The second OSPAR Regional Action Plan on Marine Litter

RAP ML 2
2022-2030

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OSPAR Agreement 2022-05

This Second OSPAR Regional Action Plan (RAP ML 2) sets out the policy context for OSPAR’s work to address marine litter within the North-East Atlantic and directly contributes to delivering the marine litter objectives of the North-East Atlantic Environment Strategy 2030. The RAP ML 2 describes priority thematic areas and defines key actions where the OSPAR Commission can best contribute to tackling this ubiquitous challenge.

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Introduction

The marine litter challenge

The vast quantities and adverse impacts of man-made solid waste, mostly plastics, that end up in the oceans and become marine litter has been identified as one of the most pressing global challenges of our time. It is estimated that between 4.8 and 12.7 million tons of litter are added to the oceans every year. This influx of litter could possibly triple by 2040. Litter is found everywhere in the marine environment, on shorelines (including beaches), at the sea surface, in the water column, on the sea bed and in marine wildlife, even in remote uninhabited areas. Plastic litter breaks down very slowly into ever smaller pieces of micro and nanoplastics. The smaller it gets the more difficult, if not impossible, it becomes to remove litter particles.

OSPAR’s latest assessments of marine litter in the North-East Atlantic provide powerful evidence of the scale of this challenge, but also some cause for hope. The OSPAR marine litter thematic assessment finds that, overall, marine litter levels are still high and further efforts are needed. Nonetheless, there are some positive signs of a decrease in quantities of litter found on OSPAR beaches and of floating litter in the North Sea over the last 10 years. When considered against the upward trend in plastic production and consumption in Europe over a similar period, this suggests that progress has been made on preventing plastics from entering the marine environment. The successful implementation of this new Regional Action Plan will be key to building on and maintaining momentum to achieving OSPAR’s objective to prevent inputs of and significantly reduce marine litter.

OSPAR’s response

OSPAR has been at the forefront of international efforts to tackle the marine litter problem since the adoption of its first Regional Action Plan on Marine Litter (RAP ML) (2014-2021). Through this Second Regional Action Plan on Marine Litter (RAP ML 2), OSPAR will continue to work to prevent and significantly reduce marine litter in the North-East Atlantic.

The first RAP ML consisted of both collective and national actions, addressing land- and sea-based sources and pathways of marine litter, as well as education, outreach and removal activities. Outputs have included recommendations and guidelines, best practice guidance, evidence reports, briefing papers, stakeholder workshops, and communication products.

A review of the RAP ML was conducted in 2020 and the results have been used to inform the development of OSPAR’s RAP ML 2. More information on the first RAP ML including all outputs can be found on the OSPAR Marine Litter webpages.

OSPAR’s North-East Atlantic Environment Strategy 2030

OSPAR Ministers adopted a new Environment Strategy at their meeting in Cascais, Portugal, in October 2021. The Strategy commits to taking action to halt and reverse biodiversity loss, prevent and eliminate pollution, including marine litter and underwater noise, and mitigate and adapt to the effects of climate change and ocean acidification on the marine environment. It sets 12 strategic objectives for achieving good environmental status in the marine environment including to prevent inputs of and significantly reduce marine litter, including microplastics, in the marine environment to reach levels that do not cause adverse effects to the marine and coastal environment, with the ultimate aim of eliminating inputs of litter.

Specific OSPAR reduction targets have been defined for marine litter (see operational objectives section below), and further targets will be developed.

The new Strategy is supported by an Implementation Plan which will show how actions undertaken by OSPAR contribute to the achievement of its strategic and operational objectives. The Plan will be a living document and will be used by OSPAR to record and assess progress with implementation of the Strategy.

Policy actions developed under RAP ML 2 will be fully integrated with and reported on under the NEAES Implementation Plan.
Objectives and scope

Objectives

The RAP ML 2 serves as the main instrument to deliver NEAES 2030 strategic objective 4 and the related 8 operational objectives on marine litter through a programme of coordinated collective actions. It will be implemented between 2022 and 2030, matching the time-frame of the NEAES.

Strategic Objective 4: Prevent inputs of and significantly reduce marine litter, including microplastics, to reach levels that do not cause adverse effects to the marine and coastal environment with the ultimate aim of eliminating inputs of litter.

Supporting operational objectives:

S4.01: By 2022 OSPAR will agree an updated Regional Action Plan on Marine Litter including a set of prioritised "SMART³" objectives to address new and emerging issues and to reduce the impacts of those items causing most harm to the marine environment.

