ASEAN CONFERENCE ON REDUCING MARINE DEBRIS IN ASEAN REGION

Background

1. Marine debris has been recognised as one of the key environmental issues at the global level and within ASEAN region. Measures and cooperation to reduce marine debris/litter shall be initiated to prevent lives under water from being harmed, which is in line with the Sustainable Development Goal (SDG) 14: Life Below W ater, on conserving and sustainably using the oceans, seas and marine resources; and with the ASEAN Vision 2025 particularly on the management of biodiversity and natural resources for sustainable development.

2. Marine debris is usually defined as any persistent, manufactured or processed solid material discarded, disposed of, or abandoned in the marine and coastal environment (CBD Technical Series No. 67, 2012). Marine debris is a major threat to marine and coastal biodiversity (CBD Technical Series 83, 2016).

3. Three-quarters of all marine debris is made up of various forms of plastic (Barnes et al. 2009). A recent study estimates that between 4.8 and 12.7 million tons of plastics are dumped into the ocean in 2010 (Jambeck et al., 2015). Inadequate waste management on land has caused 80% of marine debris originated from land.

4. Marine debris is transported by oceans currents across borders. As such, it is a transboundary concern, requiring collaborative action and regional cooperation (UNEP, 2016). Approximately 70% of ASEAN human population lives in coastal areas and intensive farming and aquaculture, rapid urbanisation and industrialisation, greater shipping traffic and fishing effort, as well as widespread deforestation and nearshore development, are contributing towards the pollution problem. Four out of the top six most marine polluting countries are in ASEAN (Indonesia, Philippines, Vietnam, and Thailand). ‘Hot spots’ of floating plastic have been observed in coastal waters adjacent to countries with high coastal populations and inadequate waste management in South-east Asia (Peter Ryan 2013).

Objectives

5. The Conference will bring together relevant ASEAN sectoral bodies and a broad range of stakeholders, i.e. governments; international organisations, business and industries; academia and experts; civil society and youth, who are involved in various issues such as health and food safety; science, technology and innovation; fiesheries; and legal and regulatory framework, to discuss ways forward for ASEAN to address the issues of marine debris more effectively and holistically.

6. The Conference aims to gather inputs from a broad range of stakeholders and identify how marine debris issues in ASEAN could be adressed through global

partnership and multi-partner and cross-sectoral cooperation mechanism and raise the awareness of ASEAN community on marine debris issue through side events.

7. The Conference will be held on **22-23 November 2017 in Phuket, Thailand**, hosted by Ministry of Environment and Natural Resources, Thailand, with the following daily schedule:

- Day 1: Conference and Exhibition
- Day 2: Workshop, Site Visit and Research Group Discussion

8. Approximately 150 participants/speakers including media personnel are expected to participate in the Conference.

Programme

9. **One-day Conference**:

- Plenary Session 1: Discussion on global, regional, and legal perspectives on the issue of marine debris in the ASEAN region.

- Plenary Session 2: Discussion on existing national policies, programmes and plans related to marine debris.

- Parallel Session 1: Discussion on policy and management solutions to address the issues of marine debris at national, regional and global level, and how ASEAN can leverage on the decisions, outcomes and recommendations of previous relevant fora at global level such as COBSEA Regional Action Plan on Marine Litter, UNEA resolution on marine plastic litter and microplastic, Oceans Conference in New York in June 2017, Indonesia's Summit on Marine Litter in 2016, International Marine Debris Conference, etc.

- Parallel Session 2: Discussion on the latest research initiatives, methods, results and innovative ideas, technologies and solutions, to clean the oceans, reduce and prevent marine debris and its impacts. This discussion aims to expand dialogue and exchange views and experiences among private sector, experts and field practitioners on the most effective tools and actions required to solve marine debris issues.

10. **One-day Workshop**: A workshop for ASEAN Member States and partners to discuss and plan for concrete follow up activities and to coordinate closely with partners on how partners can support AMS in tackling the issue in a complementary manner to avoid duplication.

11. **Site Visit**: Site Visit after the Workshop to showcase Thailand's best practices related to marine debris

12. **Research Group Discussion:** More in-depth discussion among researchers and academics on scientific findings related to marine debris and how the findings can influence policy decisions.

