

FINANCING SOLUTIONS TO ADDRESS MARINE PLASTICS POLLUTION IN SOUTHEAST ASIA

2nd REGIONAL OCEAN POLICY DIALOGUE

15-16 DECEMBER 2020, 13:00-16:30 (ICT)
VIRTUAL CONFERENCE

Meeting Summary

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ABOUT THE DIALOGUE

The Second Regional Ocean Policy Dialogue, held virtually on 15 and 16 December 2020, explored the interlinked issues of policy coherence, sustainable ocean finance and marine plastics pollution in Southeast Asia. It was co-hosted by the OECD together with the Indonesian Coordinating Ministry for Maritime Affairs and Investments, the Association of Southeast Asian Nations (ASEAN) Secretariat, the Coordinating Body on the Seas of East Asia (COBSEA), and the UN Economic and Social Commission for Asia and the Pacific (ESCAP). This event built on the success of the Regional Ocean Policy Dialogue in Southeast Asia, held in Bali, Indonesia in December 2019.

This Dialogue attracted around 140 participants with representation from 9 ASEAN member countries,¹ 7 OECD countries, a wide range of international and regional organisations and bodies, as well as representatives from private sector, development banks, civil society organisations, foundations, research centres and community-based initiatives.

The Dialogue provided a platform to share analysis and experiences to enhance regional co-operation, policy coherence and sustainable financing solutions to address and prevent marine plastics pollution. The Dialogue drew on OECD evidence and information from other national and international sources to highlight relevant ocean-related data and indicators, and showcased selected policies, projects, and financing instruments that address marine plastics pollution in line with the Sustainable Development Goals and the Osaka Blue Ocean Vision. The outcomes of the Dialogue will help support the implementation of National Marine Litter Action Plans and the ASEAN Framework for Action on Marine Debris as well as regional inputs for the United Nations Decade of Ocean Science for Sustainable Development (2021-2030).

More information on the Dialogue is available on the event website: <http://oe.cd/opd2>.

KEY TAKEAWAYS

Urgent action is needed to reduce plastics in the ocean and ultimately prevent plastic from entering the ocean. Without action, the annual flow of plastics into the ocean is projected to nearly triple to 29 million metric tonnes by 2040, from 11 million tonnes today.² This poses significant human and social risks, has tremendous economic costs including to sectors such as tourism and fishing, and adversely affects marine ecosystems already under threat from human activity.

There is a tremendous wealth of initiatives and efforts ongoing at various levels of government and with various players across Southeast Asia, which requires a synergistic and co-ordinated approach. The environmental policy, legal and regulatory framework to tackle marine plastics pollution is highly complex and fragmented with many bodies and organisations working on the issue. Improving and streamlining existing co-operation mechanisms will be key to maximising the results of these efforts.

There is scope for greater co-ordination among ASEAN members, with support from the international community. The Bangkok Declaration on Combating Marine Debris in the ASEAN Region and the ASEAN Framework of Action on Marine Debris and the COBSEA Regional Action Plan on Marine Litter play a key role in ensuring coherent and co-ordinated policies across the region. However, challenges persist in implementing these commitments at the national and subnational levels. The international community can provide ASEAN members with financial, implementation and co-ordination support.

Close collaboration between ministries and across national and subnational governments is key to ensuring that marine plastics pollution is addressed in a coherent and effective manner. Many countries in the region have made progress in developing national strategies and plans or frameworks to manage waste, and more specific plans to tackle marine plastics pollution. Given the complexity and the multiple sources of marine debris, different ministries often handle the issue. Countries also indicated challenges in the implementation of national policies and directives at the local level. This signals the need for strengthened co-ordination amongst ministries and across different levels of government.

¹ Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam.

² Pew Charitable Trust and Systemiq (2020), *Breaking the Plastic Wave: A Comprehensive Assessment of pathways towards stopping ocean plastic pollution*, https://www.pewtrusts.org/-/media/assets/2020/07/breakingtheplasticwave_report.pdf

Stakeholder awareness and engagement is important for effective action to tackle marine plastic pollution. To be inclusive and coherent in policy-making, a wide range of actors must be engaged across the entire plastic value chain. Multi-stakeholder platforms and mechanisms that bring together governments (national and sub-national), civil society, the private sector, international development partners, academics, and others can help translate commitments into meaningful action.

The international community can help in establishing better data collection and monitoring in line with agreed standards. Improved data is needed along the full plastic value chain to inform effective evidence-based policies. The lack of data is recognised as a major obstacle to fully understanding the risks posed by marine plastics and determining appropriate policy interventions. When data is available, it is often not comparable and low quality. This requires harmonisation of collected data and definitions to ensure cross-country and regional comparability. This also requires capacity development at the local level, including on cost-effective methods and techniques of monitoring and data collection as well as additional resources (both human and financial).

Policies and economic instruments should be designed to incentivise the transition to a circular economy. ASEAN countries are putting in place plans to implement economic instruments such as taxes to single use plastics and Extended Producer Responsibility (EPR) schemes. While EPR schemes are by definition industry-led, the government must set a strong policy direction in order to enable this activity and make it clear for industry to act. Green Islamic bond (sukuk), currently used in Indonesia, could also be extended to specifically finance projects to combat marine plastics pollution.

Governments should create an enabling environment that encourages private sector participation throughout the entire plastic lifecycle. Public-private partnerships can help meet infrastructure needs, for example for recycling and landfill facilities, and investments can be further encouraged through blended finance arrangements. Community-based initiatives such as waste banks offer citizens the opportunity to earn money from selling their waste, while ensuring waste is sorted and collected.