S4.02: By 2023 OSPAR will improve the evidence base on harm in relation to marine litter with the aim of developing and agreeing actions and measures to reduce harm by 2025.

S4.03: By 2025 OSPAR will reduce by at least 50% the prevalence of the most commonly found single-use plastic items and of maritime-related plastic items on beaches in order to contribute to the achievement of relevant regional and EU threshold values building upon requirements for EU Member States in the EU Single Use Plastics Directive (Directive 2019/904), and by at and by at least 75% by 2030.

S4.04: By 2023 OSPAR will develop additional regionally coordinated quantitative reduction targets for all marine litter on beaches, and as soon as possible for other relevant environmental compartments, taking account of relevant regional and EU threshold values.

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By working towards these objectives, the implementation of the RAP ML 2 will at the same time:

- Enhance knowledge and awareness on marine litter;
- Support Contracting Parties in the development, implementation and coordination of their programmes for litter reduction, including those for the implementation of the EU’s Marine Strategy Framework Directive (MSFD) and any other EU processes with relevance to marine litter;
- Strengthen the cooperation and collaboration with the EU and other Regional Sea Conventions as well as other international organizations in order to join forces, add value to existing processes and not duplicate efforts;
- Develop management approaches and harmonised monitoring for marine litter that contribute to, and reflect, international processes; and
- Contribute to the development and implementation of the envisaged international legally binding instrument on plastic pollution, including in the marine environment, agreed by the 5th session of the United Nations Environment Assembly (UNEA). The OSPAR RAP-ML 2 strives to be in compliance with and contribute to the implementation of the UNEA resolutions and relevant decisions. In 2019, UNEA agreed on the zero vision, “the importance of long-term elimination of discharge of litter and microplastics to the oceans and of avoiding detriment to marine ecosystems and the human activities dependent on them from marine litter and microplastics”. In the 2021 declaration OSPAR’s Ministers have confirmed their commitment “to a global agreement to reduce plastic marine litter under the United Nations Environment Assembly process”.

OSPAR’s marine litter objectives and RAP ML 2 will continue to support the Rio+20 global commitment to “take action to, by 2025, based on collected scientific data, achieve significant reductions in marine debris to prevent harm to the coastal and marine environment” in the ‘The Future We Want’ and the 2013 UNGA resolution A/RES/68/70 in which States noted concern on marine debris.

The Sustainable Development Goals (SDGs), adopted in 2015, are central to the 2030 Agenda for Sustainable Development. The issue of marine litter is relevant to a number of the goals such as: SDGs 12 on sustainable consumption and production and SDG 14 on life below water. The implementation of the RAP ML 2 will contribute particularly to the achievement of target 14.1 “By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution”. In addition, the RAP ML 2 will contribute to the proposed Global Biodiversity Framework under the Convention on Biological Diversity due to adopted by the 15th Conference of Parties (COP15).

OSPAR’s contribution to international efforts to reduce marine litter

The RAP ML 2 will be implemented, as far as possible, in cooperation with other relevant work and initiatives from regional and global organisations, including UNEP and other Regional Seas Conventions, the International Maritime Organisation, the Convention on Biological Diversity, the European Union, Fisheries Regional Advisory Councils, North-East Atlantic Fisheries Commission and River Basin Commissions. Partnerships with the private sector and with non-governmental organisations will also be part of the working approach. The alignment with relevant EU legislation and policy, and the collaboration with other Regional Sea Conventions is especially critical to the implementation of OSPAR’s actions to reduce marine litter. Important regional partners include HELCOM, UNEP-MAP, the Black Sea Commission, the Arctic Council, the Nordic Council of Ministers and the Cartagena Convention.

Since 2014, marine litter and microplastics have been high on the agenda within the United Nations Environment Assembly (UNEA). The OSPAR RAP-ML 2 strives to be in compliance with and contribute to the implementation of the UNEA resolutions and relevant decisions. In 2019, UNEA agreed on the zero vision, “the importance of long-term elimination of discharge of litter and microplastics to the oceans and of avoiding detriment to marine ecosystems and the human activities dependent on them from marine litter and microplastics”. In the 2021 declaration OSPAR’s Ministers have confirmed their commitment “to a global agreement to reduce plastic marine litter under the United Nations Environment Assembly process”.

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While knowledge on the pressures and impacts from marine litter has substantially increased in recent years, gaps remain. These knowledge gaps will be described in OSPAR indicator and thematic assessments, and Contracting Parties will continue to support research and development both to improve the understanding of the problem and aid the identification of effective solutions. OSPAR will continue to develop new indicators in response to emerging priorities, such as a better understanding of the impacts of marine litter.

