

Ad Hoc Open-Ended Expert Group on Marine Litter and Microplastics - Position Paper

1. Name of your organization

International Council of Chemical Associations

2. Your view on major barriers to combatting marine litter and microplastics

Multiple resolutions from UNEA¹, along with resolutions from the G7², G20³, and APEC⁴ note **the greatest barrier to combatting marine litter and microplastics is insufficient waste management in developing countries. A key reason for this is a lack of financing for waste management infrastructure.** These also are the conclusions of in-depth analyses conducted by McKinsey & Company for Ocean Conservancy's Trash Free Seas Alliance⁵. Waste management includes reducing, reusing, collecting/sorting, recycling, composting and recovery.

Waste management systems will not only prevent plastic marine litter, these systems reduce other trash in waterways, and help communities improve public health, improve sustainability, and enhance overall wellbeing. Furthermore, waste management will address Sustainable Development Goals including reducing disease vectors (SDG 3) and improve air quality (SDG 11) by reducing or eliminating the open burning of waste that is common practice in locations that lack waste management. By improving the economic fundamentals of waste management, we can achieve significant waste management improvements at scale and stop the leakage of plastic into the ocean.

Microplastics originate from a variety of sources, including the breakdown of larger plastic articles ("secondary microplastics"). Improvements to waste management infrastructure will reduce this source. Primary microplastics include microbeads. The United States, Canada, and the United Kingdom have passed laws to phase out the use of microbeads in rinse off personal care products as a way to address this source. Primary microplastics also include sources such as tire dust and synthetic fibers from clothing present more difficult challenges.

3. Your view on potential national, regional and international response options and associated environmental, social and economic costs

Solutions to the global issue of marine litter, and more specifically plastic marine litter, must be viewed in the context of the United Nation's Sustainable Development Goals (SDGs) and the 2030 Agenda for Sustainable Development. Proposed solutions should be evaluated for their effects on the SDGs.

Improving waste management is clearly the solution that achieves the most progress towards SDGs as noted in our response to question #2.

¹ UNEP/EA.3/Res.7

² https://www.env.go.jp/water/marine_litter/07_mat13_2_%EF%BC%93-2ALD.pdf

³ <http://www.mofa.go.jp/mofaj/files/000272290.pdf>

⁴ http://mddb.apec.org/Documents/2016/MM/AMM/16_amm_jms.pdf

⁵ <https://oceanconservancy.org/wp-content/uploads/2017/04/full-report-stemming-the.pdf>

developing even more efficient plastic packaging, and increasing recycling and energy conversion of post-use plastics to help curb ocean litter and conserve resources.

Replacing plastics with alternatives, however, would have significant negative environmental impacts, including on several of the SDGs especially SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-Being), SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action).

4. Your view on the feasibility and effectiveness of different response options

Jambeck et al¹⁰ identified lack of basic waste management as the primary source of marine litter. Expanding populations and rapidly developing economies that lack access to proper waste management infrastructure result in significant leakage of plastic waste into the ocean. Improved management of waste in large source countries based on the waste management hierarchy is needed to dramatically reduce the amount of plastic that enters the ocean.



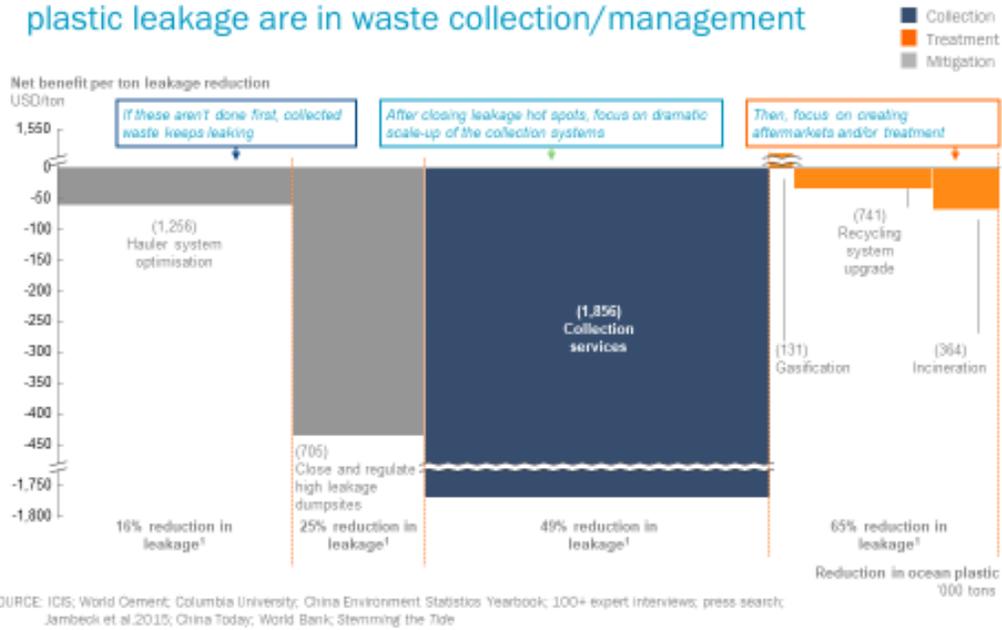
The Ocean Conservancy and McKinsey conducted a study to identify the best way to reduce leakage of plastic into the ocean. The *Stemming the Tide*¹¹ report found the most effective way to reduce marine litter is by collecting waste and managing it properly, three-fourths of land-sourced ocean plastic comes from uncollected waste, while the remainder comes from gaps in the collection system itself. It is critical for policies to focus on the entire waste stream and not simply one aspect or component of waste.