It is important to identify and scale up successful initiatives and build a project pipeline for investments. Innovative financial mechanisms that de-risk both public and private capital are required. These may include blue bonds, novel credit mechanisms, and sustainability-linked loans, amongst others. There is a need to showcase and develop innovative pilot projects, business models, product design. Government must play a role in creating a strong enabling environment for investors and consumers to signal policy direction and incentivize desired outcomes.

Official Development Assistance (ODA) to tackle marine plastics pollution represents a small proportion of overall ODA, it has increased in recent years and can be used to stimulate further investments from the private sector. Public policies and ODA can stimulate further investment from the private sector by providing grants or concessional loan guarantees to de-risk investments or enhance the risk-return profiles, by supporting the creation of innovative financial instruments, and by creating an enabling environment for the private sector to operate.

A dedicated tool could provide guidance to address policy coherence and financing challenges for addressing marine plastics pollution. Countries expressed interest in possible tools to support the selection of policies to address marine plastic pollution. The OECD has unique and relevant expertise and is willing to contribute to this work, together with regional and international partners, by drawing on its leading expertise in policy coherence and sustainable finance.³

³ Among others, the [OECD Recommendation on Policy Coherence for Sustainable Development](#), the [OECD Guidance Manual for Governments on Extended Producer Responsibility](#), the [OECD Control System for waste recovery](#), the [OECD Guidance Manual on Recommendation on the Environmentally Sound Management of Waste](#) and ongoing work to developing sustainable finance definitions and taxonomies.

DAY 1: BUILDING THE EVIDENCE BASE

Tuesday 15 December 2020

Welcome and keynote remarks



Dr. Rodolfo Lacy, Director, OECD Environment Directorate

“Policy coherence needs to be prioritised for effective action – coherent across different sectors, different levels of government and different initiatives”

Dr. Lacy opened the Dialogue, illustrating the magnitude of marine plastic pollution worldwide. The COVID-19 pandemic has magnified the marine plastics challenge by slowing down recycling efforts and increasing the use of disposable plastic products. The problem is particularly noticeable in Southeast Asia where it is estimated that marine debris directly costs ASEAN countries USD 2.1 billion each year.

He called for countries to address urgently the plastics pollution challenge in an integrated manner and using a mix of policy instruments, including regulations and economic incentives accompanied by adequate financing to implement these policies and initiatives, comprising scaling up blue-green investments. The OECD has unique and relevant expertise that can contribute to reducing marine plastics pollution, and is ready to help countries in Southeast Asia in co-operation with partners in the region.



Dr. Nani Hendiarti, Deputy Minister for Coordination of Environmental Management and Forestry, Coordinating Ministry for Maritime Affairs and Investments, Indonesia

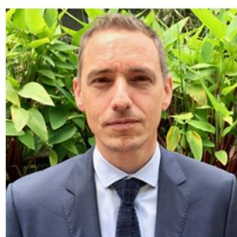
“With greater co-operation amongst stakeholders, we could find innovative solutions for the technological development and financing schemes that are mutually beneficial for social, economic, and environmental perspectives”

Dr. Hendiarti provided the keynote address. Indonesia aims to reduce marine plastics debris by 70% by 2025. With the Indonesia Plastic Action Partnership, the government aims to develop clear standards for recycling which reference the private-sector form of balancing financing to invest in plastic recyclability. The Coordinating Ministry also supports better waste management, including through the informal sector with more than 8000 waste banks in 34 provinces.

She noted that the COVID-19 pandemic has worsened the plastics challenge in Indonesia, with one estimate from the national research agency showing a 16% increase in plastic waste entering rivers due to changing consumption patterns. Meanwhile, budget has been reallocated away from environmental programmes to address the pandemic and is expected to persist for a few years.

The financial task force of the National Plastic Action Partnership indicated that 18 billion USD in capital investment are required between 2017 and 2040 and an additional annual increase of 1 billion USD must be mobilised for solid waste management by 2040. In this difficult context, Dr. Hendiarti called for innovative financial mechanisms and inclusive co-operation amongst stakeholders and private initiatives to support programmes to address marine plastics pollution at the national and regional level.

Session 1 – Addressing marine plastics pollution in Southeast Asia: Policy coherence for effective action



Jerker Tamelander



Youna Lyons



Suree Satapoomin



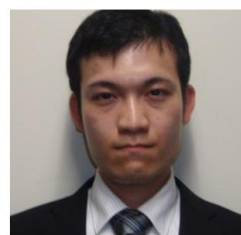
Ta Dinh Thi



Roath Sith



Kristin Hughes



Tatsuya Abe

Moderator:

Jerker Tamelander, Coordinator, Secretariat of the Coordinating Body on the Seas of East Asia (COBSEA), United Nations Environment Programme

Overview presenter:

Ms. Youna Lyons, Senior Research Fellow, Ocean Law and Policy Programme of the Centre for International Law (CIL), National University of Singapore (NUS)

Panellists:

- ✓ Dr. Suree Satapoomin, Marine Resources Management Specialist, Department of Marine and Coastal Resources, Ministry of Natural Resources and Environment, Thailand
- ✓ Dr. Ta Dinh Thi, Director General of the Viet Nam Administration of Seas and Islands (VASI), Ministry of Natural Resources and Environment (MONRE), Viet Nam
- ✓ Ms. Kristin Hughes, Director, Global Plastic Action Partnership, Member of the Executive Committee, World Economic Forum Geneva
- ✓ Mr. Roath Sith, Assistant to the Ministry of Environment, Cambodia
- ✓ Mr. Tatsuya Abe, Deputy Director, Office of Policies against Marine Plastic Pollution, Ministry of the Environment, Japan



Thaw Thaw Han



Peter Börkey



Maria Corazon Ebarvia



Emil Dardak

Discussants:

- Ms. Thaw Thaw Han, Deputy Director, Environmental Conservation Department, Ministry of Natural Resources and Environmental Conservation, Myanmar
- Mr. Peter Börkey, Principal Administrator, Circular Economy and Resource Productivity, OECD Environment Directorate
- Ms. Maria Corazon Ebarvia, Blue Economy Expert, Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)
- Mr. Emil Dardak, Vice Governor of East Java province, Indonesia

Session Summary

Policy coherence and a whole-of-government approach are pivotal for any national action on marine plastics pollution. In this session, panellists and discussants identified the main policy challenges to address marine plastics pollution in Southeast Asia, and shared best practices and solutions for a coherent and integrated approach.

