

# Malaysia National Stakeholder Consultation on Marine Litter – Solving Plastic Pollution at Source

Nationwide Project To Strengthen Multi-Stakeholder Partnerships by Applying a People Centric Approach in Managing the Plastic Value Chain in Malaysia

Tuesday, 5 November until Wednesday 6 November at Dewan Utama, Ground Floor, Balai Cerap Telok Kemang, Klana Beach Resort, Kompleks Baitul Hilal, Lot 4506 Batu, 8, Jalan Pantai, 71050 Port Dickson, Negeri Sembilan

### Country Profile on Malaysia's Marine Litter and Plastic Pollution

Malaysia is one of the open state oriented and industrialized, upper-middle income country in Southeast Asia. It has a population base of 32.60 million in 2019 (*Department of Statistics 2018/2019*) with a surface area of 330,290 sq.km and has a total coastline of 4,675 kilometres out of which Peninsular Malaysia has 2,068 kilometres (1,285 mi), while East Malaysia has 2,607 kilometres (1,620 mi) (*Trading Economics, 2016*). About 74% population live in urban areas. Average annual urban population growth rate (2.7%) is much higher than average annual rural population growth rate (-1.2%). As per 2018 estimates, country's GDP is US\$ 354.35 billion and Malaysia's economy grew 4.7 per cent at 2015 constant prices as compared to 5.7 per cent in 2017 (*Department of Statistics 2018/2019*). The government has promoted service sector e.g. tourism to Malaysia. As a result, tourism has become Malaysia's third largest source of foreign exchange, although it is threatened by the air and water pollution along with deforestation affecting tourism. Further, its beaches are threatened by mismanaged solid waste including plastic waste. Malaysia has been ranked 8th in the world of worst polluters of mismanaged plastic waste (*Earth Day Network, 2018*). Analysis of major beach clean-up efforts in Malaysia is given in Table 1 below.

Table 1: Voluntary Beach Clean-up Efforts and Items Found in Malaysia in 2019

Country/Location						People	Kilograms	Kilometres of Coast	Total Items Collected (Numbers)
Malaysia						12,817	36,895.48	1463.15	546,614
Cigarette Butts	Plastic Beverage	Plastic Bottle	Food Wrappers	Plastic Grocery	Plastic Lids	Straws, Stirrers	Glass Beverage	Other Plastic	Foam Take- Away
(No.)	Bottles (No.)	Caps (No.)	(Candy,etc) (No.)	Bags (No.)	(No.)	(No.)	Bottles (No.)	Bags (No.)	Containers (No.)
148,691	139,958	21,715	81,841	47,004	9,132	12,111	2,759	15,915	6,836

Source: Reef Check Malaysia and Trash Hero Malaysia – Combined data for International Coastal Clean Up Day and World Clean Up Day 2019

In 2018, Malaysians generated a whopping 38,142 tonnes of waste per day, an increase from 19,000 tonnes of waste a day in 2005 An average waste generated per capita at the city level is about 1.5 kg/person/day (*The Star, July 2019*). The municipal solid waste (MSW) generated in the country is composed mainly organic waste, plastic, paper textile, leather, glass and metal. On average 43.5% of the MSW in the country is organic waste, followed by plastic (25.2%), paper (22.7%), glass (2.6%), and textile (0.9%) (*UNEP's Project Report 2018*)

Malaysia has environmental regulatory framework to address future policy and regulatory requirements. The country has incentive based system and is transitioning towards greater private sector participation. It has commitment towards protecting its marine resources and meeting SDG 14,







