

**SEA of Solutions 2021**  
16-18 November 2021

# “Accelerating solutions to reduce plastic waste”

coordinated by



supported by



co-hosted by



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# EVENT HIGHLIGHTS

An underwater photograph showing the hull of a boat on the right side, with a blue rope and some debris. A striped fish is swimming in the water below the boat. The background is a clear, deep blue.

# At a glance


**856**  
**REGISTERED PARTICIPANTS**  
FROM  
**70**  
**COUNTRIES**



**70%**  
FROM  
**ASIA-PACIFIC REGION**

**PARTICIPATION**  
FROM ACROSS SECTORS  
INCLUDING:

**24%**   
REPRESENTING  
THE **PRIVATE**  
**SECTOR**

**& 18.5%**  
FROM THE  
**PUBLIC**  
**SECTOR** 

**62** **SPEAKERS & MODERATORS**  
ACROSS **6** **THEMATIC**  
**SESSIONS** AND **1** **HIGH-**  
**LEVEL PANEL DIALOGUE**



SOFT LAUNCH OF MALAYSIA'S  
**NATIONAL MARINE**  
**LITTER POLICY** AND  
**ACTION PLAN**  
**2021-2030**



# Introduction

SEA of Solutions is an annually occurring partnership event towards solving plastic pollution at source, convened by the United Nations Environment Programme (UNEP) and the Coordinating Body on the Seas of East Asia (COBSEA), through the SEA circular project supported by the Government of Sweden. SEA of Solutions serves as a platform for multisectoral dialogue, collaboration, uniting seekers and providers of market-transforming policy, business, and technology solutions, and enabling networking among stakeholders in the plastic value-chain. It was first launched in 2019 together with the Government of Thailand as Co-Host, gathering over 500 registered participants from more than 40 countries. The first annual SEA of Solutions event was successful in generating dialogue and promoting opportunities for future collaboration and partnerships under the uniting mantra of "Together, less plastic wasted".

In 2020, about 750 participants from 50 countries explored and addressed priorities in the region to help combat a resurgence in the use of plastics in response to the impacts of the pandemic. Guided by the theme

"Wasting less plastic and keeping it out of the ocean – Has the needle moved?", the discussions examined the impacts of COVID-19 and echoed a call for a sound response, more circularity, less single use and hard-to-recycle plastics, product re-design and innovation, better regulation that is enforceable, labelling rules, better waste segregation, and informal recycling services.

This year, SEA of Solutions aimed towards revisiting and showcasing actions and innovations to support countries, industries and communities to get back on track and build back better – with renewed commitments, solutions and clear directions on the way forward during and beyond the pandemic.

SEA of Solutions 2021 was held virtually on 16–18 November 2021, co-hosted by the Ministry of the Environment and Water of Malaysia, together with the United Nations Environment Programme (UNEP) and the Coordinating Body for the East Asian Seas (COBSEA) through the SEA circular project. The project is supported by the Government of Sweden.



# Background

**The COVID-19 pandemic has had an immense impact on public, economic and environmental health.**

As the world continues to battle against an invisible enemy, a more obvious and potentially longer-lasting threat emerges with the rise of single-use plastic, which not only burdens waste management systems but ultimately threatens life on land and below water.

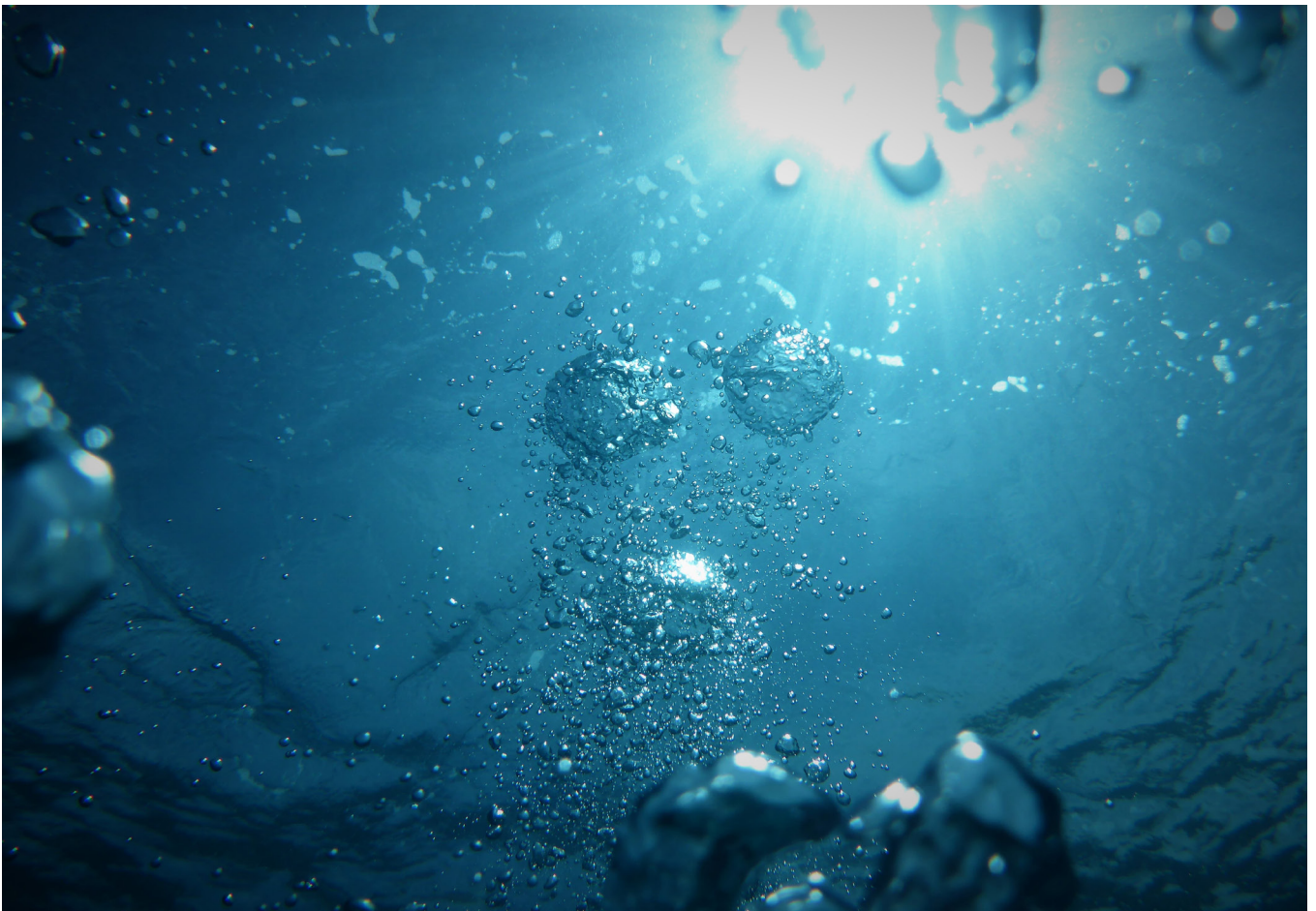
In a bid to save lives and prevent contagion, immediate measures were introduced at the onset of the pandemic such as the use of personal protective equipment. Moreover, additional measures and new consumption patterns were observed including extensive use of food delivery and e-commerce, delays or reversals in single-use plastic bans and even the reintroduction of disposable products in business establishments.

The 2021 edition of the annual event aimed to take stock and share updates from the government, business, youth, consumers and communities on actions taken related to sustainable production

and consumption, enabling policies and market transformation, as well as financing and multi-stakeholder cooperation.

Specifically, the event served as a platform for multi-stakeholders to:

- Discuss challenges and opportunities in implementing regional, national and local strategies on plastic waste prevention and disposal;
- Explore innovative policies and financing mechanisms to accelerate a transition towards a less plastic waste future;
- Feature latest technologies to support evidence-based decision-making approaches to combat plastic pollution;
- Present tools and incentive models to support businesses and social enterprises to promote circularity; and
- Foster advocacy and wider outreach to beat plastic pollution.



# Programme

This year's theme centered on '**Accelerating solutions to reduce plastic waste**' and featured six thematic sessions covering:

- Consumer awareness and outreach to combat plastic pollution;
- Innovations in sustainable packaging and its value chain;
- City-level actions through policymaking, partnerships and community engagement;
- Corporate commitments and leadership through extended producer responsibility;
- Transition towards circular economy; and
- Sustainable and innovative financing pathways.

