agreements with reduce packaging and wasted in bulk and reusing cont Commitmen	e, including selling products ainers (e.g Courtauld	
	Ban of plastic cotton-bud sticks		Improvement of Waste Water Treatment Plants to retain microplastics and fibres from urban and industrial effluents ³
Sanitary waste	Awareness campaigns for pr Bag it	oper disposal of sanitary was and Bin it, Don't Flush it, UK	

Fishing/ aquaculture gear	Innovative alternatives for aquaculture gear based on neutral, biodegradable	Use of alternative materials in aquaculture (e.g. cotton mussel socks) ³ Use of alternative materials for fishing note	Explore possibility of gear marking ¹ Collection and remov	/al of old or abandoned ne	ts for recycling and
	materials ³	materials for fishing nets, pots & traps ¹	incorporation in new products (e.g. <i>HealthySeas</i> Initiative) ²		
	Extended Producer Responsibility strategies, following waste hierarchy: reusability, durability, recyclability of products but also less resources and toxicity ^{1,3}				Clean-ups at river mouth area ²
General	Voluntary agreements with retailers & suppliers to reduce packaging and waste, including selling products in bulk and reusing containers (e.g Courtauld Commitment, UK) ^{1,5}			Innovative technologies on sorting of municipal waste and energy recovery on non-	Collection of ML removed during normal fishing operations - <i>Fishing for Litter</i> ³
			recyclable waste (Germany) ⁵		Regular beach clean- up campaigns ^{1,2}
			Recycling companies that up/downcycle difficult- to-recycle items (e.g. coffee-capsules - <i>Tassimo</i> <i>Brigade</i> , UK) ⁵		Regular removal of ML in accumulation and sensitive areas ^{1,2}
	Plastic Cycle Chain A	Agreement to achieve a circu	ar economy for plastics (PoM Netherlands) ⁵		Removal of macro- waste before disposal of dredged sediments in the sea ^{2,4}
	Sustainable Procurements t products with rec			Sustainable Procurements to encourage markets for products with recycled plastic ¹	Coordinated Clean-up Day for the MED Region ^{1,2}
	Zero Plastics to Landfill (OSPAR RAP) ^{1,5}				Dive Against Debris
	Inclusion of marine litter in waste management plans ^{4,5} Awareness raising activities on marine litter and potential solutions (e.g. MARLISCO)				(seafloor clean-up by scuba-divers)

items and on prevention of ML (e.g. Green Key)

Annex D: Policy Mix for the North-East Atlantic region

Legend:

Implemented Measures that can be extended Foreseen Measures (e.g. RAP, PoMs) New measures (e.g. innovative or from other RSs) Regulatory measures Soft/comanagement measures

Sources:

1 – OSPAR RAP

- 2 PoM Belgium
- 3 PoM The Netherlands
- 4 PoM The UK

	POLICY MIX NORTH-EAST ATLANTIC				
	Design & Production	Use & Consumption	Collection & Waste transfer	Treatment & Recycling	Clean-up
		Ban on release of balloons ³			'Jutbakken' (large waste bins on beaches) ³
String & cord	Green Deal to reduce beach recreation waste ³				
			Community-based waste	management, clean-up and Adopt-a-Beach ⁴ ; My Beach ⁴	
Caps/lids		include specific criteria or	Is of service providers to a single-use, disposable a of ML (e.g. Green Key) ³		
	to reduce packaging ar	with retailers & suppliers ad waste, including selling eusing containers (e.g.			

		nmitment, UK) ⁴				
	Plastic Cycle Chain Agreement to achieve a circular economy for plastics ³					
		Green Deal to reduce beach recreation waste ³				
Cotton bud sticks		ns for proper disposal of sanitary waste, including .g. <i>Bag it and Bin it, Don't Flush it</i> , UK) ⁴				
Snack		Certification and awards of service providers to include specific criteria on single-use, disposable items and on prevention of ML (e.g. Green Key) ³				
package and		Plastic Cycle Chain Agreement to achieve a circular economy for plastics ³				
lolly-sticks	Voluntary agreements with retailers & suppliers to reduce packaging and waste, including selling products in bulk and reusing containers (e.g Courtauld Commitment, UK) ⁴					
		Green Deal to reduce shipping waste ³	'Jutbakken' (large waste			
Dono			bins on beaches) ³			
Rope		Green Deal to reduce fishing waste ³				
Nets & pieces of nets	Innovative alternatives for fishing gear (e.g. dolly	Green Deal to reduce fishing waste ³	'Jutbakken' (large waste bins on beaches) ³			
	rope) based on neutral, biodegradable materials ^{2,3}	Collection and removal of old or abandoned nets for in new products (e.g. <i>HealthySeas</i>)				
		ycle Chain Agreement to achieve a circular economy for plastics ³				
		Green Deal beach to reduce beach recreation waste ³				
Food containers		Certification and awards of service providers to include specific criteria on single-use, disposable items and on prevention of ML (e.g. Green Key) ³				
		with retailers & suppliers				
Drink	to reduce packaging and waste, including selling products in bulk and reusing containers (e.g Courtauld Commitment, UK) ⁴ Community-based waste management, clean-up and monitoring of beaches e.g. <i>Adopt-a-Beach</i> ⁴ ; <i>My Beach</i> ³					
DIIIK		Certification and awards of service providers to				
bottles		include specific criteria on single-use, disposable items and on prevention of ML (e.g. Green Key) ³				

		Green Deal to reduce beach recreation waste ³	
Plastic bags	Ban on plastic bags		
Cigarette butts	Smoking ban on beaches		
Datto		Green Deal to reduce beach recreation waste ³	
General	Plastic Cycle Chain Agreement	Plastic Cycle Chain Agreement to achieve a circular economy for plastics ³	
		Community-based waste management, clean-up and Adopt-a-Beach ⁴ ; My Beach ²	
			Clean River approaches ^{3,4}
			Voluntary Beach Clean-up
			actions (e.g. Boskalis
			Beach Clean-up Tour) ³