target 14.1. Major weakness includes absence of matured plastic waste management infrastructure. Further, it lacks an integrated waste management plan to address plastic waste along with other waste streams. It has inadequate number of recycling centres and recovery facilities at local authority areas. Improper segregation (co-mingling of recyclables and residual waste) affects the quality of recyclables. Segregation at source is lacking and overall recycling rate is less than 50%. Therefore, the entire recycling infrastructure needs to be augmented in order to meet 22% household waste recycling target. The country lacks in high-end technology for 3R implementation and recycling infrastructure to cater to target based EPR (Extended Producer Responsibility) regulations. At institutional level there is absence of plastic waste management. Informal sector participation continues for plastic waste collection and disposal. The unwanted plastic bags or residues are either disposed off at the disposal site, or illegally dumped. Malaysia lacks human and financial resources for waste management. There are many areas, where the country lacks awareness. Lack of enforcement of regulation and coordination between agencies exists in the country. The cost of managing solid waste is highly subsidized by the federal government. The country suffers from lack of programmes and project development in the absence of integrated strategy and plans and institutional and financial mechanism or institutional framework for developing recycling industry with private sector participation e.g. public-private partnerships (PPP) need to be evolved in the country. Waste management sector offers opportunities to develop plastic waste management and integrated waste management policy, programme, plan / strategy and projects. Opportunities also exist for high end and specific technology transfer and assimilation in plastic waste management. Opportunities are expected for pilot testing and scaling up of institutional mechanism at policy, program, plan / strategy and projects especially for EPR and private sector participation considering transition policy and regulatory mechanism. Lack of interventions offers threat to accelerate deterioration of natural resource base and plastic pollution. Continued existence of informal sector especially for plastic waste will increase pollution load. Further, lack of HR and financial capacity at all levels with all stakeholders, offers threat to offset opportunities (UNEP's Project Report 2018).

### Concept note and agenda

## Background of "Reducing Marine Litter by Addressing the Management of Plastic Value Chain in South East Asia – SEA circular" Project and MESTECC as country focal point

SEA circular is an initiative of the United Nations Environment Programme (UN Environment) and the Coordinating Body on the Seas of East Asia (COBSEA), supported by the Swedish Government. MESTECC is the country focal point for this project; which aims to reduce the adverse impact of plastic pollution on the marine environment, by transforming plastic management and preventing waste leakage with a focus on the value chain stages of (i) Production of plastic products, (ii) Plastic use, and (iii) Collection / sorting / recycling. Taking a people-centred value chain approach, activities engage national and local government partners; businesses, producers, retailers, and associations in the packaging, consumer and institutional products industry; international development partners and (sub) regional organizations; academia and research institutions; civil society, consumers, and disadvantaged groups impacted by plastic pollution such as informal waste workers and coastal communities. Target countries include Malaysia, Thailand, Cambodia, Vietnam, Indonesia, and the Philippines.

The project has four components:

Output 1: Identify and develop market-based solutions to reduce single-use and hard-to-recycle plastics, promote recycling and increase recovery of plastic.

Output 2: Strengthen the evidence base for informed decision making to address marine litter by building national capacities to monitor plastic material flows and assess waste leakage hotspots in line with global best practice.

Output 3: Create widespread outreach to promote behavioural change among consumers and the plastics industry and an enabling space for policy development, building on existing campaigns (e.g. #CleanSeas).

Output 4: Targeted technical support to develop regionally coherent national marine litter planning and promote harmonized methodologies, indicator frameworks and reporting processes/systems in

line with the COBSEA Regional Action Plan on Marine Litter (RAP MALI) and Association of Southeast Asian Nations (ASEAN) efforts.

#### Purpose and objectives of the consultation

The objectives of the consultation with stakeholders in Malaysia are:

- a) To receive feedback on the project's objective and expected impact, strategies and approaches, and plans in Malaysia after pre-consultation on 15 October 2019;
- b) To introduce the project's Implementation Partners and stakeholders in Malaysia, and
- c) To explore opportunities for collaboration among other initiatives and partners.

### **Participants**

Participants will include national and local governmental representatives, private sector representatives, members of the academia, and civil society organizations in Malaysia, UN agencies and other inter-governmental agencies based in Malaysia, as well as implementation partners of the SEA circular project. Only attendees staying for both days and volunteering for beach audit will be given accommodation at hotel on 5 November night. The rest can leave before or after the Appreciation Dinner.