The latest indicator assessments contribute to the marine litter thematic assessment as part of OSPAR’s Quality Status Report (2023). All assessments will be published via OSPAR’s Assessment Portal.

The review of the RAP-ML (1) identified that the monitoring and assessment programme and the RAP-ML should be better integrated, so during the implementation of the RAP ML2, further progress towards this ambition will be made to ensure evidence-informed decision making and an adaptive and responsive approach. Monitoring and assessments should:

a. inform development of future actions, for example by identifying new sources or types of marine litter;
b. be used as part of the evaluation framework for individual actions, by contributing to assessing effectiveness of actions in reducing quantities and impacts of marine litter.

OSPAR’s monitoring and assessment work will also be used to promote engagement with other Regional Seas Conventions, by sharing methods and tools and helping to support effective action and in addition, could support any future global assessment, or scientific mechanisms.

Development of the RAP ML 2

This plan builds on the evaluation of the first RAP ML (2014-2021) and its conclusions and recommendations. The process of developing new themes and specific actions has been highly collaborative including the views of OSPAR experts through an initial brainstorm session and those of observers and stakeholders through a consultation process. Following this process, Contracting Parties decided to focus on collective actions, recognising that national experience would continue to be shared and feed into any measures taken at the level of OSPAR. It was also agreed that the RAP ML 2 will be an adaptive plan.

Each of the actions identified under the themes and sub-themes in the following section will support the delivery of OSPAR’s NEAES strategic and operational objectives. Although the objectives of the RAP ML 2 and the NEAES should not alter, the actions to achieve these objectives will evolve throughout the lifetime of the RAP ML 2 (2022-2030).

The selection of actions for RAP ML 2 have been based on the extent to which they:

- Target top litter items, harmful items or items prone to be litter within the OSPAR Maritime Area;
- Fill in evidence, policy or implementation gaps; and
- Add value to other existing processes or efforts (i.e., EU, other regional bodies, global bodies).

As actions are further developed, they will be captured as tasks under the NEAES Implementation Plan and will be linked to the NEAES operational objectives. Developed actions will be reviewed and reported on annually through the mechanism of the NEAES implementation Plan, and can also be updated and revised through that same mechanism. This will also be the case for any new and emerging actions not yet identified. Therefore, the collection of actions presented in the following section should not be seen as a definitive list of all work to be completed under this RAP ML 2 (2022-2030).

Themes and actions

The following themes and actions have been identified by OSPAR as areas of focus for the RAP ML 2 and they will be taken forward collectively by OSPAR Contracting Parties within the framework of the OSPAR Commission.

The RAP ML 2 strives to enable flexibility for Contracting Parties to adapt and adopt new actions as knowledge develops, emerging issues appear and the legislative landscape evolves. The RAP ML 2 sets out the broad themes and sub-themes where OSPAR intends to take action, and presents the existing identified actions under each of those sub-themes. The broad themes are:

- Actions to reduce land-based sources of marine litter (Theme A);
- Actions to reduce sea-based sources of marine litter (Theme B); and
- Cross cutting actions to improve knowledge and understanding (Theme C).

Actions are numbered according to themes and sub-themes. Where an action is supporting an operational objective of the NEAES this is mentioned (in brackets) by the corresponding task number of the NEAES implementation plan. An overview table of all actions is provided in Annex 1.

Land-based (Theme A)

1. Waste Prevention and Management

Significant amounts of plastic leak from land-based sources into the North-East Atlantic as a result of current inefficiencies or insufficiencies in waste management practices and planning, despite there being a long-established history of waste management in the region. Other issues under this sub-theme could include, for example, marine litter resulting from construction and demolition waste as well as from agricultural practices.

For this sub-theme, OSPAR will undertake the following action:

While knowledge on the pressures and impacts from marine litter has substantially increased in recent years, gaps remain. These knowledge gaps will be described in OSPAR indicator and thematic assessments, and Contracting Parties will continue to support research and development both to improve the understanding of the problem and aid the identification of effective solutions. OSPAR will continue to develop new indicators in response to emerging priorities, such as a better understanding of the impacts of marine litter.

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Each of the actions identified under the themes and sub-themes in the following section will support the delivery of OSPAR’s NEAES strategic and operational objectives. Although the objectives of the RAP ML 2 and the NEAES should not alter, the actions to achieve these objectives will evolve throughout the lifetime of the RAP ML 2 (2022-2030).