Ms. Youna Lyons shared the results of the last report from the Pew Charitable Trust, which concluded that under business as usual, plastic in the ocean would increase from 11 million tonnes today to 29 million tonnes in 2040, roughly equivalent to 50 kilograms of plastic per metre of coastline. Even if the government and industry collaborate, the reduction would be only about 7%. Plastics of different sizes is found in rivers and oceans, beaches, water column, seabed, all parts of marine life, even in plankton and throughout the food chain. This entails human and social risk, marine ecosystem risk at many levels compounded with existing risks from climate change, ocean acidification, and other sources of pollution from anthropogenic activities.

The environmental and legal policy framework to tackle marine plastics pollution is highly complex and fragmented with many bodies and organisations working on the issue (international organisations, international standards/mechanisms, regional centres and working groups). Each part plays a complementary role, and therefore it is key to tighten co-operative mechanisms at all levels, especially at the regional level, to work synergistically.

Dr. Suree Satapoomin informed participants that the ASEAN Working Group on the Coastal and Marine Environment has just completed a comprehensive draft regional plan for combatting marine plastic debris in the ASEAN region. Some key challenges occur in aligning national implementation to regional plans. The level of existing national strategies is different across the region with some countries having action plans and others having roadmaps or other types of documents. Regional guidance rather than prescriptive directives could help overcome such challenges.

Science and comparable data are essential but data on plastic leakage (and on marine hotspots) is lacking. The international community could help ASEAN members with financial, implementation and co-ordination support.

Dr. Ta Dinh Thi noted that Vietnam's National Action Plan for Management of Marine Litter by 2030 has a goal to reduce plastic waste and pollution by 50% and to prevent the use of single-use plastic products and non-biodegradable plastic waste in 80% of coastal tourism areas. The National Strategy on Integrated Solid Waste Management to 2025, with a vision to 2050 has specific objectives including using 100% eco-friendly bags in trade centres and supermarkets for domestic purposes, and to collect, store, transport, and centrally treat 80% of daily solid waste generated in rural residential areas. Coherence across policy instruments is ensured because many of the goals in the two plans are similar and target the same areas.

One of the challenges is to ensure consistency at the local level. Despite being mandated to do so, only 11 of 28 coastal provinces/cities have issued local action plans. There is a lack of human and financial resources, and a lack of data to evaluate action plans.

Ms. Kristin Hughes shared the experience of the Global Partnership Action Partnership (GPAP), a multistakeholder platform that emphasises government leadership while at the same time takes on advice from civil society, the private sector, international development partners, academics, and other actors to translate commitments into meaningful action.

In Indonesia, the National Plastic Action Partnership helps the government to reduce marine plastic pollution following a three-pillar approach: 1) building a community, 2) creating a clear analysis of the situation, and 3) translating that into what the government could do to reduce plastics by taking specific action. In April 2020, Indonesia launched its Multistakeholder Action Plan, the first comprehensive, costed analysis of solutions to address plastic pollution through a systems-change approach. Over 70 organisations are collaborating through five task forces with non-governmental partners on funding, metrics, behaviour change, innovation, and policy to address marine plastics pollution.

Mr. Roath Sith indicated that Cambodia has decentralised its waste management in 2015, giving responsibility to subnational (city and district) levels. In 2017, Cambodia took steps to reduce plastic pollution by regulating the import, production and distribution of plastic bags, and imposed a small charge for the purchase of plastic bags at supermarkets. Cambodia has partnered with various international organisations, such as with UNEP to support the Mekong River Commission to identify the sources of plastic leakage, and with the World Bank to develop a legal framework for plastic waste management.

The key challenges facing solid waste management and reducing marine plastic pollution include a limited legal framework and enforcement of legal instruments, limited human and financial resources, and limited citizen participation.

Mr. Tatsuya Abe highlighted the key objectives of the ASEAN+3 Marine Plastic Debris Cooperative Action Initiative supported by Japan and other partners. Objectives include energy recovery in climate change actions and the marine environment; promoting awareness, research, and education of marine plastic debris; and strengthening regional and international co-operation, including by establishing a regional knowledge hub. Last year, Japan established a regional knowledge centre in Jakarta for sharing knowledge and experience in ASEAN countries.

Japan can contribute knowledge and experience in solid waste management and would like to share it with other countries. In September 2020, Japan hosted a G20 workshop on Harmonized Monitoring and Data Compilation of Marine Plastic Litter, which discussed the importance of globally-harmonized monitoring methods and compiled monitoring data, and the promotion of a worldwide network for harmonization and data sharing for marine plastic litter. Japan also established a G20 implementation forum facilitating international mutual learning on achieving the Osaka Ocean Blue Vision.