#### Malaysia National Stakeholder Consultation Agenda

Wialaysia 1	Malaysia National Stakeholder Consultation Agenda					
Time	5 November: Inputs from Pre-National Consultation for Deliberations					
9:00	Store luggage and belongings with Porters and Concierge at Klana Beach Resort Hotel. Check in is only at 3p.m. Registration at Dewan Utama, Ground Floor.					
9:30 – 9:45	Keynote by Dr. Nagulendran Kangayatkarasu, Deputy Secretary General, MESTECC					
9:45 – 11:45	Moderator: Mr. Jayaprakash a/l Murulitharan, Principal Assistant Secretary, MESTECC					
	Overview of Marine Litter in Malaysia					
	Experts:					
	<ol> <li>Prof. Dr. Sumiani Yusof, Director, Institute of Ocean and Earth Sciences &amp; Chairperson of Eco-Campus, University Malaya on Sustainable Management on Plastic Waste and Promotion of Circular Economy (10 mins)</li> <li>Prof. Dato' Ir. Dr A. Bakar Jaafar, Director, UTM Ocean Thermal Energy Centre (OTEC), Institute of Future Energy, Universiti Teknologi Malaysia on Overview on</li> </ol>					
	Marine Litter Research & Initiatives (10 mins)					
	3. Puan Norlailina Binti Mamat, Principal Assistant Secretary, Eco-Innovation Division, MESTECC on <i>Malaysia's Roadmap Towards Zero Single Use Plastics 2018-2030</i> (10 mins)					
	4. Puan Nor Ain Fazlina Binti Saari, Assistant Director, Policy and Economy Unit, National Solid Waste Management Department (JPSPN) <i>Updates on Plastic Waste Management</i> (10 mins)					
	5. Mr. Nazar Abdul Rauf, Head of DRB Hicom Environmental Services (DHES), a subsidiary of Alam Flora on <i>Management of Solid Waste in Malaysia through 5R concepts</i> (10 mins)					
	Interactive Discussion with Malaysian Stakeholders (10 minutes)					
	Marine Litter Hotspots: Monitoring and Assessment Methodologies Using Practical					
	Examples					
	Scientists and Experts:					
	1. Dr. Britta Denise Hardesty, Principal Research Scientist, Commonwealth Scientific and Industrial Research Organisation's (CSIRO) Oceans and Atmosphere on Designing a Monitoring/Assessment Programme (10 mins)					

- 2. Ms. Cheryl Rita Kaur, Head, Centre for Coastal and Marine Environment, Maritime Institute of Malaysia (MIMA) *Methodologies & Index Assessment Applied in Malaysia* (10 mins)
- 3. Prof. Dr. Kannan Narayanan, Faculty of Environmental Sciences, UPM on *Port Dickson's Marine Debris Case Study* (10 mins)
- 4. Puan Izarenah Binti Md Repin, Fisheries Officer, Department of Fisheries on *Methodologies & Assessments Applied for Islands in Malaysia* (10 mins)
- 5. Prof. Dr. Zulfigar Yasin, Centre for Marine and Coastal Studies, Universiti Sains Malaysia on *Marine Litter in the Straits of Malacca Some Case Studies* (10 mins)

**Interactive Discussion with Malaysian Stakeholders (10 minutes)** 

### 11:45 – 12:00

"Reducing Marine Litter by Addressing the Management of the Plastic Value Chain in South East Asia – SEA circular" Project

**Introduction to COBSEA and SEA circular Project at the Regional Level** by Ms. Natalie Harms, Representative of COBSEA and the SEA circular project team

- Giving Malaysian Stakeholders updates and how they play a role in SEA Region

**Overview of SEA circular Project** by Ms. Jacqueline Chang, National Consultant, Project SEA circular – Solving Plastic Pollution at Source, UN Environment Programme at MESTECC

- The ambit of the project illustrated in detail and to alert what is not covered under the project (e.g. providing/building waste management infrastructure for the country) to ensure Malaysian Stakeholders are aligned with SEA circular Project Team