Sessions and activities at the SEA of Solutions 2021 offered a space for dialogue among plastic value chain stakeholders. The three-day Programme featured immersive sessions, which have been designed to generate insights and identify solutions to prevent plastic pollution on land and the seas.

**Session 1:** A new wave of eco-friendly consumer society

**Session 2:** Innovations in sustainable packaging value chain

**Session 3:** Cities and urbanization towards less plastic leakage

**Session 4:** Plugging plastic leakage: Enabling extended producer responsibility through producer responsibility organizations

**Session 5:** Circular economy for less plastic wasted

**Session 6:** Sustainable financing for a waste-free future

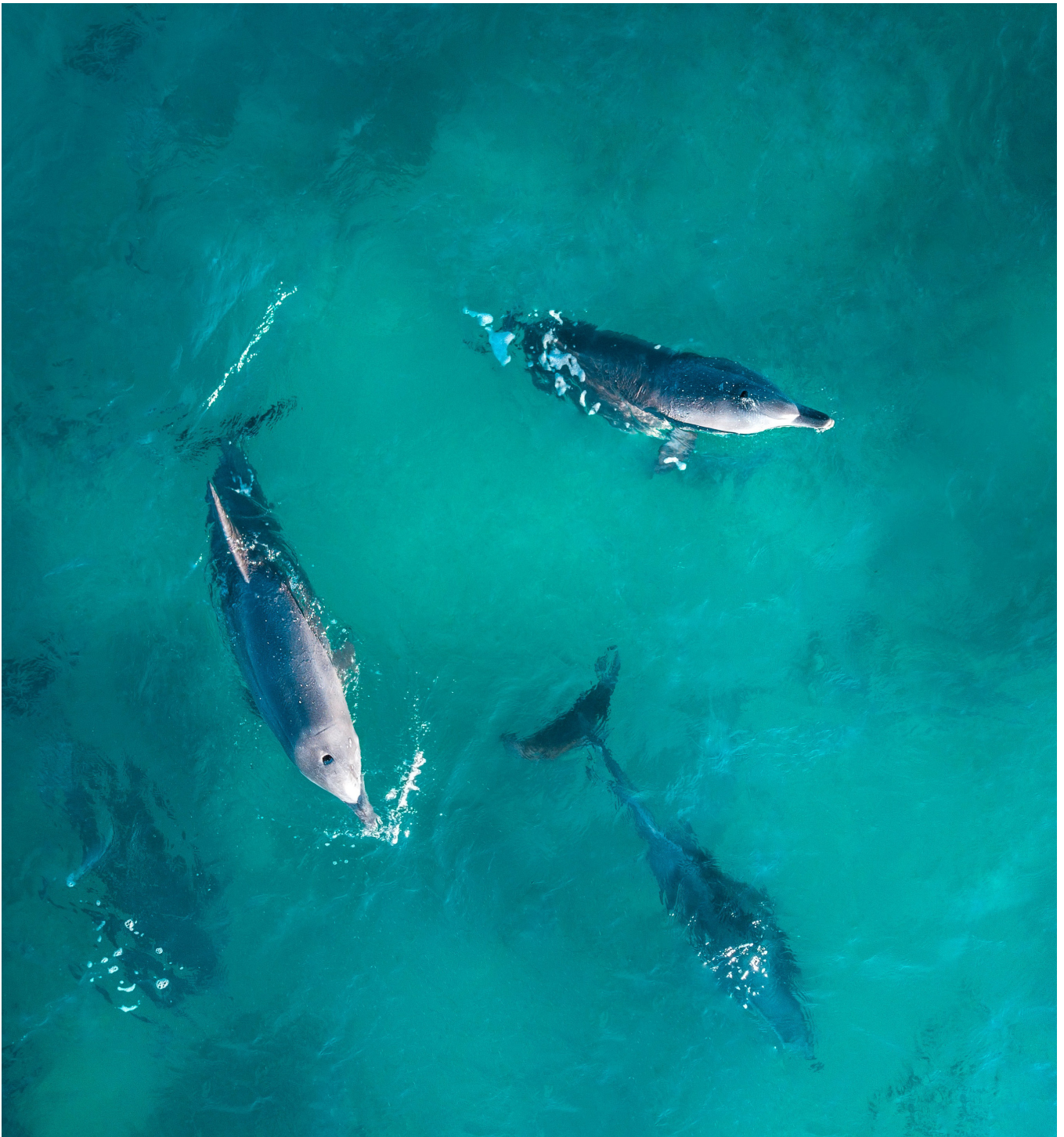
These sessions highlighted solutions for sustainable production and consumption, enabling policies and market transformation, as well as financing and multi-stakeholder actions. Collective and multi-stakeholder acceleration of key solutions were discussed on the last day during the Distinguished Panel Discussion. Session recordings, visual highlights and other resources are available at <https://sos2021.sea-circular.org>.

Time: (ICT)	Time: (ICT)	16 Nov (Tue)	17 Nov (Wed)	18 Nov (Thu)
09:30-10:10	10:30-11:10	<b>Opening Session</b> Welcome Opening Remarks	10:00-11:30 ICT 11:00-12:30 MYT	
10:10-10:30	11:10-11:30	<b>Keynote Address</b>	<b>Session 3:</b> Cities and urbanization towards less plastic leakage	<b>Session 6:</b> Sustainable financing for a waste-free future
10:30-11:30	11:30-12:30	<b>Soft Launch</b> Malaysia's National Marine Litter Policy and Action Plan 2021-2030		
11:30-13:00	12:30-14:00	Brand/transition to next session		
13:00-14:30	14:00-15:30	<b>Session 1:</b> A new wave of eco-friendly consumer society	<b>Session 4:</b> Plugging plastic leakage: Enabling extended producer responsibility through producer responsibility organizations	<b>Distinguished Panel Dialogue:</b> Accelerating solutions to reduce plastic waste
14:30-15:00	15:30-16:00	Brand/transition to next session		
15:00-16:30	16:00-17:30	<b>Session 2:</b> Innovations in sustainable packaging value chain	<b>Session 5:</b> Circular economy for less plastic wasted	<b>Closing Session:</b> <ul style="list-style-type: none"> <li>• Voices for Acceleration</li> <li>• Summary SoS2021</li> <li>• Key Message</li> <li>• Closing Remarks</li> </ul>

# Participation

SEA of Solutions 2021 had over 800 registered practitioners, scientists, government officials, representatives from civil society organizations, private sector, investors, entrepreneurs as well as development partners, and individuals connecting from seventy countries. Delegates gathered virtually to explore partnerships and share learnings from cutting edge science, innovation, and practical solutions, to reduce and prevent plastic pollution and leakage.

Collaboration and partnerships were unifying themes throughout the SEA of Solutions 2021. Voices from the Sessions, including delegates who contributed to the online Chat and Polls, not only highlighted the urgency for collective actions to get back on track and address marine litter and plastic pollution but shared rich, practical and day to day realities of inspiring initiatives that are already happening across Southeast Asia and around the world.





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# SESSION HIGHLIGHTS

# Opening Session

## SEA of Solutions 2021

OPENING

16 NOVEMBER 2021

### WELCOME

**MS. AISHAH SINCLAIR**  
HOST

**MS. SUSAN GARDNER**  
UNEP

AMBITIOUS, MEASURABLE & BOLD ACTIONS

PLAGUE OF PLASTIC

WE NOW HAVE THE TOOLS & INFORMATION TO SOLVE THIS CRISIS

### KEYNOTE

**H.E. DATO LIM JOCK HOI**  
ASSOCIATION OF SOUTHEAST ASIAN NATIONS

BRINGING TOGETHER KEY PLAYERS

CRITICAL ROLE OF CITIES TO EFFECTIVELY MANAGE WASTE

INNOVATIONS IN PLASTIC PACKAGING

HIGHLIGHT IMPORTANCE OF PUBLIC AWARENESS

SUSTAINABLE FINANCING

### LAUNCH

**NATIONAL MARINE LITTER POLICY & ACTION PLAN 2021-2030**

**MS. CHERYL RITA KAUR**, MIMA

THEMES

- STRENGTHEN EVIDENCE-BASE FOR INFORMED DECISION MAKING
- DEPLOY PRACTICAL ACTIONS IN PHASES

EXPECTED OUTCOMES

- STRENGTHENED NATIONAL PLANNING
- IDENTIFY NATIONAL INDICATORS
- YEAR ON YEAR INCREASE IN LOCAL MARINE LITTER
- DEPLOYMENT OF SOLUTIONS