The selection of actions for RAP ML 2 have been based on the extent to which they:

- Target top litter items, harmful items or items prone to be litter within the OSPAR Maritime Area;
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Land-based (Theme A)

1. Waste Prevention and Management

Significant amounts of plastic leak from land-based sources into the North-East Atlantic as a result of current inefficiencies or insufficiencies in waste management practices and planning, despite there being a long-established history of waste management in the region. Other issues under this sub-theme could include, for example, marine litter resulting from construction and demolition waste as well as from agricultural practices.

For this sub-theme, OSPAR will undertake the following action:
Action A.1 [S4.03.T2] Prevent and reduce plastic waste by coastal municipalities and cities

The action will develop dialogue with municipalities and cities with the purpose to share best practices on plastic waste prevention and management and to share experiences from development and implementation of legal action.

2. Wastewater and stormwater management

Wastewater from industries and households can contain substantial amounts of microplastics and macroplastics. Although most solid material is filtered in waste water treatment plants, effluent water is still a significant pathway for macro- and microplastics in the OSPAR Maritime Area.

In addition, releases of bio-carriers used in certain types of waste water treatment plants have been observed in the marine environment. Stormwater runoff has also been found to contain both large litter items and microplastics. A further possible route for microplastics to reach the marine environment from wastewater treatment, is via the use of sewage sludge and other bio-wastes as fertilizer.

For this sub-theme, OSPAR will undertake the following actions:

Action A.2.1 [S4.01.T3] Prevent the release of bio-carriers to the marine and riverine environment

Take action to promote measures preventing the release of bio-carriers into the marine and riverine environment by addressing wastewater treatment facilities and other industrial treatment facilities using bio-carriers.

Action A.2.2 [S4.01.T4] Reduce macro litter losses in wastewater treatment systems

Review the experimentation and development of technical devices and operational measures to retrieve macro litter in wastewater systems (including sewage discharges from storm overflows), gather knowledge on the efficiency of these devices and encourage uptake of the most efficient devices.

3. Riverine input of marine litter

One of the major pathways for litter to enter the marine environment is via inland waterways, i.e. rivers and other tributaries. There is limited data about the amount of litter being transported through rivers into the sea. There is also insufficient knowledge about the pathways, sources and transportation mechanisms for litter within rivers. although it is likely to vary greatly, depending on factors such as catchment area and rainfall.

For this sub-theme, OSPAR will undertake the following actions:

Action A.3.1 [S4.07.01] Monitor, prevent and reduce riverine inputs of macro litter to the marine environment and share knowledge on micro litter monitoring in rivers

Share information on the relevance of rivers as a source of marine litter and foster the development of harmonized monitoring and best practices for prevention and reduction of macro litter, in collaboration with relevant local and national authorities and sectors. In addition, consider and share knowledge on micro litter monitoring.

4. Actions to reduce the impacts of specific plastic products and plastic packaging

OSPAR’s beach litter monitoring regime has highlighted many of the most frequently occurring litter items which can often be linked to specific plastic products or packaging. In order to address this, the origins and sources of marine litter must be considered, options to phase out certain items and develop alternatives in order to reduce impacts on the marine environment.

For this sub-theme, OSPAR will undertake the following actions:

Action A.4.1 [S4.03.T3] Define measures and strategies for the phasing out or restriction of use of single use plastics prone to become marine litter in complement to the EU SUP Directive

Support the progressive phasing-out or restriction of use of single-use plastics that are not included in the EU SUP Directive or insufficiently covered to date. Such items are not collected in an efficient way and are prone to become marine litter (for instance balloon releases, shotgun wads and cartridges, fireworks, etc.)

Action A.4.2 [S4.03.T1] Reduce the impact of expanded polystyrene and extruded polystyrene (EPS / XPS) in the marine environment – development of OSPAR products:

Task to adapt and adopt outputs from Oceanwise project as OSPAR products taking into account work in other relevant fora.

5. Land-based sources of microplastics

Microplastics (plastic particles <$5mm) may be primary or secondary. Primary microplastics are those originally manufactured to be that small size or generated through usage of products within their life cycle; secondary microplastics are those that result from the breakdown of larger items in the environment.