13. **Exhibition**: Showcasing recent technology developments and innovations towards resolving marine debris issues e.g. advanced waste management systems. Proposed to be held during the two days of the Conference and side events.

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ASEAN Conference on Reducing Marine Debris in ASEAN Region

22-23 November 2017, Phuket, Thailand

Side Event: Research on Marine Debris and Microplastics

23 November 2017, 09:00 to 13:00 hrs

Side Event Concept Note: Group Discussion 1

Co-organizing partners: Department of Marine and Coastal Resources (DMCR) and

IOC Sub-Commission for the Western Pacific (WESTPAC)

Background

Marine debris including microplastics has been emerging as a global threat to marine organisms, ecosystems, human health, and socio-economic development. It was estimated that about 8 million metric tons of plastic waste were transported to the ocean each year. Several countries in the Association of Southeast Asian Nations (ASEAN) were ranked among the world's largest contributors to marine plastic pollution based on a model linking data on solid waste production, population density and economic status. Considering the current status of marine debris pollution and our limited scientific knowledge on marine debris and its impacts, it is critical to synergize our efforts on scientific development which will enable us to improve our understanding and help address marine debris issues, systematically.

This side event on "Research on Marine Debris and Microplastics" during the ASEAN Conference on Reducing Marine Debris in ASEAN Region will provide an interactive platform for experts, particularly from ASEAN countries, to exchange their knowledge on marine plastic and microplastic research, and discuss on how scientific knowledge can help address marine debris issues in ASEAN countries.

Objectives

The side event aims to:

i) exchange information on current scientific knowledge and research on marine plastics and microplastics;
ii) identify key research related challenges and gaps in addressing marine plastic and microplastic debris issues in ASEAN countries;
iii) discuss on how science and research can help address marine plastic and microplastic debris issues in ASEAN countries.

Expected Outputs

The side event is expected to provide recommendations on how science and research can help address marine plastic debris issues in ASEAN countries. These recommendations will be presented at the Workshop on "Discussion on Recommendations for Regional Action and the Way Forward" which will be convened on the same day (23 November 2017) from 14:30 to 18:00 hrs.

Invited Speakers and Chair

Speaker:	Dr Jenna Jembeck, Associate Professor
Organization:	University of Georgia, USA
Presentation Title:	Plastic Waste Inputs from Land into the Ocean (TBC)
Speaker:	Dr Daoji Li, Professor and WESTPAC Principal Investigator for Microplastic Programme
Organization:	East China Normal University, China
Presentation Title:	Regional Efforts on Microplastic Research in Asia and the Pacific
Speaker:	Dr Somkiat Khokiattiwong, Research Specialist and IOC Vice-Chairperson
Organization:	Department of Marine and Coastal Resources, Thailand
Presentation Title:	National Efforts on Plastic and Microplastic Research in Thailand

Chair: Mr Wenxi Zhu, Head of the WESTPAC Office

Participants

Scientists, researchers and experts, particularly from the ASEAN countries, who are interested in marine plastic and microplastic research are encouraged to participate in this side event.

Working Language

The side event will be conducted in English.

ASEAN Conference on Reducing Marine Debris in ASEAN

Region 22-23 November 2017, Phuket, Thailand

Side Event: Project on management of plastic value chain

to reduce plastic marine litter

23 November 2017, 09:00 to 13:00 hrs

Side Event Concept Note: Group Discussion 2

Co-organizing partners: Department of Marine and Coastal Resources (DMCR),

UN Environment and COBSEA

Project Title:	Reducing marine litter by addressing the management of the plastic value chain in SouthEastAsia
Lead Proponent:	UN Environment (Asia and the Pacific Office) and Secretariat of the Coordinating Body on the Seas of East Asia (COBSEA)
Project Synthesis:	An average of 8 million tons of plastic enter the world oceans every year, with wide-ranging environmental, economic and public health impacts. According to UNEP report, "Valuing Plastics: The Business Case for Measuring, Managing and Disclosing Plastic Use in the Consumer Goods Industry" (2014) global plastic production has increased by 8.7% per year on average over 1950-2012. At least 60% of this production occurred in Asia, with China and Japan leading. As to consumption, Asia is again responsible for a major part of the growth. Plastic litter is ubiquitous in the ocean, occurring on remote shorelines, in coastal waters, the seabed of the deep ocean and floating on the sea surface. The quantity observed floating in the open ocean in mid-ocean gyres appears to represent a small fraction of the total input. The ocean is expected to contain 1 tonne of plastic for every 3 tonnes of fish by 2025 and, being it extremely persistent in the marine environment, it is expected to contain more plastics than fish (by weight) by 2050. Additional emerging concern exists about microplastics. "Microplastics" - plastic particles of < 5 mm in diameter [1] - are manufactured specifically as abrasives in air/water-blasting and as powders for injection moulding, or are used in personal care and cosmetic products (PCCPs) (referred to as microbeads also). There is no legislative framework among developing countries in Asia to control microplastics at the moment.