### PANEL

**FROM POLICY TO PRACTICAL SOLUTIONS**

**MR. MAHESH PRADHAN**  
UNEP COBSEA

4 KEY COMPONENTS

- LAND-BASED SOURCES OF MARINE LITTER
- SEA-BASED SOURCES
- MONITORING & ASSESSMENT
- CREATING ENABLING CONDITIONS

**DR. VONG SOK**  
ASEAN

CONSISTENT POLICY DESIGN ACROSS LEVELS & SECTORS

PRACTICAL SOLUTIONS

CONTINUOUS IMPROVEMENT OF POLICY & ADAPTIVE LEARNING

**H.E. DATO SRI TUAN IBRAHIM BIN TUAN MAN**  
MALAYSIA

CHALLENGE OF MARINE GOVERNANCE

PLASTIC SUSTAINABILITY ROADMAP

**H.E. JON ÅSTRÖM GRÖNDÄHL**  
SWEDEN

SITE ZERO

WORLD'S LARGEST & MOST MODERN FACILITY FOR PLASTIC RECYCLING

WHOLE-OF-GOVERNMENT & WHOLE-OF-SOCIETY

**MS. DECHEN TSERING**  
UNEP

THE REGION IS A HOTSPOT OF PLASTIC LEAKAGE

SHARED RESPONSIBILITY IN EVERY STAKEHOLDER

WITHOUT COMMITMENT, WE WILL NEVER START. WITHOUT CONSISTENCY, WE WILL NEVER FINISH THIS COLLECTIVE TASK.

**MS. ANJALI ACHARYA**  
WORLD BANK

DEVELOP REGIONAL ACTION

PRIVATE SECTOR INNOVATION

COMMUNITY BASED ACTIONS

**MR. JAMALULAIL ABU BAKAR KASA**




THIS PAVES THE WAY FROM PLANNING TO IMPLEMENTATION

ADVOCATING FOR LIFESTYLE CHANGE



IMPORTANCE OF COMMITMENT & ASSISTANCE

### ACCELERATING SOLUTIONS TO REDUCE PLASTIC WASTE



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The Opening Session highlighted global, regional and national perspectives, strategies and successes in addressing the plastic crisis.

“Concerted and urgent efforts are needed globally to alter the situation and build a bluer and greener economy. Our ambition must be toward system-wide change and solutions across the entire plastic value chains, which are best addressed by rethinking how we make, use and dispose plastics taking into account their full life cycle”, Ms Susan Gardner, Director, Ecosystems Division, United Nations Environment Programme

“Our region – a place, which many of us here today call home, is also home to half of the world’s global plastics production and subsequently contribute to the largest pile up of marine plastic waste. Solutions to address plastic are available in the region. I would therefore like to commend the ASEAN for its leadership in addressing this challenge. I would also like to commend Malaysia, our host this year, and each and every ASEAN Member State for their commitment to this issue”, Dechen Tsering, Regional Director, United Nations Environment Programme in Asia and the Pacific



“Despite the unprecedented impacts of the COVID-19 pandemic, the region has demonstrated remarkable strength and resilience. The adoption of the ASEAN Comprehensive Recovery Framework (ACRF) and Implementation Plan last year reaffirms the region’s commitment towards a more sustainable and resilient future as part of our green recovery process. The ASEAN Leader’s Declaration on the Blue Economy that was recently endorsed at the 38th ASEAN Summit in October 2021, acknowledges oceans and seas as key drivers of economic growth and innovation”, H.E. Dato Lim Jock Hoi, Secretary General, Association of Southeast Asian Nations



“Sweden firmly believes that a global agreement on plastics is the most effective and comprehensive global response to combat marine plastic litter and microplastics. It is therefore imperative that a decision is taken at the second part of the 5th United Nations Environment Assembly in February 2022 to establish an intergovernmental negotiation committee for such an agreement”, H.E. Jon Aström Gröndahl, Swedish Ambassador to Thailand



“In Malaysia, we are implementing the Roadmap Towards Zero Single Use Plastic 2018-2030. This roadmap will be implemented alongside the Plastic Sustainability Roadmap 2021-2030, which will focus on the implementation of Extended Producer Responsibility and the circular economy concept. We are optimistic that the application of circular economy approach will be a game-changer and will boost the sustainable management of plastic and generation of new economic resource for the country”, Dato’ Sri Tuan Man, Minister of Environment and Water, Malaysia

This year’s SEA of Solutions marked the soft launch of Malaysia’s National Marine Litter Policy and Action Plan 2021-2030, strengthening the country’s commitment to address the significant issue of marine plastic litter. The Policy was devised through the support of UNEP’s SEA circular Project and the Government of Sweden. It is guided by five pillars, which provide clear direction on specific actions and activities. These are:

1. Policy development and implementation;
2. Deployment of technologies, innovation and capacity building;
3. Monitoring and data collection on marine litter;
4. Communication, Education and Public Awareness (CEPA), outreach and engagement; and
5. Adopting a whole-of-nation and multi-stakeholders’ approach in harmonizing cross-cutting objectives.

The Government of Malaysia, through its timely and effective implementation, aims to achieve the following outcomes:

- Strengthened national planning and enhanced regional coherence in national marine litter plan as a key building block in further policy reforms;
- Deployment of solutions including latest technology and standards to tackle marine plastic pollution, through a phased approach;
- Identify national indicators that illustrates the increased access to information in support of decision-making relevant to marine litter monitoring data and reporting, which shows effectiveness of technical facilitation, advice and capacity building efforts;
- Demonstrate effectiveness of the national action plan in applying a people-centric approach in delivering information to end users and implementation of actions;
- Year-on-year increase in local marine litter knowledge hub online content;
- Broadened engagement in addressing marine litter across all relevant stakeholder groups.

# Session 1: A new wave of eco-friendly consumer society

SEA of Solutions 2021  
SESSION 1: A NEW WAVE OF ECO-FRIENDLY CONSUMER SOCIETY  
16 NOVEMBER 2021  
MODERATED BY **RICO HIZON**

**INDUSTRY STRATEGIES**

**IDAN MA'AT**  
KL YOUNG DESIGNERS MALAYSIA  
**FASHION & SUSTAINABILITY**  
FABRIC FROM RECYCLED PLASTIC BOTTLES  
SLOW FASHION TREND  
LAUNCH A SUSTAINABLE COLLECTION  
THE GOAL: PROLONG THE ACTIVE LIFE OF THE GARMENT  
30 USES | 60 USES

**COMMUNITY & GOVERNMENT ENGAGEMENT STRATEGIES**

**DAVE ALBAO**  
PHILIPPINE REEF & RAINFOREST CONSERVATION FOUNDATION, INC.  
**WALA USIK (NOTHING IS WASTED) SARI-SARI STORE**  
SARI-SARI STORES THAT PROMOTE ZERO WASTE  
DESIGN IN CIRCULARITY AS THEIR DOMINANT SUPPLY CHAIN  
GO BACK TO USING LOCAL PACKAGING  
MAINSTREAM CIRCULAR ECONOMY ON GROUND

**YOUTH & DIGITAL TECHNOLOGIES**

**JASMIN IRISHA**  
CLIMATE & ENVIRONMENT CONSULTANT  
**ECO-CONSUMERISM**  
WHAT IS IT LIKE FOR YOUNG PEOPLE?  
92% OF YOUNG PEOPLE IN MALAYSIA BELIEVE THAT CLIMATE CHANGE IS A REAL THREAT  
YOUNG PEOPLE SHOULD HAVE A GREATER VOICE IN DECISION-MAKING  
IMPACTS OF THE CLIMATE CRISIS ON YOUNG PEOPLE: HEALTH, EDUCATION, CHILDREN'S RIGHTS

**JON CANNON**  
ACCOR ASIA  
**PLANET 21**  
**HOTEL & TOURISM**  
COMMITMENT TO SUSTAINABLE HOSPITALITY  
CONSUMERS ARE HOLDING US ACCOUNTABLE  
BOOK NOW!  
NO STRAWS  
NO SINGLE USE PLASTICS BYOB  
CONSUMER BEHAVIOUR IS CHANGING  
THE SOLUTION IS REUSE  
CHOICES SHOULD BE MORE DOMINANT & VISIBLE

**TIZA MAFIRA**  
PLASTIC BAG DIET MOVEMENT  
**PLASTIC BAG DIET MOVEMENT**  
PUSH FOR POLICY & REFORM ON SINGLE-USE PLASTICS  
LEGISLATION SHOULD BE BASED ON SUPPORT

**KAY VASEY**  
THE MESHMIND FOUNDATION  
**100 DAYS TO BEAT PLASTIC POLLUTION**  
4 AUGMENTED REALITY EXPERIENCES ON INSTAGRAM  
GO WHERE THE TOOLS ARE!!!  
SHARE IT WHERE YOU HANGOUT!  
MULTI DIRECTIONAL USE OF SMART PHONES  
DRIVE EMPATHY FOR THE IMPACT OF PLASTIC WASTE

coordinated by  
UN environment programme 50 1972-2022  
COBSEA COORDINATING BODY ON THE SEAS OF EAST ASIA  
SEA circular  
supported by  
Sweden Sverige  
co-hosted by  
Visual story by TOFU CREATIVES.COM

Sessions on Day 1 centered on sustainable consumption and production practices. The first session aimed at identifying effective strategies, including industry initiatives that help shape and address consumer demand, as well as advocacy initiatives that catalyze consumer awareness and action for more eco-friendly behaviour and lifestyles beyond the COVID-19 pandemic.