### 12:00 – 13:15

### Appreciation Lunch and Networking at Kelana Coffee House

### 13:15 – 14:45

Identify and Justify Two Pilot Projects Locations to Document as Case Studies in Cooperation with Local Government to demonstrate good practice of 3R (reduce, reuse, recycle) interventions and implementation of Circular Economy Solutions from 2020 onwards

<u>Objective</u>: Experts will share how they conducted inclusive stakeholder consultations, field visits, and interviews to gather information on challenges, activities, success factors and lessons learned in pilot locations. Experts will also disclose how they have documented cases of plastic re-use, recycle, reduction and elimination of single-use plastics and hard-to-recycle plastic packaging in pilot locations.

<u>Criteria</u>: 1 island close to mainland and 1 inland where you already have close cooperation with the local government on 3R initiatives and ready to propose the circular economy solutions locally.

<u>Successful Example in Thailand:</u> Koh Samet, Rayong Province, Thailand was chosen for SEA circular Project, a zero plastic waste island practicing eco-tourism and is 200KM South East of Bangkok, which meets both objective and criteria.

<u>Tools</u>: As requested, LogFrame for experts and a Circular City Canvas was attached that can be applied for both island and inland projects after pre-consultation on 15 October.

## Moderator: Ms. Natalie Harms, Representative of COBSEA and the SEA circular project team

1. Ms. Nur Wahidah binti Zakaria, Assistant Director, Petaling Jaya City Council, Mr. Anthony Tan, Sustainability Innovation & Network Development Manager, ASEAN Green Chamber of Commerce and Dr. S. Sri Umeswera, CEO, ES ECO (Petaling Jaya City Council and Homeowners Low Carbon and Green Initiative assessment rebate scheme – Next Steps: how we can enhance the 3R further from 2020 onwards) (12 mins)

2. Ms. Cheryl Rita Kaur, Head, Centre for Coastal and Marine Environment, MIMA (Port Klang & Perhentian Island Pilot Projects) (10 mins) 3. Mr. Faisal Abdur Rani, Project Lead, TrashHero Malaysia (Beach Cleanup Projects in TrashHero Malaysian Chapters) (10 mins) 4. Mr. Julian Hyde, General Manager, Reef Check, Malaysia (Mantanani Island and Taman Desa Projects) (10 mins) 5. Dr. Tan Ching Seong, CEO, iCycle (Circular Economy, more than just the material circulation –Pangkor Island) (10 mins) 6. Dato' Mizan Yahya, Co-Chairman of Special Project Committee, Waste Management Association of Malaysia (Point of diversion – less plastic leakage from drains, rivers into ocean by installation of Gross Pollutant traps (GPTs) and floating looms Pilot Project) (10 mins) 7. Mr. Ir. Mansor bin Abdul Ghani, Vice President, Friends of Rivers, Malaysia (Sungai Langat Project) (10 mins) 8. Mr. Carlos Steenland, CEO, SeaMonkey Project (Penang Pilot Project) (10 mins) **Interactive Discussion with Malaysian Stakeholders (10 minutes)** 14:45 -Tea Break & Networking 15:00 15:00 -Communication, Education & Public Awareness (CEPA) 15:15 An Advanced Plastics Recycling Industry For Malaysia – The White Paper presented by Dato' Johnson Yoon, Secretary General, Malaysia Plastics Recyclers Association (MPRA) on behalf of Malaysian Plastics Manufacturers Association (MPMA) and MPRA. 15.15 -Execution and Implementation of Plastic Disclosure Training from 23-24 March 2020 16:00 to Groom a Malaysian Champion in Each Sector Objective: Malaysian companies to benefit from knowledge transfer on how to apply calculator tools and frameworks including information on plastic value chain/footprint analysis to publish their Corporate Sustainability Report prior to featuring them on the Plastics Disclosure Project online platform for global visibility. Moderator: Ms. Natalie Harms, Representative of COBSEA and the SEA circular project team **UN Trainer:** 1. Mr. Doug Woodring, Founder and Managing Director of Ocean Recovery Alliance **Circular Economy Practitioner:** 2. Ms. Adrienna Zsakay, CEO, Circular Economy Asia (Overview of Circular Economy focusing on Upstream Plastic Value Chain of SEA Circular Project) Local Partner: 3. Ms. Luanne Sieh, Head of Group Sustainability, CIMB (How Companies are Being Recruited and Approached – Next Steps in Implementation) **Interactive Discussion with Malaysian Stakeholders (15 minutes)** 16:00 -Step-by-Step Approach to Launch Marine Litter Online Course in Malaysia, 16:45 Overcoming Challenges and Solutions for Nationwide Buy-In at All Levels Objective: How to effectively make it mandatory for government, private sector, academia, civil society and community based organisations to benefit from a free Massive Open Online Course on Marine Litter and to inspire them at all levels to execute and start a knowledge transfer chain effect. Moderator: Ms. Jacqueline Chang, National Consultant, Project SEA Circular – Solving plastic pollution at source, UN Environment Programme at MESTECC **Education/Professional Development Experts (10 mins each):** 1. Mr. Ismail Abdullah, President & CEO, International Green Training Centre Sdn Bhd