For this sub-theme, OSPAR will undertake the following actions:

A.5.1 [S4.01.T5] Prevent inputs of microplastics from selected land-based sources into the marine environment

Land-based sources of microplastics will be assessed in terms of whether they are effectively addressed by current legislation, and to what extent they contribute to plastic pollution in the OSPAR marine environment. Based on the retrieved information, OSPAR will identify solutions and carry out activities to prevent and reduce releases of microplastics in order to support the development of a strong legislative framework addressing effectively all relevant sources.

Action A.5.2 [S4.01.T6] Reduce microplastic contamination from artificial grass

This action will help reduce microplastic pollution from artificial grass by gathering information, concluding best practice, developing guidance for use by Contracting Parties, providing potential next steps for consideration as an OSPAR Recommendation by ICG-ML.

5. Sea-based (Theme B)

1. Commercial shipping

There are a wide range of items on board ships that may enter the marine environment through a range of pathways, including accidental and illegal discharges of waste. OSPAR has identified the need to consider actions to reduce litter from commercial shipping, by working within existing international legal frameworks and with established instruments, and by information sharing and agenda setting.

For this sub-theme, OSPAR will undertake the following actions:

Action B.1.1 [S4.01.T7] Harmonise practices related to the provision and use of Port Reception Facilities

This action aims to assess possible areas for harmonized practices related to the provision/use of PRF within the OSPAR area, and subsequently to identify needs for further action. Although the scope is not limited to it, priority may be given to practices related to waste from fishing vessels and recreational craft, including the provision of PRF for passively fished waste and the implementation of fee systems. It will identify good practices related to the management of facilities for collection of waste fishing gear to support progression towards a circular lifecycle for fishing gear. These good practices may be transposed into an OSPAR guidance document.

Action B.1.2 [S4.01.T12] Reduce microplastics from ship greywater discharges

By collecting and reviewing existing research with regards to greywater discharges from ships, possibly also conducting local research based on sampling and assessing the local impacts of the greywater, the action aims to identify potential measures to reduce greywater discharges from ships.
2. Recreational boating

End of life recreational vessels (ELB) are recognised as a source of marine litter when abandoned offshore or on shorelines, their degradation leading to macro and micro litter contamination. Other issues identified under this sub-theme include littering from recreational boating, best practice for the enforcement of existing measures to prevent recreational leisure craft littering, and understanding the extent of littering from tourist vessels.

For this sub-theme, OSPAR will undertake the following action:

Action B.2.1 (S4.01.T8) Manage end-of-life recreational vessels

This action will help tackle marine litter from end of life (EOL) recreational vessels by: Developing a methodology to estimate the quantity, distribution and material composition of EOL recreational vessels for use by Contracting Parties; developing guidance to support waste management of EOL recreational vessels and collating Contracting Party EOL recreational vessel inventory returns to provide an estimate for the OSPAR region.

3. Microplastics – Sea-based sources

OSPAR has identified the need to consider actions to prevent the release of microplastics from sea-based sources including through the use of paints and antifouling on ships as well as from offshore infrastructure.

For this sub-theme, OSPAR will undertake the following action:

Action B.3.1 (S4.02.T3) Identify the need for measures to reduce the unintentional release of microplastics resulting from paint, anti-fouling paint and other marine coatings used by [commercial] marine vessels

Marine coatings are used by vessels to protect from corrosion and bio-fouling and contain plastic polymers, chemicals polymer additives, biocides and heavy metals. The application, maintenance and use of these coatings while at sea or in shipyards risk environmental impact in our seas given the presence of both plastic and additives. A holistic approach to reducing impact from use of these coatings would incorporate an assessment of the distribution and scale of marine coating use, and resulting micro-plastic and contaminant releases. The assessment would inform future potential prevention and mitigation measures.

4. Commercial Fishing, Recreational Fishing and Aquaculture

OSPAR assessments have shown that fishing is an important source of marine litter in the North-East Atlantic. Fishing related litter recorded on OSPAR beaches includes items such as string and cord, rope, crates, polystyrene fish boxes, nets and pieces of nets, and fishing line. OSPAR assessments have also shown that aquaculture is an important source of marine litter in the North-East Atlantic. Plastic waste items from aquaculture include items such as oyster bags, ropes, fish nets, cones, crates and mussels’ nets. Furthermore, there is forecasted to be a significant increase in aquaculture activities in the OSPAR Maritime Area over the next 10 years.

For this sub-theme, OSPAR will undertake the following actions:

Action B.4.1 (S4.08.T1) Prevent, locate, retrieve and handle ALDFG

This action focuses on ALDFG as a significant source of marine litter pollution. The action will address prevention of ALDFG at sea, its location, verification and removal, as well handling the retrieved fishing gear in a sustainable way, building on existing experience, linked to EU processes such as implementation of SUP-D (and related EPR-systems/collating targets for end-of-life gear etc.) and be consistent with other international provisions such as the IMO regulations.