Consumers in Southeast Asia — a region home to the world's biggest plastic polluting nations — are worried about the plastic crisis, but lack action in changing behavior, according to a study by United Nations Environment Programme and Food Industry Association in 2019–2020. Although consumer desire to pursue greener lifestyles, driven by the COVID-19 pandemic, is starting to create ripples of change, even in a region where there are few affordable alternatives to disposable plastic products.

Companies are responding to the challenge of inspiring consumer action across different industries. To ensure behavioral change, language used to communicate with consumers must fit the local context. Sustainable alternatives to single-use plastic need to be more visible and accessible to consumers, particularly in cities built around convenience, and in online stores. That means finding and funding solutions that can be scaled to commercial level. Legislation, such as charges or bans on plastic bags, can significantly reduce plastic consumption. However, policies must ensure that solutions do not replace one disposable material with another. Policies should enable a shift to a genuinely circular model that enables an equitable transition, minimizing impact to industries and people who rely on plastic.

Plastic pollution has an outsized effect on young people, impacting health and education outcomes, according to a study by UNICEF. Young people, especially, should have a greater voice in decision-making around environmental management and pollution control as their future will be the most vulnerable against

polluted lands and oceans. To engage young people in environmental issues, policymakers and businesses could use creative ways to get messages across to tackle climate apathy, and instead drive empathy for the impact of plastic waste.

Key recommendations arising from the session include promoting sustainable choices for consumers through awareness-raising, sustainable alternatives, legislations and leveraging online campaigns for higher engagement.



# Session 2: Innovations in sustainable packaging value chain

**SEA of Solutions 2021**  
**SESSION 2: INNOVATIONS IN SUSTAINABLE PACKAGING VALUE CHAIN**  
 16 NOVEMBER 2021

**FIRESIDE CHAT 1**  
**RUBA NACKEERAN**  
 MODERATOR

**KIRSTEN VAN ZANDWIJK**  
 THE COCA-COLA COMPANY

How is COCA-COLA TRYING TO RAPIDLY SHIFT?  
 BUILD RECYCLING FACILITIES IN COUNTRIES  
 CLOSED LOOP BOTTLES  
 INCREASE COLLECTION & RECYCLING IN MARKETS  
 COMMUNICATING WHAT CONSUMERS CAN DO IN LABELS

**TANAH SULLIVAN**  
 GOJEK

INVESTING IN STRESS TESTS FOR PACKAGING OPTIONS  
 SCALE THESE OPTIONS FOR MERCHANTS & CUSTOMERS  
 NO SINGLE SOLUTION FOR THIS  
 WORK TOWARDS A FUTURE THAT'S BETTER THAN TODAY  
 COST-EFFECTIVE SUSTAINABLE HYGIENIC

**MARTYN TICKNER**  
 ALLIANCE TO END PLASTIC WASTE

COVER FULL VALUE CHAIN  
 'DO TANK'  
 PET BOTTLE SUCCESS  
 INCUBATION PLATFORMS  
 IMPORTANCE OF DESIGN  
 PRICE WILL FOLLOW QUALITY  
 HOW DO WE TRANSLATE THIS TO OTHER PLASTICS?

**DR. PETER NITSCHKE**  
 PLASTIC BANK

CREATE VALUE FOR PLASTICS  
 ENGAGE FAITH COMMUNITIES  
 BRING INVESTMENTS FROM GOVERNMENT & PRIVATE SECTOR  
 BRING PLASTIC IN THE CIRCULAR ECONOMY

**DR. VISU CHETTYAPAN**  
 ASIAN INSTITUTE OF TECHNOLOGY

COORDINATED APPROACHES OF STAKEHOLDERS  
 POLICY ALONE WILL NOT WORK  
 RISE OF EDIBLE PACKAGING  
 OPPORTUNITY FOR PLASTICS  
 PROVIDE A MENU FOR PACKAGING OPTIONS  
 MATERIAL BUSINESS TECHNOLOGICAL INNOVATION

**MATTIAS PHILIPSSON**  
 SVENSK PLASTÅTERVINNING

COLLECT AND RECYCLE ALL PLASTIC FROM SWEDISH HOUSEHOLDS  
 RECYCLING WITHOUT CLIMATE IMPACTS

**OLI KADE**  
 SEVEN CLEAN SEAS

FRUITFUL REDUCTION OPPORTUNITIES  
 WHAT IS TRUE RECYCLABILITY?  
 ECONOMIC TOOLS  
 TAXES  
 SUBSIDIES  
 EPR SCHEMES

**THE FUTURE IS CIRCULAR**

coordinated by: UN environment programme, COBSEA, SEA circular  
 supported by: Sweden, Sverige  
 co-hosted by: [Government of Malaysia Logo]  
 Visual story by: TOFU CREATIVES.COM

Session 2 on innovations in sustainable packaging value chain aimed to underscore the scale of the risks and challenges of single-use plastic production and consumption; as well as challenges and opportunities for innovations in the plastic value chain to enable advances in rethinking packaging and material recyclability.

The first part of the session discussed the challenges in creating packaging that is cost-effective, sustainable to produce, and friendlier to the environment. The COVID-19 pandemic arguably countered progress made in sustainable practices as hygiene became a priority, driving up packaging needs.

Firms that provide food delivery are challenged with finding solutions that will not hurt the bottom line of small-to-medium enterprises, which cannot afford the same flexibility as larger brands to experiment with new packaging options.

Innovations in the packaging value chain also require greater partnership between the government, private sector, and start-ups who need financial backing to test products and bring them to scale. A supportive waste management infrastructure, which developing Southeast Asia lacks often, needs to back government policies. One solution is ensuring that there is an enabling policy that will allow for recycled packaging to be used for consumables.

The end-of-life must be a key consideration for any innovation. This might require bringing in recyclers and waste management firms to consult on the design of packaging to ensure that a potential plastic 'solution' does not eventually become a problem to recycle. Big brands could consider joint ventures with recycling facilities, for instance.

The second part of the discussion focused on what is technically recyclable and what is feasible, particularly in parts of Southeast Asia where the corresponding infrastructure to recycle plastic is minimal. Taxes and subsidies that reward brands using standardized, easily

recyclable plastic, Extended Producer Responsibility (EPR) schemes that ensure strong representation of the informal sector, and plastic credits are some of the potential financial solutions that may help to drive down plastic waste and the cost of processing plastic.

Another solution is the simplification of packaging design replacing the complex one such as multi-material laminates, which require complex, highly engineered solutions. The role of sorting technology is also crucial

as it is a fundamental component of future waste management. Mandatory reporting on packaging, much like that required of carbon emissions reporting, could also bring a layer of transparency to company usage and how they are tackling reducing waste.

Finally, countries must be disincentivized from exporting their waste to developing countries that do not have the capability to process the plastic, which contributes to pollution and leakage into waterways and the ocean.



