

# **Reducing marine litter by addressing the management of the plastic value chain in South East Asia**

SEA CIRCULAR PROJECT WITH  
MESTECC AS COUNTRY FOCAL POINT  
**NATIONAL CONSULTATION WITH MALAYSIAN STAKEHOLDERS**

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**Dewan Utama, Klana Beach Resort Hotel,  
Port Dickson, Negeri Sembilan**

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**5-6 November 2019**



# **WIFI ACCESS KBRPD@WIFI**

## **Password: 44463-50344**

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KEMENTERIAN TENAGA, SAINS, TEKNOLOGI,  
ALAM SEKITAR DAN PERUBAHAN IKLIM  
MINISTRY OF ENERGY, SCIENCE, TECHNOLOGY & CLIMATE CHANGE

# Keynote Address



Dr. Nagulendran Kangayatkarasu,  
Deputy Secretary General,  
Ministry of Energy, Science, Technology,  
Environment & Climate Change (MESTECC)





PART I  
Marine Litter in Malaysia :  
Solving Plastic Pollution at Source







## Overview of Marine Litter in Malaysia

### Experts:

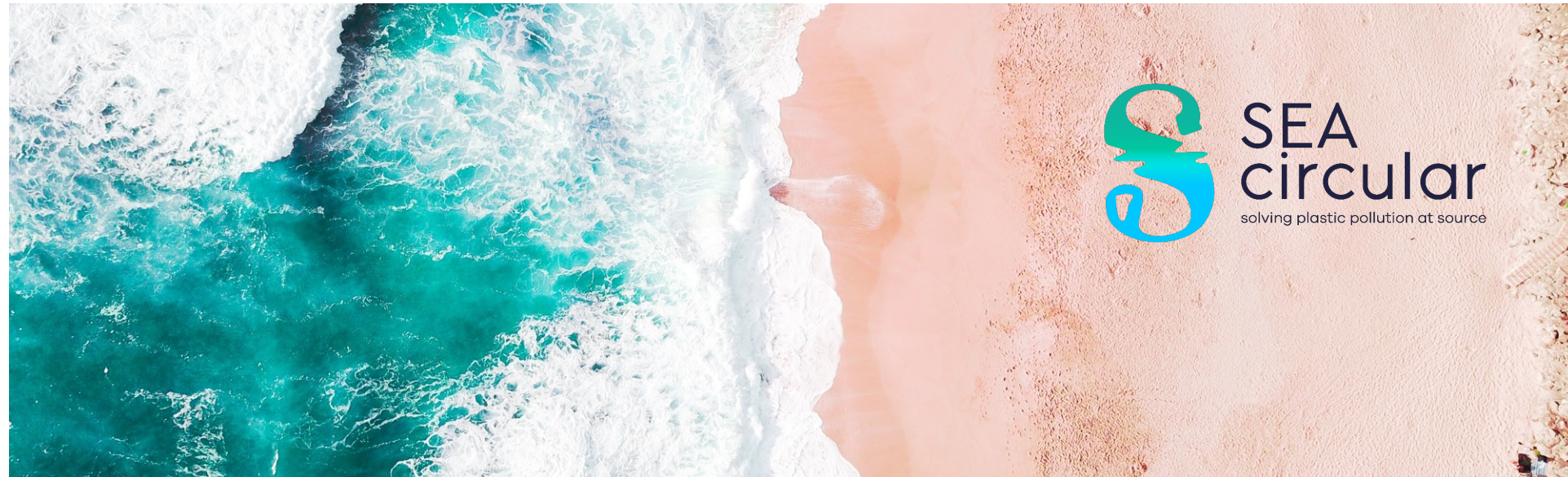
- **Prof. Dr. Sumiani Yusof**, Deputy Vice- Chancellor (Research & Innovation), Institute of Ocean and Earth Sciences, University Malaya on *Research Initiatives on Plastic Pollution Issues and Promotion of Circular Economy*
- **Prof. Dato' Ir. Dr A. Bakar Jaafar**, Director, UTM Ocean Thermal Energy Centre (OTEC), Institute of Future Energy, Universiti Teknologi Malaysia on *Overview on Marine Litter Research & Initiatives*
- **Puan Norlailina Binti Mamat**, Principal Assistant Secretary, Eco-Innovation Division, MESTECC on *Malaysia's Roadmap Towards Single Use Plastics 2018-2010*
- **Puan Nor Ain Fazlina Binti Saari**, Assistant Director, Policy & Economy Unit, National Solid Waste Management Department (JPSPN), *Updates on Plastic Waste Management*
- **Mr. Nazar Abdul Rauf**, Head of DHES, Alam Flora on *Management of Solid Waste in Malaysia through 5R concepts*