Action B.4.2 (S4.08.T6) Stimulate circular design and developments in waste management of fishing and aquaculture gear

OSPAR Contracting Parties will work together to exchange information and good practice relevant to the implementation of national policy and standards on the design and waste management of fishing and aquaculture gear, including the requirements of the SUP Directive, and in future, consider measures to implement published gear design standards.

Action B.4.3 (S4.08.T2) Promote practical solutions for reducing the impact of certain specific fishing related items, such as net cuttings and dolly rope

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This action aims to reduce the impact of certain items through a combination of awareness raising efforts, stimulating measures, sharing of best practices and harmonisation with other projects and initiatives.

**Action B.4.4** (S4.08.T3) Address recreational fishing as a source for marine litter

This action will evaluate the significance of recreational fishing including angling as a source for marine litter in order to define and take appropriate measures.

**Action B.4.5** (S4.08.T4) Raise awareness and improve education in the fishing sector, including the strengthening of the OSPAR recommendations on Fishing for litter and on Sustainability Education Programmes for Fishers

OSPAR will work to raise awareness of marine litter and support training and education in the fishing and aquaculture sector. Raising awareness and education in the fishing sector has been proven effective in combating marine litter, especially when combined with Fishing for Litter schemes.

**Action B.4.6** (S5.05.T1) To identify and understand the main sources of entanglement of sea turtles in the Eastern Atlantic and to develop adequate management measures

The task aims at addressing entanglement on sea turtles on the basis of INDICIT II project data and other potential data in the OSPAR region from stranding networks and rescue centres. Emphasis will be given to a correct and standardised classification of litter causing entanglement, identification of the main sources and proposal of adequate management measures.

**Action B.4.7** (S4.08.T5) Prevent and reduce marine litter from aquaculture

OSPAR will work to prevent and reduce marine litter from aquaculture by gathering information, promoting good practice, and developing guidelines on litter prevention, monitoring, retrieval and site decommissioning.

5. Litter from offshore industry and activities

Marine litter originates from offshore infrastructure (including oil and gas installations and offshore windfarms). There is limited data to understand the extent to which offshore infrastructure contributes to marine litter in the North-East Atlantic but given the extent to which offshore industry is forecast to increase, it is anticipated that any quantities of litter released from these activities could potentially also increase.

For this sub-theme, OSPAR will undertake the following actions:

**Action B.5.1** (S4.05.T1) Plastic materials in the marine environment

To establish and report on the source and extent of the use of plastic in materials placed in the marine environment for protecting offshore oil and gas infrastructure and, where appropriate, develop measures to control or phase out plastic from materials placed at sea for the purpose of protecting marine infrastructure.

**Action B.5.2** (S4.06.T1) Plastic substances contained in offshore chemicals

To determine the extent of use and discharge of plastic substances, including microplastics, contained in offshore chemicals and, where necessary, develop measures to control or phase out their use.

6. Removal activities

Although prevention is the first priority, clean up or removal of marine litter is also important and should be prioritised as close to the source as possible, where the litter is considered to be a threat to human health, wildlife and coastal ecosystems and where costs are considered acceptable. Clean up technologies are rapidly evolving, and a number of pilot projects in OSPAR Countries have shown some promising results. OSPAR recognises the importance of clean up and removal activities and will continue to consider options for more concrete actions on this topic, especially actions which seek to identify hot spot areas, and for projects to retrieve ALDFC (see links with Actions C.2.1 and B.4.1).

**Cross-cutting (Theme C)**

As well as targeted land-based and sea-based actions, there are also actions identified which cut across both environmental compartments. In addition, there are broader activities that OSPAR will take to improve the knowledge base and understanding of the marine litter problem, to reduce the quantity and impact of litter in the marine environment. All of these cross cutting themes are captured in this final section.

1. Cross cutting land and sea based issues

For this sub-theme, OSPAR will undertake the following action:

**Action C.1.1** (S4.01.T9) Prevent microplastic pollution resulting from plastic pellet, powder and flake loss

This action will help prevent microplastic pollution by:

- a) Monitoring and reviewing the implementation of the OSPAR Recommendation 2021/6 and
- b) Developing guidance to support clean-ups after accidental losses of plastic pellets from both off and on shore source.