# Session 3: Cities and urbanization towards less plastic leakage

17 NOVEMBER 2021

## SEA of Solutions 2021

### SESSION 3: CITIES AND URBANIZATION TOWARDS LESS PLASTIC LEAKAGE

**VOLTAIRE ACOSTA**  
UN-HABITAT, MODERATOR

#### INTERNATIONAL FRAMEWORK

**JUST DITKRIST**  
SECRETARIAT OF THE BASEL CONVENTION

- DEVELOPMENT OF CIRCULAR MODELS
- NEED FOR ACCURATE DATA
- PREVENTION IS BETTER THAN GENERATION
- CITIES OFTEN LEAD THE WAY IN WASTE MANAGEMENT
- PLASTIC WASTE INVENTORY TOOLKIT
- INCENTIVE-BASED COLLECTION SCHEME IN GHANA

#### GOVERNMENT/TAX REBATE

**ANTHONY TAN KEE HUAT**  
GREEN CITY TASK FORCE, PETALING JAYA, MALAYSIA

- REBATE SCHEME
- RETROFITTING & BEHAVIOUR CHANGE
- STAKEHOLDER CONSULTATIONS & ENGAGEMENT
- WHOLE-OF-NATION APPROACH
- INVOLVE UNIVERSITIES & YOUTH FOR RESEARCH
- INCLUSIVE

#### LOCAL GOVERNMENT ACTIONS

**MAYOR RICHARD GOMEZ**  
ORMOC CITY, PHILIPPINES

- CHALLENGES: LOCKDOWNS (DELIVERIES), SOLID WASTE VIOLATORS
- STRATEGIES: YOUTH EMPOWERMENT, USING BRIDGES FOR TRASH TRAPS
- IEC INFORMATION & EDUCATION CAMPAIGNS
- CAPACITY-BUILDING OF COMMUNITY CHAMPIONS
- CLEAN CITY GREEN CITY

#### RIVERINE PLASTIC LEAKAGE

**DR. SO NAM**  
MEKONG RIVER COMMISSION

- PLASTIC ACCUMULATION & LEAKAGE
- RICH IN BIODIVERSITY
- SUPPORTING 70 MILLION PEOPLE
- BASELINE DATA FOR INFORMED DECISION-MAKING
- MRC RIVERINE PLASTIC MONITORING PROGRAMME
- REGIONAL COOPERATION
- BUILDING CAPACITY FRAMEWORKS
- The Mekong River belongs to everyone. IT IS OUR COLLECTIVE RESPONSIBILITY TO CONSERVE IT.

#### INDUSTRY/CORPORATE ACTION

**DATO ADNAN PAWANTER**  
NESTLÉ (MALAYSIA) BERHAD

- GLOBAL 2025 COMMITMENTS TO PACKAGING
- REDUCE USAGE OF PLASTIC BY 1/3
- 100% RECYCLABLE OR REUSABLE PACKAGING
- ACHIEVE PLASTIC NEUTRALITY
- KEY SUCCESS FACTORS: JOINT PLANNING, ENGAGEMENT & EDUCATION, MONITORING & REPORTING, COLLECTION & PROCESSING

#### PORT AUTHORITIES

**CZARINA CONSTANTINO-PANOPID**  
WWF-PHILIPPINES

- CLEAN PORTS, CLEAN OCEANS
- AIMING FOR 50% REDUCTION IN PLASTIC LEAKAGE IN 3 PORTS
- PUSH FOR SCIENCE-BASED SOLUTIONS
- CROSS-SECTORAL INVOLVEMENT

#### INFORMAL WASTE SECTOR

**HARSHAD BARDE**  
SWACHH PUNE COOPERATIVE, INDIA

- WASTE-PICKERS COOPERATIVE
- 10,000 REGISTERED PICKERS
- PMC'S RESPONSIBILITIES: SAFE WORKING SPACES, ADMIN, SOCIAL WELFARE SYSTEMS, SORTING SHEDS
- CONSIDER LONG-TERM SUSTAINABILITY OF INITIATIVES

coordinated by

1972-2022

COORDINATING BODY ON THE SEAS OF EAST ASIA

supported by

co-hosted by

Visual story by

On Day 2, sessions were focused on enabling policies and market transformation. From the purview of different local actors, this session aimed to feature city-led initiatives to prevent plastic pollution, identify challenges and success factors for implementation and replication, and explore new opportunities to share lessons learned, leverage resources and create partnerships for local action.

Cities, and the rivers that run through them, account for 60% of marine debris globally. As the populations grow, municipal authorities in Asia are becoming overburdened by waste – a problem exacerbated by the COVID-19 pandemic and the uptick in personal protective equipment such as masks and gloves. Cities are also where solutions to plastic waste are created and scaled, and where policies such as the Basel Convention, the only international law for controlling transboundary movement of plastic waste, succeed or fail, as their ports are hubs for the global trade in waste.

Asia is home to eight of the 10 most plastic-polluted rivers, including the biodiverse Mekong, which supports 70 million people’s livelihoods. Collecting accurate data at scale to measure the impact of plastic pollution is needed to address knowledge gaps and find the right solutions, but regional cooperation and capacity shortfalls are key challenges.

Public-private partnerships can be a powerful solution to stop waste at source with several initiatives showcased during the session. In Petaling Jaya, Malaysia, a successful pilot project was showcased during the session. In this pilot project a novel approach was introduced, households participating in the separation of recyclables at source were incentivized by a lower property assessment tax. The private sector led by firms supporting the formation of producer responsibility organization called MAREA (Malaysian Recycling Alliance) led the way in this successful public-private partnership effort.

Integrating informal workers into the waste management system helps keep the Indian city of Pune clean. Door-to-door waste pickers are registered, equipped and



trained to collect, sort, transport, and process waste. The community that is traditionally known as vulnerable, unorganized is now provided with access to social security support and other incentives. Pune at present has one of the highest recycling rates in India.

In Ormoc, a port city in the Philippine province of Leyte, the municipal government uses trash traps on bridges to collect river debris and litter is upcycled into eco-bricks or sent to Taiwan for recycling. The city involves community 'champions' to enforce a ban on single use

plastic and littering, with enforcers gaining a share of public funds from littering fines. The city engages and empowers young people to be 'future eco-warriors' with social media campaigns.

In summary, key solutions featured include the effective implementation of policies and legal frameworks, adequate financing and incentivizing systems, increased technical capacity and comprehensive data-gathering, stakeholder awareness and public-private partnerships.



# Session 4: Plugging plastic leakage: Enabling extended producer responsibility through producer responsibility organizations

## SEA of Solutions 2021

SESSION 4: PLUGGING PLASTIC LEAKAGE: ENABLING EXTENDED PRODUCER RESPONSIBILITY THROUGH PLASTIC RECYCLING ORGANIZATIONS

17 NOVEMBER 2021

MODERATED BY  
**RICO HIZON**  
CNN PHILIPPINES

**PAULINE GOH** (MAREA): TO COLLECT 25% OF POST CONSUMER PACKAGING WASTE OF ITS MEMBERS BY 2025. Key messages: COLLECTION IS CRITICAL TO ACHIEVE PLASTIC CIRCULARITY; POLICY IS CRITICAL; BRING EPR CONCEPTS IN SCHOOLS & HOMES.

**JAZLYN LEE** (WWF PHILIPPINES): NO PLASTICS IN NATURE BY 2030. Key messages: TAP INTO EXISTING RESOURCES; EXPAND COLLECTION RATE OF LOW VALUE PACKAGING; EPR POLICIES ARE IN DIFFERENT STAGES & LEVELS OF ENGAGEMENT IN THE REGION; START WORKING WITH FINANCIAL INSTITUTIONS & INVESTORS.

**JOSEPHINE TAN** (PENANG GREEN COUNCIL): THE INFORMAL SECTOR MOST NEGLECTED PARTIES. Key messages: THEIR ABILITY TO RECYCLE IS VITAL; BUILD FACILITIES; HIRE THEM IN THE FACILITIES; ENGAGE WITH THE INFORMAL SECTOR.

**KARYANTO WIBOWO** (PRAISE): HOW DO WE ESTABLISH A 10-YEAR ROADMAP TO REDUCE PLASTIC WASTE BY 30%? Key messages: THINK UPSTREAM; PUSH FOR INNOVATION; EDUCATION & DIALOGUE WITH GOVERNMENT & STAKEHOLDERS; FOCUS ON PRODUCERS, FOOD SERVICES, RETAILERS; EPR IS A COMPREHENSIVE APPROACH.

**LAURENT LEVAN** (UNIVERSAL ROBINA CORPORATION): IT'S NOT BUSINESS AS USUAL ANYMORE! Key messages: GROW CAPABILITIES TO ACT; SEE COLLECTIVE ACTIONS TO ADDRESS PACKAGING WASTE; COLLECTIVE EFFORTS TO CREATE MORE IMPACT; ENFORCEMENT BY GOVERNMENT IS CRUCIAL.

coordinated by: UN environment programme 50 1972-2022; COBSEA COORDINATING BODY ON THE SEAS OF EAST ASIA; SEA circular; supported by: Sweden Sverige; co-hosted by: ALP SEA-TAN 2021-2022; Visual story by TOFU CREATIVES.COM

This session addressed effective strategies for implementing Extended Producer Responsibility (EPR) frameworks that include Producer Responsibility Organizations (PROs) to scale-up and engage more actors in the plastic value chain in ending plastic leakage into the environment.