Ms. Thaw Thaw Han shared Myanmar's progress in addressing marine plastic pollution. The country has adopted its National Waste Management Strategy and Master Plan (2018-2030) and will be developing a National Plastic Action Plan with support from the World Bank, the ADB, and possibly other partners.

Ms. Han emphasised the need for collaboration with international partners to adopt evidence-based policy. The country will be undertaking a survey to set the baseline on pollution focused on river basins.

Mr. Peter Börkey talked about the need for coherent policy interventions to address marine plastic litter all along the lifecycle of plastics, ideally as close as possible to the source. The OECD is developing a Global Plastic Outlook that will identify effective policy mixes to address plastic pollution and will put a spotlight on particular issues like market for plastics, trade in waste plastics, and innovation towards greener plastics.

The OECD is also developing a report looking at all sources of microplastics along the lifecycle of textiles and tyres and identifying mitigation measures available at various stages of their lifecycles. What is observed is the particular need for policy coherence with wastewater management or water management sectors.

Ms. Maria Corazon Ebarvia noted that there are opportunities for improvement along the entire waste management value chain, but at present many gaps remain before these opportunities can be realised. The high cost of plastic pollution provides a strong rationale for improving waste management systems and for developing alternatives to plastics. Governments can design policies and economic instruments to incentivise and hasten the transition to a circular economy.

Mr. Emil Dardak informed that East Java is currently working on the 3Rs, developing an Extended Producer Responsibility (EPR) scheme to reduce the generation of waste and working towards a circular economy, redesigning packaging to make it more reusable and recyclable. The government is also promoting behaviour change, encouraging people to be mindful of what and how they consume and how this can result in waste. This also includes education programmes, for example teaching children the consequences of throwing diapers into the river.

Session 2 – Financing solutions to reduce marine plastics pollution



Anthony Cox



Bruce Dunn



**Eddy Mazuaansyah bin Mohd
Ali Murad**



Joko Tri Harianto



Crispian Lao



Piera Tortora



Anjali Acharya

Moderator:

Mr. Anthony Cox, Deputy Director, OECD Environment Directorate

Overview presenter:

Mr. Bruce Dunn, Director of Safeguards Division and Officer-in-charge for the Environment Thematic Group, Sustainable Development and Climate Change Department, Asian Development Bank

Panellists:

- Mr. Eddy Mazuaansyah bin Mohd Ali Murad, Deputy Undersecretary, Environmental Management Division, Ministry of Environment and Water, Malaysia
- Dr. Joko Tri Harianto, Researcher, Ministry of Finance, Indonesia
- Mr. Crispian Lao, Vice Chair and Private Sector Representative to the Philippines' National Solid Waste Management Commission
- Ms. Piera Tortora, Coordinator, Sustainable Ocean For All, OECD Development Co-operation Directorate
- Ms. Anjali Acharya, Regional Lead for Marine Plastics in East Asia and Pacific, World Bank



Julia Giebel



**Anindita Normaria
Samsul**

Discussants:

- Ms. Julia Giebel, Advisor, Reduce, Reuse, Recycle to Protect the Marine Environment and Coral Reefs, Deutsche Gesellschaft für Internationale Zusammenarbeit - GIZ
- Ms. Anindita Normaria Samsul, Founder, Bank Sampah Induk – Central Waste Bank Surabaya

Session Summary

Both public and private financing are needed to tackle the issue of marine plastics pollution. In this session, panellists and discussants shared the innovative financing instruments they put in place to address marine plastics pollution.

Mr. Bruce Dunn highlighted the Asian Development Bank's (ADB) USD 5 billion commitment to healthy oceans from 2019 to 2024, and their recent framework to define blue investments. It is important to identify and scale up successful investments and build a project pipeline for finance. Innovative financial mechanisms that de-risk both public and

private capital are required. These may include blue bonds, novel credit mechanisms, and sustainability-linked loans, amongst others. Projects also need to be incubated and de-risked. Governments must remove perverse incentives, taxes and subsidies must be aligned with ocean health, and financial partnerships need to be developed.

The ASEAN Catalytic Green Financing Facility (ACGF) was put in place in 2019 and USD 1.4 billion has so far been committed. ASEAN governments put in public funds, matched by private funds, to support green and blue projects while the ADB helps administer this fund. The facility's own equity and concessional funds from various partners along with innovative financing are used to do some de-risking and reduce the overall cost of capital.

The ADB is currently working with five countries (Indonesia, Myanmar, the Philippines, Thailand, and Vietnam) on a source-to-sea approach to tackle marine plastics pollution with a focus on the move to a circular economy (including a circular economy test hub in Indonesia).

Mr. Eddy Mazuaansyah bin Mohd Ali Murad noted that Malaysia has developed the Roadmap Towards Zero Single Use Plastics 2018-2030. It includes plans to implement financial and economic instruments as pollution charges and Extended Producer Responsibility (EPR) schemes. The implementation of pollution charges on plastic bags should be completed nationwide by 2022.

The government of Malaysia is working with the GIZ to formulate an implementation plan for EPR scheme that could be implemented in its totality, not just as an extension of Corporate Social Responsibility. These schemes also need metrics to define the recyclability of various materials in the Malaysian context. The key challenge is to bring Small and Medium Enterprise on board as the current COVID-19 crisis has hit them strongly and EPR is not their current priority.

Mr. Mohd Ali Murad also recognised the importance of behavioural change and the need to raise awareness with the general public as well as specifically with industry, business and consumers.

Dr. Joko Tri Harianto illustrated some of the financial instruments that Indonesia has put in place to address environmental challenges including marine plastic pollution. A single-use plastics tax is currently under discussion with parliament. Indonesia is a leader in issuing green *sukuks* (including retail green *sukuks*) and it has continued to raise money during the COVID-19 pandemic. Resources collected through the green *sukuks* can be allocated to nine eligible green sectors, including waste management.