	<ol> <li>Prof. Dr. Sumiani Yusof, Director, Institute of Ocean and Earth Sciences &amp; Chairperson of Eco-Campus, University Malaya</li> <li>Associate Professor Dr. Yeong Siew Wei, Chairperson of RCE Kuching, UCSI University, Kuala Lumpur</li> <li>Prof. Dr. Zulfigar Yasin, Marine Biology, School of Biological Sciences, Universiti Sains Malaysia         Interactive Discussion with Malaysian Stakeholders (5 minutes)     </li> </ol>
16:45 –	Multi-Party Collaboration in Implementing the Communication and Outreach
17:15	Strategy Nationwide
	Objective: To assess progress made and potential needs/challenges to implement #CleanSeas activities, engaging government agencies and other stakeholders in Malaysia with the rakyat to implement and develop new #CleanSeas pledges. Developing and supporting sub-national awareness raising campaigns to regional activities through SEA circular.
	Moderator: Ms. Natalie Harms, Representative of COBSEA & SEA circular project team will share what other COBSEA countries are implementing in this area
	Community Leader/Champion:
	1. Mr. Faisal Abdur Rani, Project Lead, TrashHero Malaysia (Star Golden Hearts Award Winner 2019) will share on 'How corporates can collaborate as ambassadors and change agents by sharing his work experience with other private sector collaborators in the past'.
	Interactive Discussion with Malaysian Stakeholders (5 minutes)
17:15 – 17:30	<b>Briefing on Beach Audit and Security Briefing</b> by Mr. Faisal Abdur Rani, Project Lead, TrashHero Malaysia
17:30 – 17:45	Closing Remarks by Mr. Eddy Mazuaansyah bin Mod Ali Murad, Undersecretary, Pollution Control Division, MESTECC
17:45 – 18:45	Free & Easy
19:00 – 21:00	Appreciation Dinner for Malaysian Stakeholders at Kelana Coffee House

### **BEACH AUDIT**

Time	6 November: Beach Audit and Beach Cleanup at Teluk Kemang, Port Dickson
7:00–7:30	Breakfast at Kelana Coffee House
07:30 am sharp	Meet at Front Entrance of Lobby with Team Leaders  Mr. Faisal Abdur Rani, Team Leader, TrashHeroKL will divide participants in groups.
08:00 – 11:00	Training attendees on conducting a transact, beach audit and data recording.
11:00 – 12:00	Return to hotel and freshen-up. Check out by 12 noon to avoid unnecessary charges.
12:00	Appreciation Lunch & Networking at Kelana Coffee House
14:00	End of Programme

#### Contact

For further information and to confirm your participation, kindly contact <a href="https://husainisaidi@mestecc.gov.my">husainisaidi@mestecc.gov.my</a> and <a href="mailto:jacqueline@mestecc.gov.my">jacqueline@mestecc.gov.my</a>