The efforts of PROs led by companies were a key focus in the first part of the session. Multinational corporations (MNCs) such as Unilever and Tetrapak are collaborating to improve the post-consumer packaging waste landscape by working with government agencies to formulate comprehensive EPR policies. Malaysian Recycling Alliance Berhad (MAREA) aims to support the Malaysian government's target to implement a mandatory EPR system by 2026 and collect 25% of their members' recycled waste by 2025.

While cross-industry collaboration is important to advance EPR schemes, panelists acknowledged that a key challenge lies in integrating small-to-medium sized enterprises (SMEs) in the EPR ecosystem. One solution is for MNCs to mentor SMEs on best practices of PROs and guide them to implement feasible targets that limit plastic leakage. Another challenge is that EPR participation is currently voluntary, and would become mandatory in Southeast Asia in the coming years as panelists suggested. Singapore and Vietnam are spearheading such efforts.

Education is key as the concept of EPR is still in its infancy. Awareness must be raised among SMEs by creating the right value proposition to achieve buy-in. Secondly, households must be informed how to segregate their recyclable waste properly to boost collection and recycling rates. Lastly, schools must educate students on the role they can play in driving circularity in the

plastic value chain. It also vital to empower and protect the informal sector to achieve higher recycling rates in Southeast Asia.

Panelists agreed that a comprehensive EPR scheme is one that includes the informal sector, local

manufacturers and importers. Also, to ensure that the scheme is effective, it must move beyond collection and recycling to including upstream solutions for sustainable packaging. Policies, education and dialogue with stakeholders will be necessary to drive progress on this front.



# Session 5: Circular economy for less plastic wasted

## SEA of Solutions 2021

### SESSION 5: CIRCULAR ECONOMY FOR LESS PLASTIC WASTED

#### KEYNOTE

**AMBROGIO MISEROCCHI**  
ELLEN MACARTHUR FOUNDATION

#### KEY LEARNINGS

- 1 VIRGIN PLASTIC USE APPEARS TO HAVE PEAKED**  
(SET TO FALL FASTER BY 2025)
- 2 RECYCLING IS NOT ENOUGH**  
FOCUS ON URGENTLY ELIMINATING SINGLE-USE PACKAGING
- 3 VOLUNTARY INITIATIVES ALONE WILL NOT BE ENOUGH**  
EXTENDED PRODUCER RESPONSIBILITY IS NECESSARY

COMPREHENSIVE POLICY FRAMEWORK

#### PANEL

**ELISA TONDA**  
UNEP  
MODERATOR

**A CIRCULAR ECONOMY IS LESS NO PLASTIC WASTED**

**MINDSET SHIFT BEYOND RECYCLING**  
ELIMINATE INNOVATE (REUSE MODELS) CIRCULATE

**WORLD'S FIRST PLASTIC NEUTRAL BUILDING**  
R&D INVESTMENT FOR A LOW-CARBON BUILT ENVIRONMENT

**ESTHER AN**  
CITY DEVELOPMENTS LIMITED

**MINDSET ACTION IMPACT**

**BARAK EKSHTEIN**  
TONTOTON

**TACKLING NON-RECYCLABLE PLASTIC WASTES**  
COLLECTION OF NON-RECYCLABLES  
CERTIFIED SOLUTION  
VALORIZE PLASTIC WASTE COLLECTED  
COLLABORATE WITH LOCAL COMMUNITIES

**SEAH KIAN HOE**  
HENG HIAP (HHL)

**PROBLEM OF FRAGMENTED PROCESSES**  
WE INTEGRATED THE RECYCLING PROCESSES

**DR. CHINDARAT TAYLOR**  
SOLID WASTE MANAGEMENT ASSOCIATION OF THAILAND

**SOLUTIONS MUST BE MARKET-LED & FINANCIALLY VIABLE**  
PRIVATE SECTOR - KEY ROLE IN PLASTIC TRANSFORMATION  
WE NEED TO ADDRESS THE IMPLEMENTATION GAP

**SALISA TRAIPIPITSIRIWAT**  
ENVIRONMENTAL JUSTICE FOUNDATION

**BUY WASTE FISHING GEAR FROM THE COMMUNITIES**  
TRANSFORM ABANDONED FISHING GEAR INTO LIFESTYLE PRODUCTS  
RAISED \$6,000 FOR COMMUNITIES

coordinated by

supported by

co-hosted by

Visual story by TOFU CREATIVES.COM

**Recycling is not enough to solve plastic pollution; more focus is needed on eliminating single-use pollution. In six out of 10 countries in Southeast Asia, over half of plastic waste is not collected, which contributes to illegal dumpsites and soil and water pollution.**

This session showcased innovative business models for plastic circularity and removing ocean-bound waste, repurposing it to let plastic products remain in the economy at the highest economic value for as long as possible.

Singapore is facing a trash crisis as its sole landfill is slated to run-out of space by 2035. In a bid to tackle its largest waste stream - plastic - a building developer is incorporating waste management solutions to encourage behavioral change among its tenants. One example is twin chutes to motivate tenants to sort waste. Other waste solutions include using eco-digesters to create compost from food waste. A blend of plastic waste has been repurposed to create building material for non-structural applications. Plastic credits are also being used to create plastic neutral buildings.

Other solutions tackle marine plastic pollution by collecting ghost fishing gear, which represents roughly 10% of the total debris found in the ocean. Discarded nets are paid for and repurposed into lifestyle products.

Not all plastic can be recycled. Other business models focus on the collection of orphan ocean-bound post-consumer plastic waste, which have been abandoned, mismanaged and with low-value, clinging to coastlines and harming marine life. Communities, informal waste-pickers are incentivized to collect this seemingly useless plastic through payment, the provision of protective equipment and basic health insurance. 'Plastic neutralization' programmes in Vietnam use difficult to recycle plastic waste to produce an alternative fuel for the cement kilns, replacing part of the fossil fuel required for the process.

In order to further drive plastic circularity, collaboration between government and private sector will be necessary. Companies with innovative business models can help close the loop of plastic pollution, and policy frameworks will be vital in facilitating wider transition from linear to circular economy models.

# Session 6: Sustainable financing for a waste-free future

**SEA of Solutions 2021** 18 NOVEMBER 2021

**SESSION 6: SUSTAINABLE FINANCING FOR A WASTE-FREE FUTURE** MODERATED BY **GITA SABHARWAL**

**INA BALLIK** (YUNUS ENVIRONMENTAL HUB)  
 WE HAVE TO LEARN FROM THE PAST.  
 LOOK AT EMERGING TRENDS & STAKEHOLDERS  
 BRING TO THE TABLE THE IMF  
 REFOCUS ON HUMAN RIGHTS  
 SHIFT TO INVESTING ON HUMANS

**STEVE HARDMAN** (PLASTIC COLLECTIVE)  
 1 TONNE  
 TRANSFERABLE UNITS REPRESENTING A SPECIFIC QUANTITY OF PLASTICS THAT WAS PREVENTED FROM ENTERING THE ENVIRONMENT  
 PLASTIC CREDIT SYSTEM  
 DRIVE FUNDS TOWARDS CIRCULAR INFRASTRUCTURE  
 PLASTIC WASTE COLLECTION  
 NEW RECYCLING VENTURES  
 SUPPORT LOCAL ECONOMY  
 PROVIDE LIVING WAGES TO WASTE PICKERS

**DR. THERESA MUNDITA LIM** (ASEAN CENTRE FOR BIODIVERSITY)  
 SUSTAINABLE FINANCE  
 PROTECTED AREAS MANAGEMENT PLAN  
 INTEGRATE SUSTAINABLE FINANCE INTO MANAGEMENT PLANS OF PROTECTED AREAS  
 CROWDFUNDING  
 SUPPORT THE VALUATION OF ECOSYSTEM SERVICES  
 "GREEN" BOND

**LUANNE SIEH** (CIMB GROUP)  
 ACCELERATE FINANCIAL REGULATIONS ACROSS ALL BANKS  
 SECTOR POLICY FOR BIG COMPANIES  
 BLENDED FINANCIAL OPPORTUNITIES

coordinated by: UN environment programme, 50 1972-2022, COBSEA (COORDINATING BODY ON THE SEAS OF EAST ASIA), SEA circular (SEA CIRCULAR INITIATIVE)

supported by: Sweden Sverige

co-hosted by: ASEAN SECRETARIAT

Visual story by TOFU CREATIVES.COM

This session showcased different funding sources and mechanisms available to different stakeholders in South-East Asia with a focus on sustainable, inclusive, and transformative finance mechanisms. The session brought together perspectives from a range of organizations working with businesses, governments, and communities.