The green *sukuk* is currently not raising specific resources to address marine plastics and marine waste. To extend the green *sukuk* to this specific sector, the Coordinating Ministry for Maritime Affairs and Investments together with the Ministry of Finance can identify budget priorities and select underlying projects that could be financed through green *sukuks*. Another option would be to include marine plastic pollution under the SDG bonds that Indonesia is preparing to issue in 2021.

Mr. Crispian Lao explained that one of the biggest challenges for the Philippines is the lack of infrastructure for solid waste management at the local level. Only 30% of barangays (administrative divisions) have material recovery facilities and only 30% of local government units (LGUs) have access to sanitary landfills for the final disposal of waste. While collection rates are relatively high, improper disposal remains a problem.

Public-Private Partnerships (PPPs) can step into this gap by partnering with LGUs, especially in sorting, waste treatment, final disposal, and wastewater treatment. However, there are problems with the continuity of projects beyond the three-year political cycle. National guidelines will attempt to address this issues, stepping in when contracts are not respected and creating an enabling environment that encourages private sector participation.

The private sector currently takes on most of the risk in PPPs therefore investment recovery can be a challenge. National or local government could share part of the investment structure to make it more appealing to private partners.

Dr. Piera Tortora shared that USD 361 million of Official Development Assistance (ODA) targeted marine plastic litter from 2013 to 2018, with only 14% focussed on Southeast Asia. Despite this amount being quite limited, it grew significantly from 38 USD million a year on average for the period 2013/2014 to 70 USD million for the period 2017/2018. The prioritisation of waste management varies significantly across countries in Southeast Asia and is particularly small in Indonesia, where it represents around 8% of the total. OECD data shows that ODA is mainly used to support waste management systems, but also targets capacity building, good governance, and helps to enable a whole-of-society approach to waste management.

Public policies and ODA can help stimulate further investment from the private sector in three ways. First, by using ODA to catalyse investments (e.g. providing grants or concessional loan guarantees to de-risk investments or enhance the risk-return profiles of investments in this area). Second, by supporting the creation of innovative financial instruments, like blue bonds, that mobilise and catalyse private capital. Third, by creating an enabling environment for the private sector to operate.

Dr. Anjali Acharya presented the work of the World Bank in the region. The Bank first looks at metrics (what type of plastics, where does it flow, where does it start, what is the resin type, what are the choke points, what are the hotspots). In Malaysia, the Bank has carried out a baseline analysis to assess the full extent of plastics leakage across the country and into marine areas. In the Philippines, it is analysing the plastic value chain and the current recycling capacities (including barriers to private-sector entry, most valuable resins, etc.). In Indonesia, it implemented behaviour change projects focused on how to re-think the relationship with plastics. After having developed those metrics, analytics, and policy instruments, the bank scales up to replicable and sustainable investments. It has leveraged about USD 9 million in trust fund financing (from ProBlue and beyond) and the International Finance Corporation concluded massive deals with the private sector, including a USD 300 million concluded recently with Indorama Corporation.

Ms. Acharya highlighted that while there are big recyclers entering this space, there is a “missing middle”: the small and medium players that have greatest connection and commitment to the local communities. There is therefore a need to showcase and develop innovative pilot projects, business models, product design, and so forth.

Ms. Julia Giebel informed participants that the GIZ has recently published the “Extended Producer Responsibility (EPR) for Packaging Toolbox” in the framework of the multi-stakeholder partnership PREVENT Waste Alliance. The Toolbox is based on the definition and approach of EPR in the OECD guidance document of 2016 as well as the Basel Convention’s revised practical manual on EPR of 2019. The Toolbox, used in GIZ projects in Southeast Asia, has a significant potential to achieve a range of policy objectives.

Ms. Anindita Normaria Samsul shared the experience of the Surabaya Central Waste Bank, an innovative financing mechanism that encourages people to save their waste instead of throwing it out. Saved waste is recorded in a credit book that can be used for daily activities (e.g. to pay for electricity). Surabaya Central Waste Bank has 512 individual customers and 429 group waste banks, and they collect 360 tonnes of waste per year.

DAY 2: SHARING EXPERIENCES AND LOOKING AHEAD

Wednesday 16 December 2020

High-level opening



H.E. Mr. Kung Phoak, Deputy Secretary-General of ASEAN for ASEAN Socio-Cultural Community (ASCC)

“The ongoing pandemic presents not only an enormous challenge but also a unique opportunity to stimulate investments and innovation on circular economy approaches and a green economic recovery of our regions”

Mr. Phoak highlighted that ASEAN ocean-based services are an important driver of economic development, representing critical resources of employment and income, especially for coastal communities. However, the ocean is under immense pressure and marine debris pollution is one of the fastest-growing threats, exacerbated by the COVID-19 pandemic.

ASEAN adopted the Bangkok Declaration on Combating Marine Plastic Debris in ASEAN Region and resource mobilisation and partnership are critical to its successful implementation. ASEAN is keen to promote new business models, enabling infrastructure, and a co-ordinated policy framework that supports economies in the region. It is vital to create enabling conditions to attract investments, which are currently insufficient to address the entire plastic lifecycle.

Marine plastic pollution is a trans-boundary issue that must be addressed through co-ordinated action and partnerships with various actors at all stages of plastic lifecycle. ASEAN adopted the ASEAN+3 Marine Plastics Debris Cooperative Action Initiative and joined the East Asia Summit Leaders’ Statement on Combating Marine Plastic Debris. It is supporting members to develop their national plans for combating marine debris and finalising a regional action plan. To accelerate the process of addressing marine plastics pollution, ASEAN will need support from its partners in government, international organisations, private industry, and other stakeholders.



