Promotion of Strategy Development for Reduction of Marine Plastic Wastes in Low and Middle Income Countries

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Strategies to Reduce Marine Plastic Pollution from Land-based Sources in Low and Middle-Income Countries

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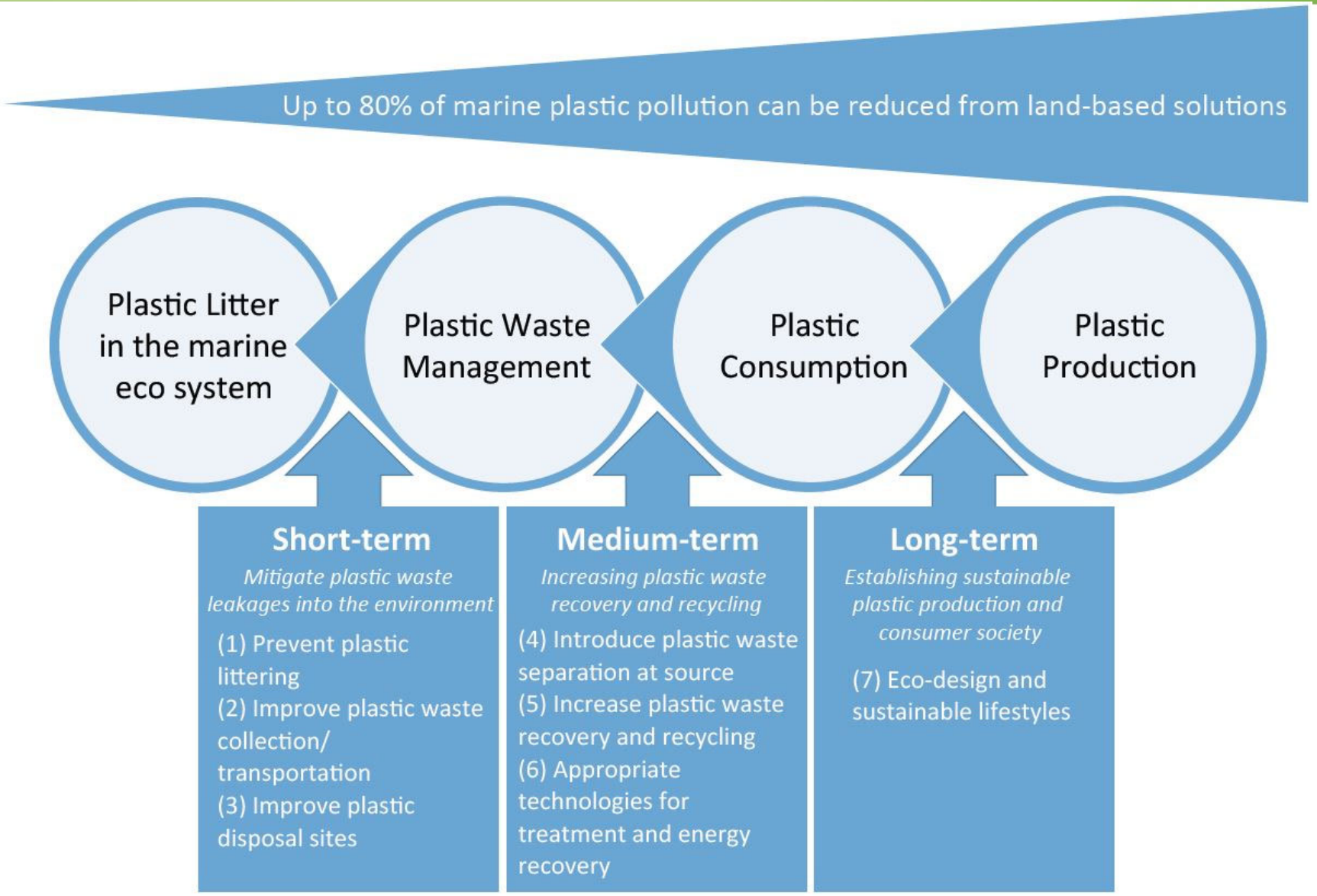
Up to 80% of marine plastic pollution can be reduced from land-based solutions
Plastic Litter in the marine eco system
Plastic Waste Management
Plastic Consumption
Plastic Production
Short-term
Mitigate plastic waste leakages into the environment
(1) Prevent plastic littering
(2) Improve plastic waste collection/ transportation
(3) Improve plastic disposal sites
Medium-term
Increasing plastic waste recovery and recycling
(4) Introduce plastic waste separation at source
(5) Increase plastic waste recovery and recycling
(6) Appropriate technologies for treatment and energy recovery
Long-term
Establishing sustainable plastic production and consumer society
(7) Eco-design and sustainable lifestyles