Mobilizing investments is key in transforming markets and societies towards a waste-free future by boosting the economic value of waste materials and de-risking investment in circular innovation. Innovative financing calls for a combination of public and private mechanisms, from large-scale grants and loans by multilateral development banks, private sector incubators for innovative business models, plastic credit schemes to catalyze change, to microfinancing for community-based action. Plastic accounting for neutrality and credit schemes are evolving and taking shape very quickly, getting this right for all relevant stakeholders, achieving a harmonized approach will further support efforts to achieve circularity.

The concept of credits is now moving beyond emissions

to one of the most pressing forms of pollution: plastic. While the idea of buying and selling plastic pollution credits is gaining traction, no harmonized standards, as instituted for carbon credits in the 1997 Kyoto Protocol, currently exist for these schemes.

During this session, experts agreed on increasing need to review and introduce financial mechanisms that will underpin the plastic credit market. Public-private partnerships and blended finance could help back circular economy innovation and reduce the risk for investors. Private backing of projects will increase viability and facilitate the adoption of plastic waste collection and recycling initiatives.

Banks and multilaterals must be part of the solution. Financial institutions in the region are starting to look at environmental sources of risks while deciding which loans to approve. They are scrutinizing what clients are doing to ensure a higher level of accountability. Sustainability-linked bonds, a relatively new kind of instrument that carry no restrictions on how proceeds are used, are seen as useful for galvanizing green finance.

A lack of capital is a significant barrier to creating a profitable plastics recycling market in emerging

economies. Projects that are smaller in scale, in remote locations such as smaller islands, further suffer from inadequate financing which prevents them from overcoming the 'tyranny of distance'. These projects are often carried out in remote locations, and the logistics and transport costs involved in getting plastic waste to central recycling facilities in urban markets are proving too costly. Companies and brands interested in purchasing credit offsets should consider providing upfront capital to better support rural and peri-urban waste management initiatives.

Initiatives to come up with new standards and guidelines for plastic credit schemes should also build on the lessons learnt from carbon offsets. It is crucial to prevent greenwashing. Companies should credibly and transparently quantify and report on their plastic

footprints. Panelists at this session sounded a note of caution on solely relying on having new plastic credit schemes arguing that this method could undermine national policies to come up with other complementary strong mitigation efforts. The speakers also cautioned that simply 'piggyback' on existing carbon trading mechanisms may not be wise, the plastic credit schemes need to be closely looked at to ensure lessons learned from the experience gained from carbon credit schemes are taken on board to arrive at a plastic credit scheme that will benefit all stakeholders, including the informal sector. Having a social component on the scheme is crucial. Waste collectors and local communities should be paid and treated fairly. There is a need to reframe the narrative around plastic credits and make sure that people are at the centre of the conversation.



# Distinguished Panel Dialogue: Accelerating solutions to reduce plastic waste

**SEA of Solutions 2021** 18 NOVEMBER 2021

**DISTINGUISHED PANEL DIALOGUE: ACCELERATING SOLUTIONS TO REDUCE PLASTIC WASTE**

**MODERATED BY JESSICA CHEAM**  
ECO-BUSINESS

**DATO' JANA SANTHIRAN MUNIAYAN**  
MINISTRY OF ENVIRONMENT & WATER, MALAYSIA

**SOME LOW HANGING FRUITS**

- MATCH ASPIRATIONS WITH CONCRETE ACTIONS ON GROUND
- NATIONAL POLICIES SHOULD BE CASCADED DOWN TO THE LOCAL
- IMPOSE MINIMAL CHARGE ON SINGLE USE PLASTICS
- PREVENT PLASTIC LEAKAGE
- BAN ALL PLASTICS
- CREATE AWARENESS AT ALL LEVELS

**MS. AMY FRAENKEL**  
CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS

**MIGRATORY SPECIES MOST VULNERABLE TO PLASTIC POLLUTION**

**NEED:**

- MORE RESEARCH ON IMPACT OF PLASTIC WASTE TO TERRESTRIAL SPECIES
- CHANGE THE WAY WE USE PLASTICS

EVOLUTION OF PLASTIC FROM A GOOD TO A POLLUTANT

**MS. TESSA GOVERSE**  
UNITED NATIONS ENVIRONMENT PROGRAMME

**RECOGNIZE THAT MARINE LITTER & PLASTIC POLLUTION IS A TRANSBOUNDARY ISSUE**

**STOP THE LEAKAGE TO THE ENVIRONMENT**

**CHANGE THE BUSINESS MODEL**

ENGAGE WITH CONSUMERS

**MR. YUTAKA MATSUZAWA**  
MINISTRY OF ENVIRONMENT, JAPAN

**REGIONAL & GLOBAL CONTRIBUTIONS OF JAPAN**

- CIRCULAR PRODUCT DESIGN
- ESTABLISHED NEW LAW ON PLASTIC SEGREGATION
- G20 REPORT ON ACTIONS AGAINST MARINE PLASTIC LITTER
- JAPAN PARTNERSHIP FOR CIRCULAR ECONOMY
- GOOD PRACTICES FOR REDUCING MICROPLASTICS

**DR. ROLPH PAYET**  
SECRETARIAT OF THE BASEL, ROTTERDAM AND STOCKHOLM CONVENTIONS

**BASEL ROTTERDAM STOCKHOLM CONVENTION**

- CREATION OF PLASTIC WASTE PARTNERSHIP
- WORKING WITH CSOs & PRIVATE SECTOR
- FREE MOOC
- AVAILABLE IN NATIONAL LANGUAGES
- THEY ARE ALSO PART OF THE SOLUTION

**MR. NOVRIZAL TAHAR**  
MINISTRY OF ENVIRONMENT & FORESTS, INDONESIA

- IMPROVE CAPACITY OF LOCAL GOVERNMENT
- ENHANCE PRODUCER RESPONSIBILITY
- INCREASE PUBLIC AWARENESS
- BUILD INTERNATIONAL COOPERATION

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Visual story by

Reducing global plastic pollution is one of the greatest challenges facing the planet. Solutions exist; however, actions must be accelerated. Government, business, consumers and communities are stepping up. Collective efforts can address the million tonnes of plastic wastes that end up in our oceans and waterways each, which negative impact on natural ecosystems, economies, people's livelihoods and health.

Panelists agreed on urgent action to tackle the plastic crisis in order to avoid grave consequences in the future. Plastic pollution is not only an environmental issue. It is a health and economic burden that is disproportionately affecting underprivileged communities, not only in coastal areas but in landlocked countries too. The issue is so complex and broad in scope that it requires multi-

stakeholder efforts and solutions, experts said.

A global agreement on plastic, to be delivered by the United Nations and the Ellen MacArthur Foundation next year, and amendments to the Basel Convention to include the transboundary movement of plastic debris, have not come soon enough to address an issue that requires more research into the impacts of plastic waste. Awareness of plastic pollution is high, but effects to combat it have largely focused on the ocean, not on land. The impact on migratory sea species such as sharks, dolphins, turtles and whales are well documented, but more work is needed to understand the effects of plastic on land-based animals — including people.

Southeast Asian governments are taking measures to tackle plastic pollution, such as Malaysia's National Marine Debris Policy and Action Plan 2021-2030, and Indonesia's plan to be plastic-pollution free by 2040, with new ways to engage the private sector. Extended

Producer Schemes will soon be enacted, but more data is needed to understand what works in different contexts to help businesses adopt circular processes, sustainable materials, and products that are reusable or recyclable.

While momentum is growing, more needs to be done. Educating consumers to help them make better choices

through responsible labelling systems, will give them the opportunity to choose more sustainable packaging options.

The discussion echoed multi-stakeholder cooperation and collective action at all levels from global, regional and national to tackle the plastic challenge.