## Marine Litter Hotspots: Monitoring & Assessment Methodologies Using Practical Examples

### Experts:

- **Dr. Britta Denise Hardesty**, Principal Research Scientist, Commonwealth Scientific and Industrial Research Organisation's (CSIRO) Oceans and Atmosphere on *Designing a Monitoring/Assessment Programme*
- **Ms. Cheryl Rita Kaur**, Head, Centre for Coastal and Marine Environment, Maritime Institute of Malaysia (MIMA) *Methodologies & Index Assessment Applied in Malaysia*
- **Prof. Dr. Kannan Narayanan**, Faculty of Environmental Sciences, UPM on *Port Dickson's Marine Debris Case Study*
- **Puan Izarenah Binti Md Repin**, Fisheries Officer, Department of Fisheries on *Methodologies & Assessments Applied for Islands in Malaysia*
- **Prof. Dr. Zulfigar Yasin**, Centre for Marine and Coastal Studies, Universiti Sains Malaysia on *Marine Litter in the Straits of Malacca - Some Case Studies*



## Introducing COBSEA and the SEA circular project

Malaysia National Stakeholder Consultation on Marine Litter  
Port Dickson, Malaysia 5.11.2019

Natalie Harms, COBSEA Secretariat and SEA circular team







## Coordinating Body on the Seas of East Asia

### Regional Seas

18 Regional Seas Conventions and Action Plans, 7 administered by UN Environment

### East Asian Seas Action Plan 1994

Action Plan for the Protection and Sustainable Development of the Marine and Coastal Areas of the East Asian Seas Region

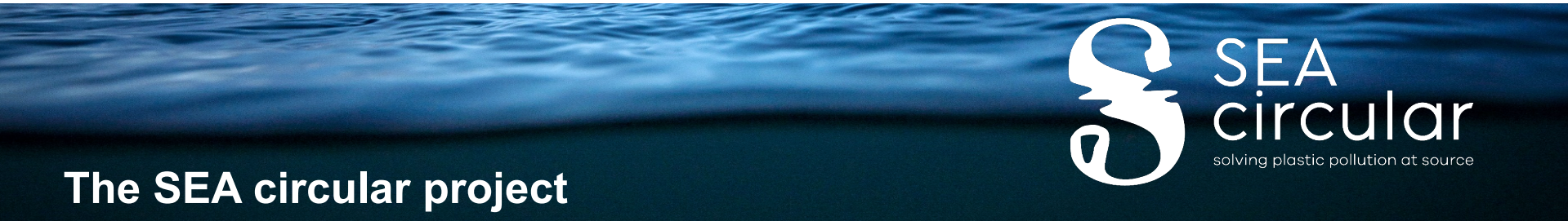
### COBSEA Countries

Cambodia, China, Indonesia, Republic of Korea, Malaysia, Philippines, Singapore, Thailand, Vietnam

### COBSEA Governance

Intergovernmental meeting; Secretariat hosted by Thailand and administered by UNEP; Strategic Directions 2018-2022, Regional Action Plan on Marine Litter 2019





## The SEA circular project

### 1. Market-based solutions

- Stakeholders measure and report plastic footprint
- Stakeholders manage their plastic value chain
- Business incentives for plastic reduction and recycling

Variety of non-plastic and recycled plastic packaging increases

### 2. Science-basis for decision making

- Assessment of plastic leakage and hotspots
- Marine litter monitoring national & regional levels
- Knowledge hub / Regional Node on marine litter
- Policy obstacles and opportunities identified