2. Increasing knowledge and understanding of the marine litter problem

For this sub-theme, OSPAR will undertake the following action:

**Action C.2.1** (S4.01.T10) Understand the location of litter accumulations

The aim of this task is to provide resources to support the build-up of knowledge about points of accumulation of marine litter and its pathways, including transboundary inputs. It will be built on the results produced by CleanAtlantic project, namely the CleanAtlantic Marine Litter Transport Tool, which estimated the location of accumulation areas and provided an assessment of the contribution of land and ocean-based sources to their formation.

3. Evidence on harm caused by litter to marine species and habitats

Although it is known that marine litter has severe detrimental mechanical and chemical impacts on species and habitats, which in some cases is even documented at population level, additional knowledge is required e.g. on the link of quantities of litter ingested and harm, food web implications, animal welfare etc.

For this sub-theme, OSPAR will undertake the following action:

**Action C.3.1** (S4.02.T1) Improve evidence base on harm in relation to marine litter

A synthesis of the harmful impacts of marine litter on biota and habitats in the North-East Atlantic based on a review of available and upcoming information.

4. Increasing integration and connectivity between monitoring, indicators and RAP ML 2 actions

OSPAR’s Coordinated Environmental Monitoring Programme for marine litter currently has four main indicators (Beach, Seafloor, Fulmar and Turtles) and one under development (microplastics in sediment).

For this sub-theme, OSPAR will undertake the following action:

**Action C.4.1** (S4.02.T2) Bridge the gap between monitoring and policy

The review of the RAP ML 2014-2021 noted that monitoring and the actions of the RAP ML 2 should be better connected. This action aims to identify opportunities and ways in which this can be done, including through ensuring the monitoring data and assessments can be used to inform RAP policy actions and that RAP actions connect to ongoing monitoring in order to understand their impact, and build on harmonisation between indicators to understand how they connect and what they can say about the state of marine litter.
Implementation and reporting

The RAP ML 2 is implemented through the OSPAR Agreement 2022/xx. It will be implemented during the period 2022-2030, and it shall be reviewed and updated in accordance with updated OSPAR quality assessments and strategies, and assessments under the MSFD.

Implementation approach

As with the first RAP ML (2014-2021) the implementation of actions will be through a lead country approach, such that at least one Contracting Party will take responsibility for the progression and delivery of the single actions, the lead country can be supported by another Contracting Party or Observer organisations. Resourcing for the delivery of the action may come from a combination of sources including the lead Contracting Party; other contributing Contracting Parties or observers and/or external project funding. Dedicated support will be needed to ensure the successful coordination and implementation of the RAP ML 2.

RAP 2 project management

The project management of the RAP ML 2 will be overseen by the Intersessional Correspondence Group on Marine Litter (ICG-ML) with the support of dedicated technical assistance. Progress, including barriers and resourcing requirements will be reported annually to the Environmental Impact of Human Activities Committee (EIHA) using the Programme Management Plan. This has been developed as a practical, real time monitoring tool that will:

a. Show implementation status of actions;
b. Provide oversight of resourcing and any potential risks and barriers;
c. Identify where the action drew on additional resources or collaboration e.g., projects;
d. Provide links to outputs of the action;
e. Describe impact of the action;
f. Enable input into the NEAES 2030 Implementation Plan reporting processes.

Reporting

The structure of the Project Management Plan aligns closely to that of the NEAES Implementation Plan. This alignment will ensure that the RAP ML 2 is compatible with and visible within the NEAES reporting system with manageable additional administrative effort, including facilitating input from the RAP ML 2 progress into the NEAES mid-term review in 2025.

Review and evaluation

Evaluation and impact criteria have been built into the articulation of the RAP 2 actions within the task templates. This will facilitate monitoring and evaluation of the actions taken to measure progress in their implementation, understand their impact and provide information to help improve how and which actions are taken in the future.

An interim review and evaluation of the status of implementation of the RAP ML 2 and effectiveness in delivering the NEAES Strategic and Operational Objectives should be undertaken for consideration by EIHA 2025 in order to contribute to the development of the OSPAR strategy beyond 2030.

A final evaluation of the impact of the RAP ML 2 will be undertaken towards the completion of the RAP ML 2 and published by 2030 at the latest.