As noted in the graphic below from *Stemming the Tide*, leakage-reduction levers are interdependent and should be implemented in order, with hauler-system optimization and closure and regulation of high-leakage dump sites done to stop waste from leaking into the ocean. This would be followed by a dramatic scale-up of collection services, and finally a focus on creating aftermarkets, treatment options, or both for collected waste. Only through implementation of the full waste management system can leakage of plastic into the ocean be significantly reduced.

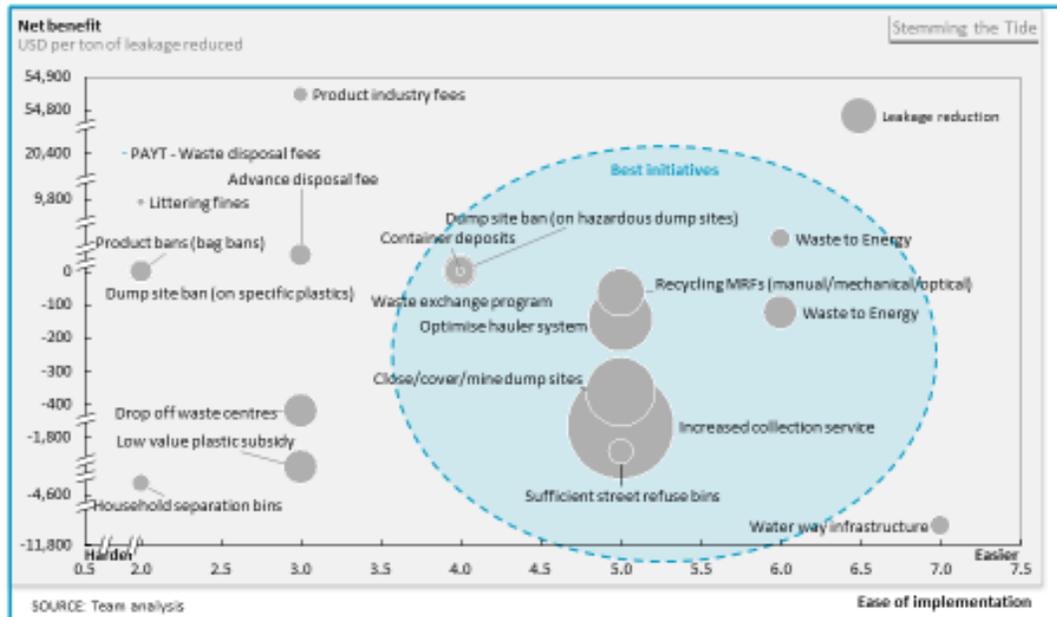
¹⁰ <http://science.sciencemag.org/content/347/6223/768?ijkey=BXtBaPzbQgagE&keytype=ref&siteid=sci>

¹¹ <https://oceanconservancy.org/wp-content/uploads/2017/04/full-report-stemming-the.pdf>

Identified that the most effective levers to reduce plastic leakage are in waste collection/management



By contrast, the Ocean Conservancy and McKinsey also looked at plastic use reduction and bans and rejected that approach as ineffective and difficult to implement.



Innovative financing mechanisms that catalyze new investments from governments, development finance institutions, and the private sector and assign risk to those best enabled to manage it are needed to enable target economies to rapidly improve their waste management infrastructure.

The Trash Free Seas Alliance conducted a follow-on study, *The Next Wave*¹² to identify financing mechanisms to implement the recommendations of the *Stemming the Tide* report.



Source: *The Next Wave*

The Next Wave described an innovative financing mechanism whereby multiple investors provided access to capital at differing rates of return. In addition, the report identified a role for the plastics industry to provide catalytic capital to absorb risk.

Solutions to the marine debris and waste management crisis facing the oceans will require region and country-specific solutions. Waste management is ultimately a local issue and thus may not be well-suited to be addressed by a large multilateral treaty.

5. Any other inputs

The plastics industry is presently engaged in a process to deploy catalytic capital that will both demonstrate the effectiveness of waste management infrastructure projects to address leakage of plastic into the ocean, as well as encourage investment by multinational development banks and other financing institutions in waste management infrastructure projects.

Closed Loop Ocean¹³, an initiative of Closed Loop Partners in partnership with Ocean Conservancy, is designed to fund waste infrastructure solutions in Southeast Asia, with a focus on investments to improve collection, sorting and recycling markets, particularly across the plastic value chain. And as research indicates that the majority of plastic debris originates from five fast growing economies in Asia—Indonesia, the Philippines, Vietnam, Thailand and China—the initiative will focus initially on galvanizing investment in waste management and recycling solutions in Southeast Asia.

¹² <https://oceanconservancy.org/wp-content/uploads/2017/05/the-next-wave.pdf>

¹³ <http://www.closedlooppartners.com/ocean/>