Mr. Kaveh Zahedi, Deputy Executive Secretary, UN ESCAP

“As we embark on the decade of action to deliver on the Sustainable Development Goals it is clear that the mechanisms of stewardship we have in place may not be enough to enable our region to achieve SDG14 and to safeguard the ocean and its resources for future generations.”

Mr. Zahedi highlighted that more than 350 million tons of plastic are produced each year, and an estimated 40% of plastic is used just once and discarded within minutes. Without action, the global production of plastic is expected to double in the next ten years. This level of production and consumption has resulted in solid waste management systems that are unable to effectively collect, recycle and dispose of the growing quantity of plastic. As a result, plastic ends up in the ocean, consumed by marine life and eventually makes its way to our dinner tables.

In 2020, the 76th ESCAP Commission Session focused on the ocean for the very first time and a new resolution recognized that the protection of the ocean is pivotal in the joint fight towards the conservation of the common goods and natural resources. However, SDG progress assessments show that in Asia Pacific SDG14 is regressing, and achieving zero plastic entering the ocean by 2030 requires measures that increase the provision of financing for municipal collection and management while reducing the supply of problematic and unnecessary plastics. To ensure success, these measures should be part of a systemic approach that embeds circular economy principles to maximize resource efficiency, reduce waste and drive end-to-end value.

He reminded participants that in Southeast Asia the land-based sources from urban areas is a primary contributor of plastic into the ocean. In this context, ESCAP initiated the ‘Closing the Loop’ project supported by the Government of Japan to turn the spotlight on the importance of the urban-ocean nexus.

Session 3 – Food for thought: Inspiration from good practices



Stefanos Fotiou



Thomas Chhoa



Janet Salem



Jocelyn Matyas



Sidhant Gupta



Dominic Thomson

Moderator:

Mr. Stefanos Fotiou, Director, Environment and Development Division, UN ESCAP

Panellists:

- Mr. Thomas Chhoa, Senior Advisor, Office of the CEO, Alliance to End Plastic Waste
- Ms. Janet Salem, Economic Affairs Officer, Environment and Development Division, UN ESCAP
- Ms. Jocelyn Matyas, Venture Development Lead, The Incubation Network, SecondMuse
- Mr. Sidhant Gupta, Founder, ClearBot
- Mr. Dominic Thomson, Deputy Director & Project Manager (SE Asia), Environmental Justice Foundation

Session Summary

In this session, panellists shared experiences and good practices in addressing marine plastic pollutions, across different phases of the plastic lifecycle, to inspire action from others.

Improvement of plastics design and innovation

Mr. Thomas Chhoa shared progress made by the [Alliance to End Plastic Waste](#), a global large-scale industry alliance (above 40 companies) committed to spend hundreds of millions of dollars over the next five years to eliminate plastic waste. The objective of the alliance is very ambitious and collaboration with multiple organisations is key to achievement. Member companies, part of the plastic value chain, also provide expertise in addressing plastics waste (e.g. PepsiCola or P&G are developing their own design and alternatives for increased recycling/recyclability; Suez and Veolia bring their expertise in waste management).

The Alliance is working on improving design for recycling under different themes. Engaging with cities around the world, including in Southeast Asia. Creating value for recycling so that plastic waste can deliver more value over time, for example through the “Planks of Promise” project in the Philippines that converts plastic waste into building material to provide shelter from typhoons. Advanced recovery and recycling through innovative technologies, and design for circularity to ensure max recyclability of products. Finally, influencing societal behaviour, with a focus on education and changing people’s behaviour with waste.

Innovations in city-level monitoring for enhanced plastic waste management

Ms. Janet Salem introduced [Closing the Loop](#), a project implemented by UN ESCAP in partnership with the Government of Japan. The project supports four cities in Southeast Asia (Da Nang, Viet Nam; Kuala Lumpur, Malaysia; Surabaya,

Indonesia; Nakhon Si Thammarat, Thailand) to prevent marine plastics pollution by supporting the development of city-level action plans, policies and investment strategies to address marine plastics pollution.

An innovative digital tool allows local governments to monitor and visualise from where plastic comes from and where it is going and identify hotspots to allow collection. Recently, the project has adjusted its technology to allow identification of Personal Protection Equipment and other single-use plastics whose use increased with the COVID-19 pandemic.

The key enabling factors for successful project implementation are: 1) a clear structure under which to operate provided by the ASEAN Framework for Marine Debris; 2) a project advisory committee; 3) technology, which in the future will help getting real-time data about where plastic is and enable targeted interventions.

Enabling companies to bring viable solutions forward: The role of start-ups and incubators

Ms. Jocelyn Matyas shared the experience of the [Incubator Network](#) by SecondMuse and the Circulate Initiative. The Network implements programmes that source, support, and scale innovative solutions that address ocean plastics pollution in South and Southeast Asia. It does it in two ways, first by looking at innovations happening around the globe and supporting adaptation and testing of their models to ensure they are replicable in South and Southeast Asia. Second, by sourcing innovators in communities in Indonesia, India, Thailand, Vietnam, and the Philippines and connecting them to global resourcing and partners so that they are able to take those most promising ideas and replicate them around the region.

For these solutions to work, it is key to build a connected and integrated community that streamlines efforts, gives access to supply chains, and have the support of private and public sector actors. Governments can also play a big role by providing earlier stage capital and take on that initial risk that innovation needs to scale as a business model.