# Summary and Closing Session

## SEA of Solutions 2021

CLOSING

**DATO' MANSOR BIN HAJI OTHMAN**  
MINISTRY OF ENVIRONMENT & WATER, MALAYSIA

### 10 ACCELERATION SOLUTIONS

- 1 ENHANCE COLLECTIVE RESPONSIBILITY
- 2 MOBILIZE IMPACT INVESTMENTS
- 3 LEVERAGE ON PARTNERSHIPS
- 4 ACT FOR NATURE
- 5 ENGAGE COMMUNITIES & YOUTH CHANGEMAKERS
- 6 CIRCULARITY
- 7 SCIENCE, DATA & POLICY
- 8 EDUCATION, SHARING & COMMUNICATING
- 9 EMBRACE INNOVATION
- 10 CITIES ARE SOLUTION LEADERS

18 NOVEMBER 2021

**MS. HELEN ÅGREN**  
AMBASSADOR FOR THE OCEAN,  
SWEDEN

**MS. ISABELLE LOUIS**  
DEPUTY REGIONAL DIRECTOR  
UNEP

MAINTAIN OUR FOCUS & MOMENTUM

DIGITAL TRANSFORMATION

OUTREACH & AWARENESS

INNOVATIONS & PARTNERSHIPS

2021 WILL WORK TO STEP FORWARD THE AMBITIONS & BEST PRACTICES

THE PLASTICS CRISIS AFFECTS A BROAD RANGE OF HUMAN RIGHTS

IN 2 YEARS, MOST TECHNICAL PROBLEMS WERE SOLVED

PIONEERING THE IMPOSSIBLE

SITE ZERO




GLOBAL AGREEMENT ON PLASTICS MUST CONSIDER THE WHOLE LIFE CYCLE

DEMONSTRATE WHAT IS POSSIBLE

THERE IS A SEA OF SOLUTIONS TO TURN THE TIDE ON PLASTICS



**AISHAH SINCLAIR**  
MODERATOR

coordinated by






COORDINATING BODY ON THE SEAS OF EAST ASIA

supported by

co-hosted by



Visual story by TOFU-CREATIVES.COM

In summary, 10 Acceleration Solutions were identified during the SEA of Solutions 2021, which set the benchmark for stepping up collective actions. These solutions were identified through in-depth and constructive dialogues during the three-day programme, echoing the urgent call of the UN Environment Assembly for “more action, more cooperation, more finance and more ambition and more sustained commitment”.

## 1

**Enhancing collective responsibility.** To overcome the plastic crisis we are in, experts across private and public sectors appealed for stepping-up in ambition and moving to circular culture from a linear and disposable

one. Clear road maps for commitments are reflected in actions plans developed by countries in order to guide management measures in tackling plastic issues. We heard testimonies from across the region that success can be achieved when communities, governments and the informal economy are engaged to work together.

## 2

**Mobilizing impact investments.** Mobilizing investment is key to addressing the huge financial gap for the solutions required to help solve the plastic crisis amid the COVID-19 recovery and beyond. Public-private partnerships and blended finance can help boost and de-risk investment in circular innovation. Moreover, the engagement of the private sector and multilaterals need to go beyond direct funding and encompass a broader range of interventions to mobilize investments, particularly in small-to-medium enterprises.

---

3

**Leveraging partnerships.** Partnerships, transboundary cooperation, best practice examples and knowledge exchange are enabling and supporting collective actions to test, innovate and demonstrate effective solutions. Producer Responsibility Organizations (PROs) play a part in connecting actors along the value chain and filling up gaps in waste management infrastructure. New solutions led by partnerships are overcoming barriers to enable technical, operational, financial and business model solutions. Partnerships and collaborations can lead to scaling up and acceleration of solutions.

---

4

**Acting for nature.** Nature-based solutions play an important role in addressing climate change and building resilient societies and communities. Investments for nature-based solutions should also integrate plastic waste reduction and community-based solutions, which eventually will be the key in meeting global biodiversity, climate, food security, and COVID-19 recovery challenges. There is also an increasing need to review financial practices to bring security to the plastic credit market and simultaneously, de-risk circular economy investments to make them more viable and accessible for local projects, regardless of scale, to take off.

---

5

**Engaging with communities and youth.** To fight plastic pollution, inclusive partnership of youths and members of society along with informal sectors and vulnerable members of the community is necessary. Young people, especially, should have greater voice in decision-making on environmental management and pollution control, as their future will be the most vulnerable by polluted lands and oceans. To engage young people in environmental issues, policymakers and businesses could use creative ways to get messages across to tackle climate apathy, and instead drive empathy for the impact of plastic waste. Greater visibility of the Youth Heroes in the Asia-Pacific region is needed.

---

6

**Functional circular solutions.** Sustainable alternatives to single-use plastic should be more visible, accessible and affordable; and policymakers need to be mindful that solutions are genuinely circular which do not replace one disposable material with another. Repurposing plastic destined for landfill is being deployed across a range of industries.

---

7

**Enabling policy.** Government policies can both incentivize behavioral change and also penalize harmful environmental actions to drive down plastic consumption. Extended Producer Responsibility schemes, although still in the early stages in Southeast Asia, are considered crucial and necessary part of the solution to packaging waste and pollution. Regulation is critical as enforcement will be difficult while schemes remain voluntary. It was echoed across the sessions that recycling is not enough to solve plastic pollution, focus is needed on eliminating single-use packaging.

---

8

**Education, sharing and clear communication.** Policy is important but education is key. To catalyze behavioral change, language used to communicate to consumers must resonate with the local context. Greater efforts should also be made to communicate messages about the risks of plastic waste and the potential solutions at local level to ensure greater success.

---

9

**Embracing innovation.** Greater collaboration is needed between the public and private sector to bring innovative plastic packaging solutions to scale so that they are affordable and can be responsibly repurposed in developing countries that are still in the nascent stages of recycling plastic. Private sector incubators are key to supporting start-ups that are developing circular solutions, but do not have the expertise to scale them.

---

10

**Cities are solution leaders.** Asian cities are buckling under the pressure of managing waste associated with rapid urbanization and population growth. Cities are also where solutions to plastic waste are created and scaled, succeed or fail, as their ports are hubs for the global trade in waste. Progress happens when all levels of the community are engaged - from children in schools to informal waste-pickers who have proven to be instrumental in the sorting of waste.

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# PLEDGES

The background is a vibrant teal color with a dynamic, textured appearance. It features numerous small, clear water droplets and bubbles scattered throughout, with a more prominent cluster of larger bubbles on the left side. The overall effect is that of a close-up shot of water being splashed or poured, creating a sense of movement and freshness.



I will continue to raise awareness of the plastic pollution crisis in Southeast Asia and share everyday habits to avoid single-use plastic that we can all make to #beatplasticpollution.

Join the movement to #BeatPlasticPollution by clicking on the links below to explore the AR experiences on your smartphone.

- Drowning in Plastic: <https://l.ead.me/bpp-dip>
- Say No To Single-Use: <https://l.ead.me/bpp-sntsu>
- Clean Our Oceans: <https://l.ead.me/bpp-coo>

Meet The Reusables: <https://l.ead.me/bpp-mtr>

Full details of 100 Days to #BeatPlasticPollution here: <https://www.unep.org/events/campaign/100-days-beatplasticpollution>

**-Kay Vasey**



Myself and the entire team at Community Action Against Plastic Waste (CAPWs) in 21 countries across Africa, Asia and South America pledge to continue to intensify our effort to advocate and advance circular plastic economy globally.

**-Ahmed Tiamiyu**



I pledge to be part of the solution in eliminating plastic out the environment.

**-Perine King**



I pledge to lead a team of my classmates in [reducing] plastic waste!

**-Xu Wei**



I pledge to support the #cleanseas campaign by fulfilling the Circular Economy Institute's mission together with my other peer leaders who are promoting #circularity in all sectors and promoting the highest standards of practice in the #circulareconomy field.

**-Jacqueline Chang**



I vow to use only recycled plastic and to completely stop using regular plastic.

**-Sangeeta Desarda**



Terra Phoenix pledges to collect back at least 100 tons of plastic per year!

**-Terra Phoenix**



PET Croc Sdn Bhd pledges to remove marine litter especially plastic from our Malaysian beach and river. We organize beach clean-up activities as well as partnerships with local community, NGOs and beach clean-up groups to collect, monitor and educate as well as empowering local community especially the coastal area to reduce and improve management of marine litter, while collaborating with relative stakeholders to assist in recovering as much mismanaged plastic waste and turn it into circularity.

**-Sudy Yeo**

# SEA<sub>of</sub> Solutions

partnership week for marine plastic pollution prevention  
16-18 november 2021