Elimination of single use plastics from selected value chains

Plastic segregation at source and recycling rates increase

### 3. Outreach

- Social and economic impacts better understood
- Targeted training (MOOC)
- Outreach campaigns/consumer awareness

Strengthened policy and fiscal incentives to reduce virgin plastic use

### 4. Regional networking

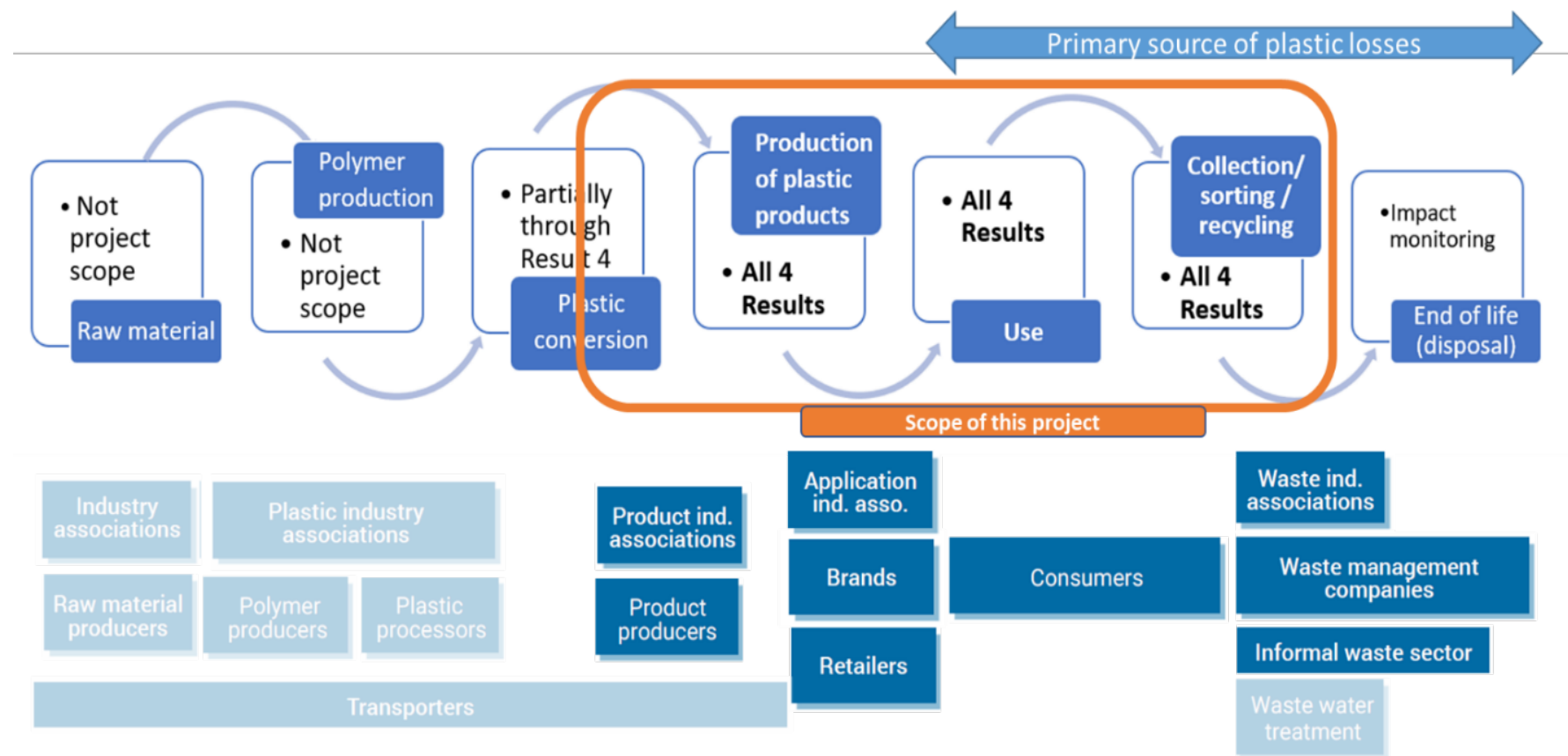
- Policy dialogue & constituency engagement
- Regionally coherent national plans & policies
- Information sharing & stakeholder engagement
- SEA of Solutions partnership week

