DEVELOPMENT OF A STRATEGIC APPROACH FOR THE MARITIME INDUSTRY TO ADDRESS MARINE PLASTIC LITTER





Marine litter is now considered one of the major pollution problems in the world. Plastic debris is leaking into water bodies from both land-based and sea-based sources, causing negative impacts on the environment. In line with its commitment to the No Plastic in Nature Initiative, the World Wide Fund for Nature (WWF) implemented, in partnership with the Grieg Group, a three-year project called "Clean Ports, Clean Oceans: Improving Port Waste Management in the Philippines" project (hereinafter "the project"), which was funded by the Grieg Foundation, to tackle plastic waste leakage in ports.

This briefer, published by WWF-Philippines, aims to share more information about the strategic approach taken by the national authorities in the Philippines to address plastic pollution in the maritime sector and will especially provide insights about the support provided by the project to the development of the Strategic Action Plan for Marine Plastic Litter and lessons learned from this process.

STRATEGIES FOR MARINE LITTER MITIGATION

A national strategy is essential for addressing all aspects of marine litter problems in the long term, starting from their sources until debris reaches the oceans. Through such a strategy, stakeholders with decision-making powers, along with valuable feedback from different sectors, can develop policies, regulations, and guidelines related to marine litter management.

At the international level, the International Maritime Organization (IMO) developed the "Action Plan to Address Marine Plastic Litter from Ships" [1] and the "Strategy to Address Marine Plastic Litter from Ships" [2] respectively in 2018 and 2021. These resolutions lay out a comprehensive strategy and an action plan aimed at reducing the contribution of shipping industry to marine plastic litter and enhancing the effectiveness of port reception facilities.

At the national level, in the Philippines, the Philippines' Department of Environment and Natural Resources (DENR) through its Memorandum Circular No. 2021-10 has officially adopted in 2021 the National Plan of Action on the Prevention, Reduction, and Management of Marine Litter (NPOA-ML) which provides guidance to enhance the current efforts of the country in resource and waste management and to bring the additional perspective to marine litter issues and the control of additional leakage of waste into bodies of water [3]. The plan has an overarching goal of "Zero Waste to Philippine Waters by 2040".

[1] IMO (2018) Action Plan to Address Marine Plastic Litter from Ships. Retrieved from

https://www.cdn.imo.org/localresources/en/MediaCentre/HotTopics/Documents/IMO%20marine%20litter%20action%20plan%20MEPC%2073-19-Add-1.pdf

[2] IMO (2021) Strategy to Address Marine Plastic Litter from Ships. Retrieved from

 $\underline{\text{https://www.cdn.imo.org/localresources/en/MediaCentre/HotTopics/Documents/marine} \\ 20 \underline{\text{litter/STRATEGY\%20TO\%20ADDRESS\%20MARINE\%20PLASTI} \\ 20 \underline{\text{rd.imo.org/localresources/en/MediaCentre/HotTopics/Documents/marine} \\ 20 \underline{\text{rd.imo.org/localresources/en/MediaCentre/HotTopics/MediaCentre/HotTopics/MediaCentre/HotTopics/MediaCentre/HotTopics/MediaCentre/HotTopics/MediaCentre/HotTopics/MediaCentre/HotTopics/MediaCentre/HotTopics/MediaCentre/HotTopics/Medi$ C%20LITTER%20FROM%20SHIPS.pdf

[3] Department of Environment and Natural Resources (2021) National Plan of Action for the Prevention, Reduction and Management of Marine Litter. Retrieved from NPOA-ML.pdf (denr.gov.ph)



The plan includes ten marine litter prevention, reduction and management strategies that have been grouped into two clusters of actions [4].

A. Programmatic Cluster of Actions

Strategy 1: Establish science- and evidence-based baseline information on marine litter

Strategy 2: Mainstream circular economy and sustainable consumption and production initiatives

Strategy 3: Enhance recovery and recycling coverage and markets

Strategy 4: Prevent leakage from collected or disposed waste

Strategy 5: Reduce maritime sources of marine litter

Strategy 6: Manage litter that is already existing in the riverine and marine environments

B. Enabling/Cross-cutting Cluster of Actions

Strategy 7: Enhance policy support and enforcement for marine litter prevention and management

Strategy 8: Develop and implement strategic and targeted social marketing and communications campaigns using various media

Strategy 9: Enable sufficient and cost-effective financing and other institutional resource requirements for the implementation of the NPOA-ML

Strategy 10: Strengthen local government unit (LGU) capacities and local level implementation of NPOA-ML



[[4] <u>Department of Environment and Natural Resources (2021) National Plan of Action for the Prevention, Reduction and Management of Marine Litter.</u>
Retrieved from NPOA-ML.pdf (denr.gov.ph)



The development of the NPOA-ML provides an opportunity for relevant stakeholders, including the maritime industry, to provide input for the creation of stakeholder and industry-led marine litter strategy roadmaps. These roadmaps will involve participation from stakeholders and actors in the value chain.