Clean-up efforts

Mr. Sidhant Gupta introduced [Clearbot](#), an initiative that builds robots that use AI-Vision to detect and get plastics out of the ocean. These robots are fully autonomous, solar-powered, capable of recognising about 64 different types of trash and cheaper compared to other solutions. Mr Gupta emphasised that cleanup initiatives are also raising attention around the issue of marine plastic pollution therefore can drive longer-term solutions by changing how people are buying and consuming.

The enabling elements that made the project successful are: 1) basic financing willing to take a part of the risk that comes with technology innovation; 2) political commitment at local level; 3) partnerships and community engagement.

Sea-based initiatives: Collecting and recycling lost fishing gear

Mr. Dominic Thomson described the [Net-Free Seas](#), a project of the Environmental Justice Foundation that addresses the threat posed to the ocean by fishing net waste. The project currently involves 47 communities in Thailand to build a network whereby communities can be in direct contact with recyclers and get financial benefit from collecting this environmentally damaging litter. Communities receive a slightly higher than market rate as an incentive to clean the net and process them so that they are immediately ready to be melted and turned into something new when they reach recyclers. The simplicity of the project makes it immediately scalable and replicable in other contexts.

Lost fishing nets are partly a consequence of overall non-sustainable fishing practices. Policies and regulations to address the two issues at the same time include attaching tags to fishing gear (material, manufacturer, and owner) to facilitate recycling and allow enforcement agencies to know whether gear has come as a result of illegal fishing. A further step is to make fishing nets part of EPR schemes. A secondary way is better demarcating the coral reefs and the marine protected areas to make sure that marine vessels do not actually stray into those areas.

Session 4 – Towards guidance for an effective and coherent approach to reducing marine plastics pollution

This session provided a platform for exchange of experiences in tackling marine plastics pollution. Dialogue participants were divided amongst 3 virtual breakout groups. Anchored by a concrete example based on their own experiences, participants reflected on how policy, financing, and co-operation have enabled their work, highlighting challenges and proposing solutions. Observations from the sessions can help to inform guidance to enhance regional co-operation, policy coherence and sustainable financing solutions to address and prevent marine plastics pollution.

Successes, challenges and solutions: What are the key factors that enabled your success in tackling marine plastics pollution, and how did you overcome any challenges?

Breakout Group 1: Policy coherence

- **Developing national plans and policy frameworks are essential steps that countries should take to tackle marine plastic pollution.** Myanmar has adopted its National Waste Management Strategy and Master Plan (2018-2030) and will be developing a Plastic Policy Option and Action Plan with the support of the World Bank and other development partners. Cambodia is in the process of developing a national policy framework on marine litter as well as a legal framework on recycling restrictions and regulations. Myanmar indicated the need for a more holistic understanding of the plastic lifecycle and better evidence to inform further policy efforts and called for technical assistance and capacity building support.
- **Co-ordination across ministries and across different levels of government is essential to tackle marine plastic pollution effectively.** In Malaysia, the issue of marine debris is handled by the Ministry of Environment and Water while waste management is under the mandate of the Ministry of Housing and Local Governments. Waste management is under jurisdiction of local authorities but only seven states in Malaysia have adopted the federal act on waste management. This signals the need for close collaboration between ministries and across national and subnational government. Malaysia is creating a policy that encompasses these inconsistencies and gaps.
- **Stakeholder awareness and engagement is key for effective action to tackle marine plastic pollution.** The ASEAN Secretariat highlighted the need for harmonized action and the importance of meaningful engagement of actors at every stage of policy formulation to ensure coherent approaches while noting the lack of guidance for private sector engagement. Myanmar is raising awareness among stakeholders to reduce single use plastics and plans to establish a technical group representing all actors. Malaysia recognised that raising awareness with the general public may take longer and in parallel it is key to work with the private sector, strategic companies and development partners.
- **There is a need to improve data availability on all segments of the plastic value chain.** Lack of data in general and harmonised data in particular is a major obstacle to fully understanding damage and determining appropriate policy interventions. There are data gaps on many levels and where there is data, it can be skewed and disconnected. While data and monitoring can be established in line with existing global standards, it will be important to be sensitive to the context. Efforts to collect data are ongoing in the region: Cambodia has joined the Mekong River Commission in the development of a methodology to assess plastic waste leakage into the Mekong River that will form the basis for formulating specific policies; Myanmar will be undertaking a survey to set the baseline on pollution focused on river basins. The need for national source inventories was further mentioned.
- **Extended Producer Responsibility is recognised as a proven policy tool to address marine plastics pollution but some issues of rolling it out in Southeast Asia require close consideration.** The OECD has developed a guidance book with explicit focus on emerging economies and the role of the informal sector. While EPR systems in OECD countries pursue environmental objectives, the schemes that are under discussion in emerging markets also pursue social objectives (e.g. preserving livelihood of informal sector and bring them into the formal sector). This impacts the pace of at which to advance: trying to achieve different objectives with the same policy leads requires careful evaluation of how trade-offs are made.
- **There is interest in possible tools to support countries to select and adapt the right policies to address marine plastics.** Several participants indicated that a tool to assist countries in the selection of the right policy tool at the right level and the right time would be a very useful input.