Growing consumer demand for plastic pollution reduction

Less plastic wasted, reduced leakage & impact on the marine environment & communities



# A value chain approach targeting upstream sources of plastic pollution



# SEA of Solutions

partnership week for marine plastic pollution prevention  
11-14 November 2019, UNCC, Bangkok

<http://sos2019.sea-circular.org/>

DAY 1: Science for Change

DAY 2: Plasticity Forum

DAY 3: Localizing Action

DAY 4: Solutions Forum



[SEA-circular@un.org](mailto:SEA-circular@un.org)

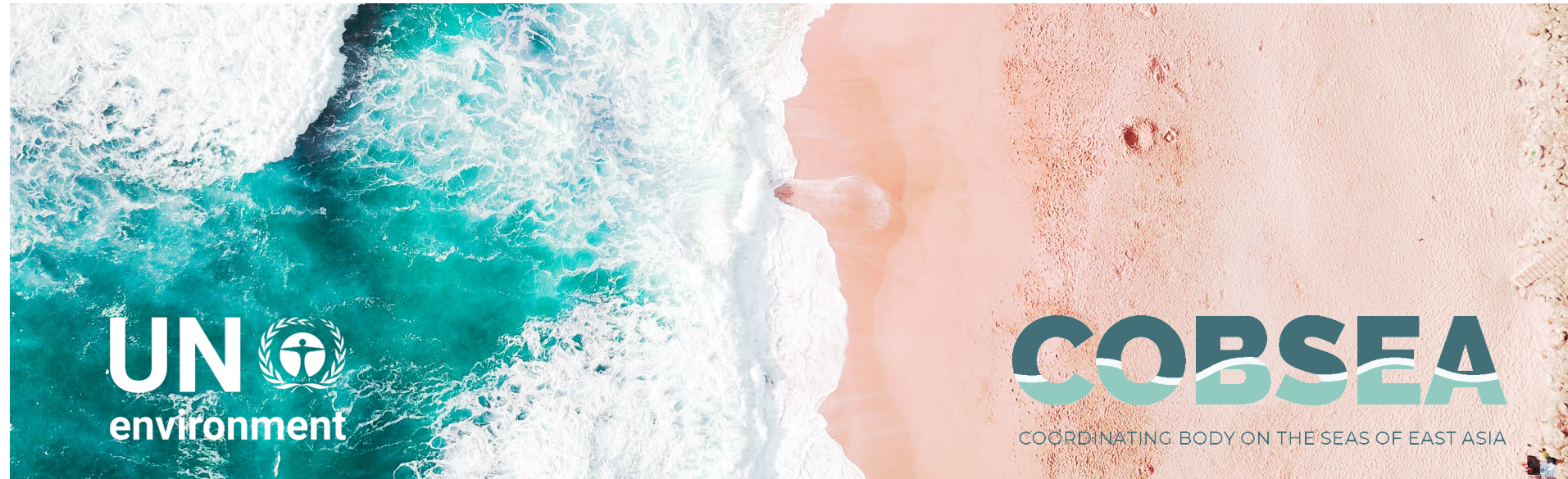
SEA circular | UN Environment UN  
Building, Rajdamnern Nok Avenue  
Bangkok, Thailand



Natalie Harms  
COBSEA Secretariat, UN Environment Programme  
natalie.harms@un.org  
unep-cobsea@un.org

[www.cobsea.org](http://www.cobsea.org)  
<https://www.sea-circular.org/>  
[www.unenvironment.org](http://www.unenvironment.org)





# Reducing marine litter by addressing the management of the plastic value chain in South East Asia

OVERVIEW OF SEA CIRCULAR PROJECT  
by Jacqueline Chang

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Dewan Utama, Klana Beach Resort Hotel,  
Port Dickson, Negeri Sembilan