Strategy 5 in NPOA-ML includes interventions to reduce maritime sources of marine litter which refer to the **leakage of waste from ships, fishing boards, and aquaculture activities.** To support the implementation of this strategy, the Maritime Industry Agencies developed a Strategic Action Plan for Marine Plastic Litter, which was facilitated by the Maritime Industry Authority (MARINA)



Observed leakage of waste including plastics in a port

The development of the Strategic Action Plan for Marine Plastic Litter was crucial since the maritime industry plays a critical role in fishing, transportation, tourism, and other offshore activities, all of which potentially contribute to marine debris. Integrating the maritime industry's efforts ensures a comprehensive approach to tackle the issue and encourages collaboration and partnership between different stakeholders within the maritime sector, such as shipping companies, port authorities, cruise lines, and even fishing fleets. In working hand-in-hand, they can effectively combat marine litter.

TARGET STAKEHOLDERS

Developing a national strategy requires the participation of a diverse group of stakeholders with different expertise and perspectives to ensure a holistic approach to addressing the issue of marine litter to the environment.

The following stakeholders should be involved in the formulation of a national strategy similar to the making of the Strategic Action Plan on Marine Litter.

Communities

the engagement of local communities is crucial to fostering a sense of responsibility. Including the perspectives and insights of the public helps tailor the strategy to the specific needs and concerns of various communities.

Academic and research Institutions

academic and research institutions provide valuable data, research, and expertise on the nature and impacts of marine litter and its potential mitigation measures which are crucial for evidence-based decision-making.

Private sector

engaging private companies and private management authorities involved in waste management is essential to design sustainable practices.

Non-governmental organizations (NGOs) and international governmental organizations

Industries

representatives from the maritime, fishing, and tourism industries, and other relevant industries ensure that the strategy will take into account the specific challenges and opportunities faced by each sector.

Local Government Units (LGUs)

the participation of the leaders from LGUs is essential in aligning the national strategy with local action plans and ensuring effective implementation at the regional, city, and barangay level.

National Government Agencies (NGA)

NGAs play a key role in developing and implementing policies and regulations related to marine litter.

NGOs and conservation groups that have long experience in advocating for marine conservation and waste management can provide useful insights. Collaboration with international organizations can provide guidance and access to best practice to implement the national strategy.

DEVELOPMENT OF THE STRATEGIC ACTION PLAN ON MARINE PLASTIC LITTER

The following paragraphs suggest steps that could be followed to develop a national action plan to address marine plastic litter, and present the experience and lessons learned from the partnership between WWF-Philippines and the Maritime Industry Authority (MARINA) for the development of the Strategic Action Plan for Marine Plastic Litter.

1. Identifying an industry champion

Following the Plastic Smart Cities framework, it is important to generate commitment from key stakeholders about addressing the plastic pollution issue. It is important to pinpoint champions from the maritime industry who could lead both technical working groups and focus group discussions.

In the Philippine context, the NGAs possess the authority and influence as mandated by the law to implement and enforce policies and regulations related to waste management and maritime activities.

They also align the strategy for the maritime industry with the existing legal and institutional frameworks in the country, leading to smoother

implementation and compliance.

WWF and MARINA worked closely together for the development of the Strategic Action Plan for Marine Plastic Litter, through a partnership agreement. The partnership agreement started with a shared goal of increasing awareness of passengers, shipping companies, shipyards, and even MARINA offices about the plastic pollution issue, its impacts, and how it is possible to address these through proper waste segregation and disposal. This agreement paved the way for an easier collaboration among maritime industry players for the development of the Strategic Action Plan for Marine Plastic Litter. This also helped in ensuring that all maritime industry players were involved in the discussions.

(2.0

2. Strengthening capacity and consultation of stakeholders

Strengthening the capacity of entities involved in the development of a strategy is an important aspect. First, it increases awareness of relevant entities about the latest updates on ongoing policies and activities being conducted by their counterparts. Second, learning about these interventions helps in aligning all concerned entities about the similarities, differences, and overlaps within the industry, and provides information for assessing ways forward in the entire industry regarding their strategies toward addressing plastic pollution. Lastly, it reinforces the need for all entities to collaborate and work together.

MARINA, in collaboration with WWF, successfully conducted a webinar series focused on plastic pollution. The series aimed to equip key stakeholders with essential insights into plastic pollution and ongoing initiatives within the maritime industry. This started as an internal capacity-building activity for MARINA employees which later involved all maritime industry players.

Topics covered in the webinar series are the following:

- 1. International policies for ship and port waste management;
- 2. Local policies for ship and port waste management; and
- 3. Marine plastic litter.

WWF and MARINA worked together in inviting international and national entities including the Institute of Marine Engineering, Science and Technology (IMarEST), government agencies, and Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), among others. Involving these entities enriched the discussion and increased internal capacity in preparation for the drafting of the strategic action plan.