Breakout Group 2: Financing

- **Public financing can play a role in de-risking promising initiatives not yet proven at scale.** For example, in the case of Clearbot technologies, the company relied primarily on government grants for funding. The initiative is now seeking support from impact investors, which have a higher risk appetite than traditional investors, but without the initial public financing the risk appetite for truly disruptive innovation is not there. The finance exists, but the political will and innovations that are sufficiently mature and proven for private investment and scalability is the real challenge. A higher risk tolerance for public investments at the early stages of development is essential. There is also enthusiasm around specific types of solutions, for example in new materials or reverse logistics, and government can play a role in supporting the conditions for these types of investments.
- **A strong enabling environment set by policy-makers is key to signalling clear directions for consumer and investors.** Roadmaps at national and regional levels are key to providing certainty for the private sector to invest and create understanding amongst the public in terms of attitudes and approaches to recycling. For example, proper labelling and standards requirements can be used to address information asymmetries and create a level playing field amongst market participants. Another tool are levies or fees. One example discussed was that of Cup Club, a coffee cup sharing startup in the UK. However, the incentives were not right: a disposable cup costs 4p, while a shared cup was 10p, and the startup was initially not successful. Once the City of London started talking about a 25p “latte levy”, however, the concept gained significant traction and financing for the startup. The latte levy was never implemented in the end, but even the threat of implementation was sufficient to instigate action by investors. The ongoing COVID-19 pandemic, unfortunately, has reversed some of these gains as takeaway in disposable cups is prioritised for sanitary reasons.
- **Extended Producer Responsibility can provide incentives to private sector to prevent waste at source, promote more sustainable product design and support recycling.** While EPR schemes are by definition industry-led, the government must set a strong policy direction in order to enable this activity and make it clear for industry to act. Malaysia has a policy document looking at how to enable industry to participate in EPR. One of the challenges for EPR, particularly in the developing country context, is that networks must be localised and incentivised given the heavy reliance on the informal sector for waste collection and the varying capacities of recyclability from one island to the next even within the same country.

Breakout Group 3: Co-operation

- **For policy-making to be inclusive and coherent a wider range of actors must be engaged, across the entire plastic value chain.** It is important to ensure coherence between national solid waste and marine litter plans (for land-based marine litter) and the institutional actors associated with each. Action plans and coordination bodies should define mandates and responsibilities of members and ensure financing mechanisms for action. The establishment of knowledge sharing platforms could help build on rather than replicate existing efforts. These platforms are also useful to identify collaboration opportunities, solutions and adequate financing. It will be key to build on and engage with existing coordination networks, like the ASEAN working groups and mechanisms.
- **Identifying a national focal point or champion can increase coordination.** Because of the diverse nature of the issue, there are naturally multiple entry points into the country, and this can lead to fragmentation and knowledge gaps. It will be useful to identify a national entry point or champion who can be caused by communicating with a number of actors simultaneously.
- **Monitoring and co-ordinated data collection and sharing is key to identify key hotspots, where action is most necessary.** Harmonisation of collected data and definitions is also needed to ensure cross-country and regional comparability as well as to improve knowledge management. The ASEAN Regional Knowledge Centre for Marine Plastic Debris was identified as a good practice example that should be supported and scaled.
- **There is increasing demand for certification mechanisms for ocean-bound plastics.** This includes not only certifying that it is coming from the ocean, but also that certifies ethical practices in plastic waste recovery. Scaling certification scheme and mechanisms for competitive pricing is important, governments to approve certification and standards and require producers to use a certain amount of recyclable materials.

Closing remarks



Mr. Novrizal Tahar, Director of Domestic Waste Management, Ministry of Environment and Forestry, Indonesia

“One of the biggest challenges to addressing marine plastic pollution is the ability to provide financing solution both at the national and regional level. I do appreciate this dialogue to find solutions”

Mr. Tahar highlighted how plastic waste in Indonesia has grown rapidly in recent years following economic growth and changing consumer habits: it represented 11% of total waste in 2010 and 17% in 2020. This is expected to increase to 35-40% by 2050 without significant policy intervention.

To solve the complexity of plastic pollution, the government has developed an integrated and consistent policy and regulation from upstream to downstream, including a single-use plastic ban mainly on shopping bags, currently implemented in 39 cities. Upstream policies focus on strengthening and broadening actions to minimising waste and implementing extended producer responsibility schemes. Midstream policies focus on applying a circular economy model, enhancing proper collection and recycling systems as well as translating waste to energy and electricity. In the context of the circular economy, the Ministry of Environment in collaboration with the Ministry of Industry and Commerce is finalising the roadmap for domestic self-sufficiency and developing a plastic recycling industry to eliminate the potential of plastic scrap.

Indonesia has set strategic direction for all ministries to contribute to the marine reduction goal through a wide array of interventions, policy, behaviour change programmes, innovation, and financial mechanisms. Mr. Tahar highlighted that one of the biggest challenges to addressing marine plastic pollution is the ability to provide financing solutions and emphasised that the Dialogue helped identify solutions and opportunities for collaboration at local, national and regional levels.



Mr. Anthony Cox, Deputy Director, OECD Environment Directorate

“This Dialogue provided a glimpse of the tremendous wealth of initiatives ongoing across Southeast Asia, all working towards the same simple goal: to reduce, and even eliminate, marine plastics pollution. Let’s make sure these efforts reveal that the whole is indeed greater than the sum of its parts.”

Mr. Cox closed the Dialogue by thanking participants and speakers for their informative interventions throughout the course of the two-day event. He also thanked the Dialogue partners – the Indonesian Coordinating Ministry for Maritime Affairs and Investments, the ASEAN Secretariat, COBSEA and UN ESCAP – for their excellent collaboration and insight into developing the agenda.

He reflected on the wealth of initiatives, countries, sectors and organisations represented from across the region and beyond, underscoring the complexity of marine plastics pollution and the need for co-ordinated action. Mr. Cox reiterated that the OECD is keen to be a partner in the region, building on the OECD research and expertise on policy coherence, sustainable finance and marine plastics pollution.