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5-6 November 2019

Rank	Country
1	China
2	Indonesia
3	Philippines
4	Vietnam
5	Sri Lanka
6	Thailand
7	Egypt
8	Malaysia
9	Nigeria
10	Bangladesh
11	South Africa
12	India
13	Algeria
14	Turkey
15	Pakistan
16	Brazil
17	Burma
18*	Morocco
19	North Korea
20	United States



## Why focus on plastic in marine litter?

- Plastic make up the most prevalence and important type of marine litter (UNEP, 2009).
- Project aims to reduce the adverse impact of marine litter from plastic leakage by ensuring that less plastic is entering general solid waste streams where the coverage and effectiveness of the management systems is weak.



Source: CSIRO





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## Reducing marine litter by addressing the management of the plastic value chain in South East Asia

- A regional approach, developed in the context of the COBSEA Regional Action Plan and supporting the ASEAN Framework for Action on Marine Debris
- Focus on the plastic value chain, interventions designed and implemented with an understanding of land-sea interactions, and towards a circular economy
- A multi-stakeholder partnership: government, private sector and civil society





## Reducing marine litter by addressing the management of the plastic value chain in SEA

Timeline	2018 – 2022 (4 years)
Lead agencies	UN Environment, COBSEA
Partners	COBSEA focal agencies, private sector, civil society & academia
Donor	Swedish International Development Cooperation Agency (Sida)
Target countries	Thailand, Malaysia, Cambodia, Indonesia, Malaysia, the Philippines, Vietnam, Korea and China



### REGIONAL APPROACH

in line with COBSEA RAP MALI and the ASEAN Framework for Action on Marine Debris



### MULTI-STAKEHOLDER PARTNERSHIP

government, private sector, civil society, academia, international & UN-partners



### PLASTIC VALUE CHAIN APPROACH

preventing land-based marine litter, land-sea interactions, towards a circular economy