	UN Environment Assembly resolution 2/11 (2016) recognizes marine plastic litter and microplastics as a global priority requiring regional solutions[2]. Countries in the region of Asia and the Pacific are a major source of marine plastic litter, and also highly vulnerable to its impacts. There is therefore high potential to reduce marine plastic litter through action in the plastic value chain of the region, and indeed there is no global solution to the marine litter challenge without specific focus on land-based sources of marine plastic in this region. Having assisted development of national and city-level waste management strategies, UN Environment is very aware that waste management practices in many parts of the region are still rudimentary, struggling even to increase waste collection coverage and to ensure basic segregation of municipality waste, industrial waste, and hazardous waste. All countries of The Association of Southeast Asian Nations (ASEAN) except Singapore have active open dumps for municipal waste disposal. A large portion of municipal solid waste (as high as 70% in Brunei Darussalam and 69% in Indonesia) is sent to landfill as mixed waste simply.
	With such waste management practices, the rate of plastic collection for recycling in the region is expected to be significantly lower than the global average of 14%. Where it is not properly managed, plastic waste is washed or transported to the sea by waterways. Since they are not fully biodegradable, plastic materials accumulate to form island of plastic debris and is ingested by fish starting its accumulation up into the food chain and becoming a threat to human health. A regional project on management of plastic value chain to reduce plastic marine litter is therefore proposed, taking an integrated 'source to sea' approach and fostering regional cooperation.

[1] As defined by the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), Working Group 40 (Sources, fate and effects of microplastics in the marine environment – a global assessment)

[2] Available at: http://wedocs.unep.org/bitstream/handle/20.500.11822/11186/K1607228_UNEPEA2_RES11E.pdf?sequence=1&isAllowed=y

	The project will concentrate particularly on reducing the flow of land based single use plastic and microplastic into the ocean. When referring to plastic marine litter in the following text, land based single use plastic and microbeads as well as intentionally or incidentally abandoned fishing gears are considered. The goal of the project is to make a significant contribution towards global efforts to reduce and prevent further damages generated by marine litter to ecosystems and human health. In order to achieve this, the project will focus on actively involve stakeholders along the plastic value chain to act on the root causes of marine plastic litter. If successful, the project is expected to: • Consolidate the science base on plastic marine litter; • Strengthen policy and policy implementation tools related to plastic marine litter; • Share information, knowledge and technology for marine plastic reduction; and • Demonstrate the viability of methodologies to reduce plastic waste along the plastic value chain.

Projects Activities	The project will focus along four streams of activities: • Strengthening the science-basis for decision-making in relation to the plastic value chain in South-East Asia; • Establishment of regionally coherent policies, regulations as well as business incentives; • Knowledge management and exchange, and • Pilot demonstrations and sharing of lessons learnt. A gender responsive approach, including an initial gender analysis, will be applied in designing and implementing the activities based on an understanding of consumer behavior and how it relates to plastic waste management. Especially, awareness-raising campaigns will be gender-sensitized.
Related SDG(s) and SDG Targets:	Goal 14: Life below water 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. Goal 12: Responsible consumption and production Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment. Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse. Goal 11: Sustainable cities and communities Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities including by paying special attention to air quality and municipal and other waste management. Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities. Goal 3: Ensure healthy lives and promote well-being for all at all ages Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
Project Duration:	Five years, articulated along the following three phases: 1. inception (6 months, see annex 1); 2. implementation of activities (4 years), and 3. evaluation, reporting and closing (6 months).
Indicative Budget:	USD 5 million (of which, USD 0.25 million is for the inception phase) plus Project Support Cost (PSC) at 13%.