Short-term Policy Interventions 1

Activities	Regulatory	Economic	Technology	Data/ Information	Voluntary (EPR, public involve.)
(1) Prevent plastic littering	- Introduce anti-litter regulations, laws and enforcement - Specify plastic litter in the anti-litter regulations if not available in existing regulations - Control of plastic littering will be included in the overall waste management policy and planning.	- Set plastic litter innovation funds - Set fixed penalties for plastic littering	- Better infrastructure planning and implementation (design, number and location of public litter bins and other street items to catch plastic litter)	- Develop a baseline and an affordable methodology for assessing and monitoring the extent of plastic litter	- Cleaning-up campaign is required to clean the existing litter - Anti- plastic littering campaigns - Raise awareness of the environmental and economic costs of plastic littering - Develop voluntary code and anti-litter messaging on plastic packaging - Document and share good practices on street cleaning and reducing plastic littering
(2) Improve waste collection, handling transfer stations and proper transportation	- Set plastic waste collection targets, strategies and policies - Strengthen informal/ community- based systems for collecting plastic waste - Introduce take-back systems - Standardise plastic waste collection systems - Enforcement action to reduce illegal plastic waste disposal	- Charge waste producers for collection of non-recyclable plastic (collection fees/ EPR system) - Mobilise investment for developing collection, sorting and processing systems - Set incentives for informal, community-based and private sector involvement for plastic waste collection and transportation	- Development of better and more cost-effective systems for collecting, transporting and sorting waste plastics - Introduce baling and shredding equipment at the transfer stations	- Develop a baseline and an affordable methodology for assessing and monitoring the extent of plastic waste management data - The monitoring indicators described above will need to be linked clearly to the SDGs, particularly SDG 14, but also other SDGs where plastic waste and resource management has a key contribution to make, including SDG 11 and 12	- Share best practice on all aspects of the collection, sorting and reprocessing supply chain. - Create voluntary standards for collection, sorting and reprocessing

Short-term Policy Interventions 2					
Actions	**Regulatory**	**Economic**	**Technology**	**Data Information**	**Voluntary (EPR, public participation)**
(3) Improve final disposal sites	- Ban recyclable plastics disposal at dumpsites - Set targets on zero plastic waste to landfills in overall waste management strategies/ policies - Enforcement of actions to reduce illegal dumping and open burning of plastic waste at disposal sites - Enforcement of legislation requiring the closing of open dumpsites and establishment and operation of sanitary landfills	- Charge waste producers for discharging of non-recyclable plastic (Landfill fees/ disposal fees/ EPR system)	- Introduce plastic waste recovery before disposal (source separation facility for informal sector) - Convert open dumping into controlled sanitary landfills to reduce plastic waste leakage - Study the feasibility and set enabling environment to introduce energy recovery (RDF and Incinerator)	-Develop a baseline and affordable methodology for assessing and monitoring the extent of plastic waste disposal, open dumping and burning	-Set voluntary standards to reduce plastic waste to be landfilled. -Share good practices on managing plastic waste at landfills -Organise waste pickers informal sector to handle plastic waste effectively at landfills

Key factors affecting the recycled plastics supply chain in low, middle and high-income country contexts

Stage	Low-income	Middle-income	High-income
Collection	- Collection coverage is low and service is mostly limited to high- income urban areas - Informal sector plays a key role in plastic waste collection - Plastic waste recycling is to be informal or SME-led - Few municipal-led plastics recycling schemes can be observed	- Waste collection rate is high when compared to low-income category, but still main coverage in urban areas - Informal sector often still plays a key role in plastic waste collection and recycling - Some municipal-led recycling schemes, particularly in urban areas	- Formal sector-led (municipal and private sector) plastics recycling schemes are common. - Collection systems are well established and highly mechanised
Primary sorting	- Manual sorting is common - If available, mechanical sorting normally limited to balers for compaction	- Some mechanization in sorting - Where informal sector is active, manual separation also likely to be common	- Highly mechanized and capital intensive to maximise recovery of valuable plastics
Recycling	- Waste plastics typically exported although there may be some simple recycling process used for plastics (e.g. manufacture of paving slabs from waste plastic bags)	- Waste plastics typically exported for recycling but there may be some local recycling in some contexts	- Waste plastics exported but some local capacity in some countries for high value plastics

CCET Supports developments of national/city plastic waste management strategy/action plans

- Indonesia (completed),
- Sri Lanka, India (Hyderabad), Vietnam, Malaysia, Thailand, Myanmar (on going)

- Collaboration with UNEP, UN-ESCAP, WB, IMT-GT, ICLEI, AEPW(Alliance of End of Plastic Waste),etc

Thank you for your attention

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