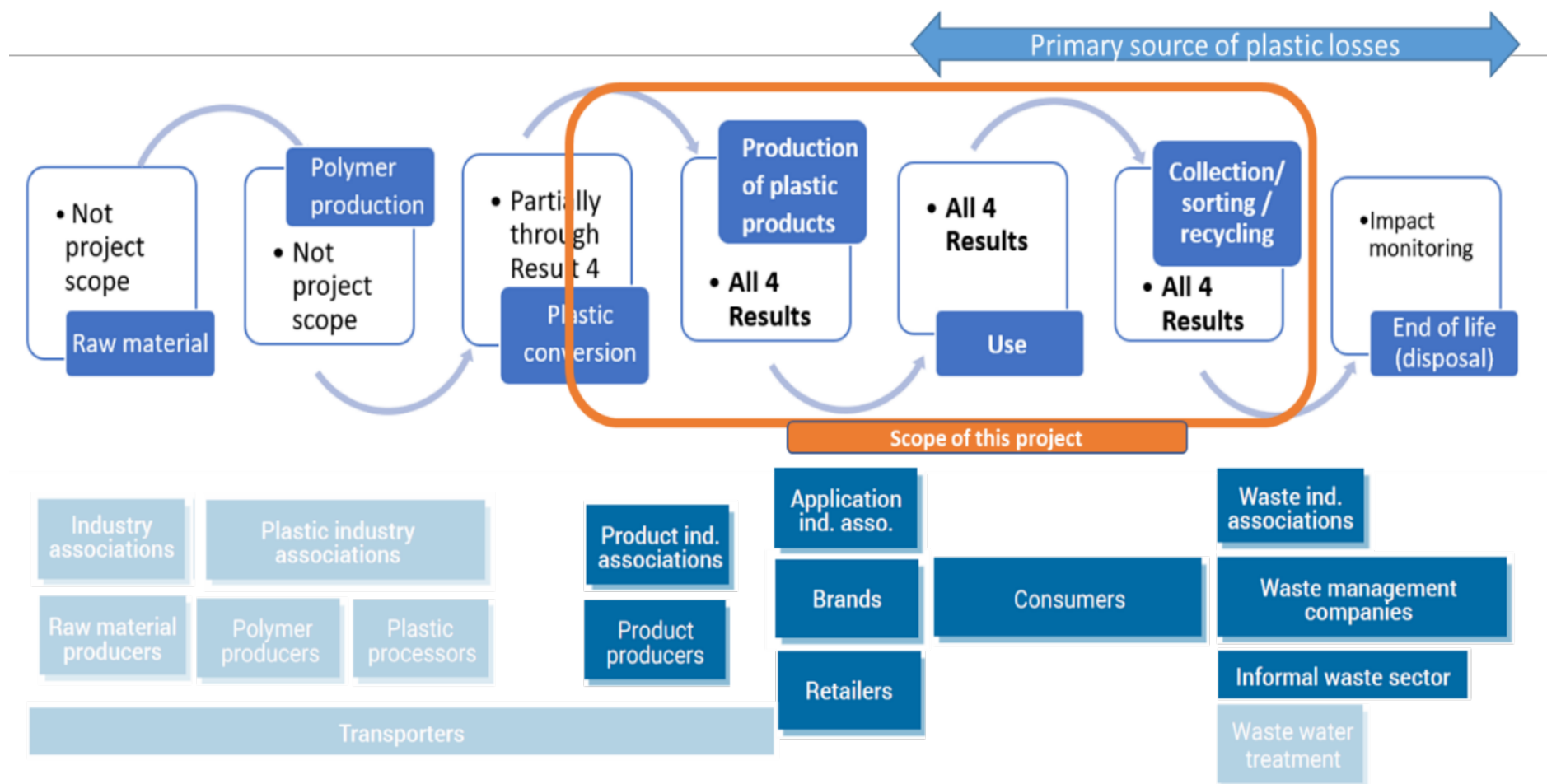


### PEOPLE-CENTRED APPROACH

respecting the needs and interests of disadvantaged groups and their human rights



a value chain approach targeting upstream sources of land-based pollution





## planned activities and expected results

### OUTPUTS

#### MARKET BASED SOLUTIONS

- Stakeholders measure & report plastic footprint
- Stakeholders manage their plastic value chain
- Business incentives for plastic reduction & recycling

#### SCIENCE-BASIS FOR DECISION MAKING

- Assessment of plastic leakage & hotspots
- Marine litter monitoring at national/regional levels
- Research collaboration and publishing
- Policy obstacles and opportunities identified

#### OUTREACH

- Social & economic impacts better understood
- Targeted training
- Outreach campaigns/consumer awareness
- Enabling policy change

#### REGIONAL NETWORKING

- Policy dialogue and constituency engagement
- Regionally coherent national plans and policies
- Information sharing and stakeholder engagement

### OUTCOMES

Variety of non-plastic and recycled plastic packaging increases

Elimination of single use plastics from selected value chains

Plastic segregation at source and recycling rates increase

Strengthened policy and fiscal incentives to reduce virgin plastic use

Growing consumer demand for plastic pollution reduction

### IMPACT

**Less plastic wasted, with reduced input to and impact on the marine environment & dependent people**



**Activities 2019- 31 December 2020**

A1. Develop a national marine litter and microplastic monitoring programme, in line with regional guidance and globally established best practice

A2. Conduct marine litter accumulation hotspot assessment **(1 in 2020)**

A3. Further develop and accelerate implementation of national policy or planning framework for addressing marine litter

A4. Support SEA circular outreach and capacity building (not in Malaysia for 2019-2020)

A5. Facilitate private sector reporting of plastic footprint (10 companies by end of 2020).