Communicating the RAP ML 2

Communication with all stakeholders within and beyond OSPAR is a fundamental component of the RAP ML 2. This will maximise the effect of the work being undertaken by OSPAR on marine litter issues and ensure consistent messaging and easy access to outputs from the RAP ML 2 for use by OSPAR Contracting Parties, Observers and other stakeholders. The aim is to increase awareness of the work being carried out by OSPAR, as well as to promote awareness and understanding of the issues surrounding marine litter leading to further prevention and reduction efforts in the North-East Atlantic and within the international context. Communication will be delivered in cooperation with the Secretariat, by dedicated technical support and with the contribution of the action leads.
### Annex 1– Action Overview Table

<table>
<thead>
<tr>
<th>Action Number</th>
<th>Action Title</th>
<th>Lead &amp; Support</th>
<th>Completion status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theme A: Actions to reduce land-based sources of marine litter</strong></td>
<td></td>
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<tr>
<td>A.1.1</td>
<td>Prevent and reduce plastic waste by coastal municipalities and cities</td>
<td>Germany</td>
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<tr>
<td>A.2.1</td>
<td>Prevent the release of bio-carriers to the marine and riverine environment</td>
<td>Sweden and France</td>
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<tr>
<td>A.2.2</td>
<td>Reduce macro litter losses in wastewater treatment systems</td>
<td>France</td>
<td></td>
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<tr>
<td>A.3.1</td>
<td>Monitor, prevent and reduce riverine inputs of macro-litter to the marine</td>
<td>France, Belgium, Netherlands</td>
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<tr>
<td></td>
<td>environment and share knowledge on micro-litter monitoring</td>
<td>Support from Germany and KIMO</td>
<td></td>
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<tr>
<td>A.4.1</td>
<td>Define measures and strategies for the phasing out or restriction of use of</td>
<td>France and Seas at Risk</td>
<td></td>
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<td></td>
<td>single use plastics prone to become marine litter in complement to the EU</td>
<td>Support from Denmark and Netherland</td>
<td></td>
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<tr>
<td></td>
<td>SUP Directive</td>
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<tr>
<td>A.4.2</td>
<td>Reduce the impact of expanded polystyrene and extruded polystyrene</td>
<td>Portugal</td>
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<td></td>
<td>(EPS / XPS) in the marine environment - development of OSPAR products</td>
<td>Support from Denmark</td>
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<tr>
<td>A.5.1</td>
<td>Prevent inputs of microplastics from selected land-based sources in the</td>
<td>Germany</td>
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<tr>
<td></td>
<td>marine environment</td>
<td>Support from Netherlands and KIMO</td>
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<tr>
<td>A.5.2</td>
<td>Reduce microplastic contamination from artificial grass</td>
<td>KIMO and United Kingdom</td>
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<td></td>
<td>Support from Norway and Sweden</td>
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<tr>
<td><strong>Theme B: Actions to reduce sea-based sources of marine litter</strong></td>
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<tr>
<td>B.1.1</td>
<td>Harmonise practises related to the provision and use of Port Reception</td>
<td>Belgium</td>
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<tr>
<td></td>
<td>Facilities</td>
<td>Support from Netherlands, Portugal and KIMO</td>
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<tr>
<td>B.1.2</td>
<td>Reduce microplastics from ship greywater discharges</td>
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<td>SAR can support</td>
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<td>B.1.3</td>
<td>Manage end-of-life recreational vessels</td>
<td>United Kingdom</td>
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<td></td>
<td>Support from Belgium and Sweden</td>
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<tr>
<td>B.1.4</td>
<td>Identify the need for measures to reduce the unintentional release of</td>
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<td></td>
<td>microplastics resulting from paint, anti-fouling paint and other marine</td>
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<td>coatings used by (commercial) marine vessels</td>
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<td><strong>Theme C: Cross cutting actions</strong></td>
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<tr>
<td>C.1.1</td>
<td>Prevent microplastic pollution resulting from plastic pellet, powder and</td>
<td>Netherlands and United Kingdom</td>
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<tr>
<td></td>
<td>flake loss</td>
<td>Support from Denmark, France, Germany, KIMO</td>
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<td>C.1.2</td>
<td>Understand the location of litter accumulations</td>
<td>Portugal and Spain</td>
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<td></td>
<td></td>
<td>Support from the CleanAtlantic project</td>
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<td>C.1.3</td>
<td>Improve evidence base on harm in relation to marine litter</td>
<td>Germany</td>
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<td>C.1.4</td>
<td>Bridge the gap between monitoring and policy</td>
<td>United Kingdom</td>
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<td>Support from Denmark, Ireland, Norway</td>
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<td></td>
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<td>and marine litter monitoring expert group</td>
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<td></td>
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<td>leads</td>
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