3. Drafting of the Strategic Action Plan for Marine Plastic Litter

With increased capacity from the webinar series, maritime industry players should be prepared to draft the strategic action plan for marine plastic litter. It is important that all input and discussions in the conducted capacity-building activities such as webinars are documented so these will be integrated into the plan.

Key priority areas commonly included in a national strategic action plan include the following:

- legislation;
- institutional arrangement;
- capacity development;
- stakeholders' awareness and involvement;
- research, technology, and infrastructure development;
- information and resource sharing;
- monitoring and evaluation mechanisms;
- sustainable financing mechanisms.



WWF and MARINA worked closely in developing the Strategic Action Plan for Marine Plastic Litter in 2022. The project supported a pre-forum event which aimed at reviewing all concepts taught and highlighting activities that need to be included in the plan. MARINA led the drafting which was later circulated for further comments and finalized. The Strategic Action Plan on Port and Ship Waste Management and Marine Plastic Litter was launched during the Marine Environmental Protection Forum last September 1, 2022. The event also aimed to ensure commitment and support statements on the action plan and the launch of communication materials for ships and ports.

In this process, WWF learned that the following factors facilitated the development of a national strategic action plan:

- 1. **Champion within the industry:** having MARINA as the project's champion has been helpful in ensuring participation of relevant industry players in the discussions leading to the development of this document.
- 2. Having an approved national framework on addressing marine litter: the approved National Plan of Action on Marine Litter has helped push for local industries to take action as part of their mandate.
- 3. Launching the strategic plan: showcasing the completed strategic action plan through a public event helped reinforce commitment from maritime industry players, especially with MARINA who spearheaded the plan.

4. Integration of the industry's strategic action plan into national plans

Countries may have frameworks, plans, and national policies for addressing plastic pollution. These are good opportunities to better understand recommended strategies and align the industry's efforts to the national interventions. In cases when frameworks, plans, policies are absent, it may be good to look at both global and regional levels.

For the maritime industry, the project observed that **authorities are commonly aware of international policies** related to their industry as **compared to national plans** that require them to submit their respective industry's strategies.

Spearheading the strategic action plan for the maritime industry, MARINA submitted the updated plan to the Department of Environment and Natural Resources (DENR) for seamless incorporation into the broader framework of the National Plan of Action for the Prevention, Reduction, and Management of Marine Litter (NPOA - ML), specifically for the Fifth Strategy focused on mitigating maritime sources of marine litter. This promotes ensuring local collaboration and participation achieving national targets for addressing the plastic pollution issue.

5. Implementation and monitoring of activities in line with the Strategic Action Plan of the Maritime Industry for Marine Plastic Litter

In the implementation stage activities indicated in the strategic action plan are carried out by the designated industry players. Monitoring activities are necessary to see progress and provide input for any future review of the strategic action plan. The overall process is summarized in the diagram below.

- Prepare an **implementation plan** which includes specific actions, expected outcomes, timeline, lead agencies, source of funding, delegation of tasks, and resource requirements for each aspect of the strategy.
- Conduct training, workshops, and other relevant activities for the stakeholders involved in the implementation of the strategies to **boost** their knowledge and technical capacity.
- Develop a monitoring and evaluation framework that will be used to **track the progress** of the strategy's implementation and measure its impacts and effectiveness.
- Execute intensive and extensive information, education, campaigns (IECs) to **raise awareness and educate the public**, and other stakeholders on the importance and impacts of the strategy.
- Continuously review and update the strategy over time based on the feedback, updated data, changing circumstances, and even results from the monitoring to keep it relevant and effective.

Following the Strategic Action Plan development, WWF and MARINA co-developed communication materials including a video for passenger ships focused on promoting proper disposal and waste segregation on-board ships. This has been scaled through a MARINA Memorandum Circular that mandated MARINA Regional Offices to promote the communications video to ships they cover.

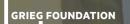
The project also facilitated discussions for the development of a module on plastic pollution for the maritime industry which MARINA plans to pilot in maritime schools. This builds on the ongoing modules that aim to highlight the importance of following MARPOL regulations Annex V - plastic pollution and its impacts to industry and human beings.



CONCLUSION

Having an industry-wide strategy to address marine litter is a vital step in combating this pressing environmental issue. It will be further effective if it is integrated in national, regional, and global regulations. This integration allows for ensuring implementation of identified interventions and dissemination of best practices that the maritime industry has adopted.

Moreover, it is essential for the maritime industry to work collaboratively with various stakeholders to align strategies with existing policies and regulations. By doing so, the national strategy can be effectively translated and implemented into actions that should also be timely monitored and evaluated, leading to tangible and sustainable outcomes in the fight against marine litter and creating a healthier and cleaner ocean environment.



This compendium was developed under the "Clean Ports, Clean Oceans: Improving Port Waste Management in the Philippines" project funded by the Grieg Foundation.