A6. Demonstrate interventions for plastic value chain management at 2 locations

A7. Promote market-based incentives for plastic reduction and recycling







## Pre-Consultation and National Consultation with Key Stakeholders in Malaysia

**Pre-Consultation  
15 October at  
MESTECC**

**National  
Consultation  
5-6 November at  
Port Dickson**

Target groups

Private sector, academia, scientists, researchers, think tanks, CSOs, NGOs apart from Government Ministries and agencies



**BRAINSTORM APPROACH**

Open knowledge sharing without borders



**MULTI-STAKEHOLDER PARTNERSHIP**

Integrated, streamlined and sustainable solutions



**OPEN MINDED APPROACH**

Encouraging strategic ideas that are actionable and realistic



**PEOPLE-CENTRED APPROACH**

Practical, realistic and easy to implement to benefit the rakyat





SAVE THE DATE

11-15 NOVEMBER 2019, UN CONFERENCE CENTRE, BANGKOK

# *SEA of solutions*

A partnership week to catalyse action for marine litter and plastic pollution reduction

If you wish to host a session or a side event,  
please contact: [unep-cobsea@un.org](mailto:unep-cobsea@un.org)



## SEA of Solutions

The first annual partnership week for marine litter and plastic pollution prevention

Day 1: Knowledge, science and technologies

Day 2: Finance, Investments and product innovation (Plasticity Forum)

Day 3: Localization and community engagement

Day 4: High-level forum on regional cooperation and governance

**Register, attend, and contribute**

Back to back with the Ad Hoc Open-ended Expert Group, mandated in UNEA-4/6



## leveraging COBSEA for Malaysia's Roadmap Towards Zero Single Use Plastics 2018-2030

- Addressing key challenges of land-based plastic marine pollution
- Directly delivering on priorities and needs identified through COBSEA
- Using COBSEA mechanisms, including technical exchange and guidance through intergovernmental meetings and working groups
- Strengthening the evolving institutional framework of COBSEA through UN network
- Providing support for capacity building, technical assistance, addressing knowledge gaps, and partnerships to accelerate national planning and achieve regional goals





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Identify 2 pilot locations in Malaysia where cooperation with local governments is successful & to document its plastic re-use, recycle and reduction/elimination of single-use plastics and hard-to-recycle plastic packaging as case studies.

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





**Objective:** 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.

**Criteria:** 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.

**Successful Example in Thailand:** 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.

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







### Experts:

- **Tuan Johary Anuar**, Deputy Mayor, MBPJ, **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)
- **Ms. Cheryl Rita Kaur**, Head, Centre for Coastal and Marine Environment, MIMA (Port Klang & Perhentian Island Pilot Projects)
- **Mr. Faisal Abdur Rani**, Project Lead, TrashHero Malaysia (Beach Cleanup Projects in TrashHero Malaysian Chapters)
- **Mr. Julian Hyde**, General Manager, Reef Check, Malaysia (Mantanani Island and Taman Desa Projects)





### Experts continued:

- **Dr. Tan Ching Seong**, CEO, iCycle (Circular Economy, more than just the material circulation –Pangkor Island)
- **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)
- **Mr. Ir Mansor bin Abdul Ghani**, Vice President, Friends of Rivers, Malaysia (Sungai Langat Project)
- **Mr. Carlos Steenland**, CEO, SeaMonkey Project (Penang Pilot Project)





**PLEASE USE DOCUMENT MARKED “C”  
ON YOUR TABLE AND VOTE FOR YOUR  
TOP THREE LOCATIONS**

**RANK #1 for your first choice**

**RANK #2 for your second choice**

**RANK #3 for your third choice**

**SUBMIT YOUR VOTE BALLOT TO JACQUELINE  
DURING COFFEE BREAK**





## Part II

# Communication, Education & Public Awareness (CEPA)





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# 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





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## Plastics Disclosure Project: Why Malaysian companies should participate in the training?

### UN Trainer:

- **Mr. Doug Woodring**, Founder and Managing Director of Ocean Recovery Alliance

### Circular Economy Practitioner:

- **Ms. Adrienna Zsakay**, CEO, Circular Economy Asia (Overview of Circular Economy focusing on Upstream Plastic Value Chain of SEA Circular Project)

### Local Partner:

- **Ms. Luanne Sieh**, Head of Group Sustainability, CIMB (How Companies are Being Recruited and Approached – Next Steps in Implementation)







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# Step-by-Step Approach to Launch Marine Litter Online Course in Malaysia, Overcoming Challenges & Solutions for Nationwide Buy-In at All Levels

Moderator: Jacqueline Chang

Register on Online Education Platform:

<https://www.ou.nl/-/unenvironment-mooc-marine-litter>





**UN environment**  
United Nations Environment Programme

**clean seas**  
turn the tide on plastic

**GPA**  
Global Programme of Action for the Protection of the Marine Environment from Land-based Activities

**GPMML**  
Global Partnership on Marine Litter

**Open Universiteit**  
www.ou.nl

# MOOC

Massive Open Online Course on Marine Litter

**520 universities involved globally.  
We want to launch in Malaysia nationwide in 2020.  
WHAT DO YOU THINK?**





## Features

*First MOOC focusing on marine litter;*

*Case studies from around the world;*

*Expert faculty and distinguished visiting lecturers;*

*Courses taught at a BSc level;*

*Open to all without restrictions;*

*FREE of charge.*

**LEADERSHIP TRACK:** 10 hours of learning the basic characteristics and concepts of marine litter issues & various strategies in preventing and reducing marine litter issues. 12 modules geared towards policymakers, managers and professionals who require an overview of the topic.

**EXPERT TRACK:** 30 additional hours of 6 modules and a final assignment for professionals and students who acquire more in-depth knowledge, insights and skills relating to prevention of marine litter. **Students taking the Expert Track must complete Leadership Track.**





Key: Make it mandatory in the educational curriculum of schools, universities and for local authorities.

Language: Taught in local languages which is easy to understand to overcome language barrier issues.

CPD points to be awarded for the course.

To ensure Ministry of Education is represented and coming for 5-6 November for national consultation.

Work with Human Resources Development Fund (HRDF) and SME Corp





You still need to nominate a Champion to drive this

1. Main coordinator for public sector? Nominate
2. Main coordinator for private sector? Nominate
3. Main coordinator for universities? Nominate
4. Main coordinator for other research institutions ?  
Nominate





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## Step-by-Step Approach to Launch Marine Litter Online Course in Malaysia, Overcoming Challenges & Solutions for Nationwide Buy-In at All Levels

**Moderator:** Ms. Jacqueline Chang, National Consultant, Project SEA Circular – Solving plastic pollution at source, UN Environment Programme at MESTECC

**Education/Professional Development Experts:**

- Mr. Ismail Abdullah, President & CEO, International Green Training Centre Sdn Bhd
- Prof. Dr. Sumiani Yusof, Institute of Ocean and Earth Sciences, Deputy Vice-Chancellor (Research & Innovation), University Malaya
- Associate Professor Dr. Yeong Siew Wei, Chairperson of RCE Kuching, UCSI University, Kuala Lumpur
- Prof. Dr. Zulfigar Yasin, Marine Biology, School of Biological Sciences, Universiti Sains Malaysia







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## Multi-Party Collaboration in Implementing the Communication and Outreach Strategy Nationwide

Presented by

**Community Leader/Champion:**

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'.





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## Objective of #CleanSeas campaign in Malaysia

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.





# clean seas

turn the tide on plastic

**Improve plastics management (reduce, redesign, reuse, recycle)**

**Global phase out of non-recoverable plastics**  
(e.g. microplastics in cosmetics)

**Reduce single-use plastics drastically**  
Global ban on certain types of single-use plastic bags





How to execute and start Clean Seas campaigns to create pledges in Malaysia?

1. Roadshows in shopping malls to get the rakyat involved (one private sector entity has great success in their Active Citizens campaign)
2. Social Media Champions/Ambassadors who have a high follow ships on social media to spread the word





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## Briefing on Beach Audit and Security Briefing

Presented by

**Community Leader/Champion:**

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'.







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## Keynote & Closing Remarks



Dr. Nagulendran Kangayatkarasu,  
Deputy Secretary General,  
Ministry of Energy, Science, Technology,  
Environment & Climate Change (MESTECC)





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Prepared by Jacqueline Chang for MESTECC Internal Meetings

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