



Summary of the Dialogue

3rd Regional Ocean Policy Dialogue Addressing Common Challenges in Data, Policy Coherence, and Financing to Tackle Marine Plastic Pollution in SEA

3-4 May 2023

Bali, Indonesia (Hybrid)

About the Dialogue

The OECD, in collaboration with the Indonesian Coordinating Ministry of Maritime Affairs and Investment (CMMAI) and the UNEP Coordinating Body on the Seas of East Asia (COBSEA), organised the [3rd Regional Ocean Policy Dialogue](#) in Bali, Indonesia, on the topic of addressing marine plastic pollution in Southeast Asia (SEA). The two-day Dialogue provided a forum for government representatives, donors, international and regional partner organisations, local level stakeholders, non-governmental organisations, civil society, academia, as well as the private sector to discuss common challenges, opportunities, and solutions to tackle of marine plastic pollution in SEA, focusing on three key themes of: **data and information**, **policy coherence** and **financing**.

The Dialogue, held in hybrid format, gathered around 190 total participants (with representation from 8 ASEAN member states), of which 43 participants joined on-site from across the Southeast Asia region and beyond.

The objectives of the Dialogue were to:

1. Discuss (i) the challenges in collection, monitoring and harmonising of **data and information** to tackle marine plastic pollution nationally and across the SEA region, and (ii) ways on how existing data may be coordinated and integrated into the work of relevant ministries and agencies, and made available to stakeholders and the public.
2. Share the local-level challenges in tackling marine plastic pollution and in implementing the national Action Plans and Roadmaps with a view to foster **policy coherence** across levels of government, and exchange ideas as to how international organisations can assist in this area.
3. Explore the current state of **finance and investment** for the sustainable ocean economy, e.g., sustainable ocean finance, and discuss the roles of public-private collaboration and partnerships, as well as the role of development co-operation to mobilise greater finance to stem the tide of plastic pollution both on land and at sea.

The Dialogue was an excellent opportunity to draw on OECD evidence as well as other national and international sources to highlight relevant ocean-related data and indicators, policy instruments and financing solutions to combat marine plastic pollution, while enhancing regional co-operation. The outcomes of the Dialogue will help support the implementation of the 2019 Bangkok Declaration on Combating Marine Debris in the ASEAN Region, the ASEAN Regional Action Plan for Combating Marine Debris, UN COBSEA Regional Action Plan on Marine Litter (RAP-MALI) as well as the various National Action Plans and Roadmaps with the goal of combatting marine litter, covering the topics of plastic pollution, circular economy, sustainable ocean economy, and sustainable production and consumption, as well as informing the negotiation process for the Intergovernmental Negotiating Committee to develop an [international legally binding instrument on plastic pollution](#).



Delegates at the 3rd Regional Ocean Policy Dialogue, 3-4 May 2023 in Bali, Indonesia



Day 1: Role of Data and Information in Evidence-based Policymaking

Key Takeaways:

- There is a lack of a systematic, nationally managed database for some SEA countries
- Data collection on waste is typically done by local-level authorities (frequently with private sector involvement)—largely on an ad-hoc, individual basis—with some data collection done on paper, and thus lack of digitalisation, and institutionalisation
- A fragmented data governance system (e.g. federal/national vs provincial vs local) could lead to a fragmentation of data collection and monitoring
- Lack of “baseline” plastic leakage data for the SEA region as a whole
- Lack of harmonised methodologies for data collection
- Lack of financial and human resources, pointing to the need for capacity building
- Challenges of proper regulation & enforcement
- Challenges of raising public awareness / education

Opening and Keynote remarks:

Ms Mathilde Mesnard, Deputy Director of the OECD Environment Directorate opened the Dialogue by reminding about the unprecedented pressures that ocean is facing from human activities, and especially from the plastics pollution. In 2019 alone 22 million tonnes of plastics leaked into the environment and the total accumulated stock of plastics in the ocean already amounts to 30 million tonnes. She highlighted an urgent need for practical and innovative solutions to address the plastic pollution challenge and the importance of sharing of policy experiences on “what works” and “what does not work” in tackling marine plastic pollution. She referred to the process launched by the UN Intergovernmental Negotiating Committee (INC) to develop an international instrument on plastic pollution as an important step in the right direction and called to complement global approaches with regionally co-ordinated processes and responses, including in SEA.

Ms Nani Hendiarti, Deputy Coordinating Minister of the Coordinating Ministry of Maritime Affairs and Investment of Indonesia started by calling for enhanced international co-operation as the marine plastic pollution has become a mainstream global concern.. Plastic pollution is acknowledged as one of the significant stressors to the marine ecosystems and biodiversity with negative impacts on human health, societies and also on the economy. She noted that plastic is the most widely used material for everyday life and therefore the main challenge is how to reduce its unnecessary use. She also noted that as an archipelagic country with a large population and a growing economy, Indonesia has put the management of marine debris as one of its national priorities. Over the past four years Indonesia has reduced the plastic leakage to the ocean by 35,4% compared to the 2018 conditions. However, lot of work remains to reach 70% plastic national target by 2025. She called for the multi-stakeholder co-operation to tackle this transboundary problem, through the process of developing the global plastic treaty and jointly in SEA as part of the Indonesian Chairmanship in the ASEAN. She highlighted the Indonesian initiatives under its 2022 [G20 Presidency to scale up Blended Finance](#) to unlock more investments for SDG, including marine plastic pollution and the Ocean20 initiative to enhance concrete co-operation efforts.

Ms Susan Gardner, Director of the Ecosystems Division at the UN Environment Programme began with a call to change the narrative on the link between Southeast Asia and plastic pollution: Southeast Asia has often been singled out as the region most affected by plastic debris, yet the region is demonstrating to the world a model of leadership and a political will to drive action in this important transboundary environmental issue. Reiterating that plastic pollution is a transboundary challenge that requires cross-sectoral, co-ordinated action across all levels of governance, she noted that this is a particularly opportune time to address plastic pollution, with the 2nd INC meeting just around the corner to establish an [international legally-binding instrument on plastic pollution](#), and the publishing of an options paper that lays out a comprehensive approach that addresses the full lifecycle of plastics. She ended by referring to the invaluable work of organisations such as COBSEA on knowledge sharing, capacity building, standardising data collection, as well co-ordinating action on the ground.



In addition, **Mr Shardul Agrawala**, Head of the Environment and Economy Integration Division at the OECD Environment Directorate, shared some insights and lessons learned from the OECD [Global Plastics Outlook](#), highlighting notably that global plastic production and global annual plastic waste have more than doubled between 2000 and 2019. More than half of mismanaged plastic waste is produced in non-OECD Asian countries, and South and East Asia¹ is projected to be one of the regions experiencing the largest growth in plastic leakage, in the absence of more stringent policies. He emphasised that eliminating leakage requires global action on all aspects of the plastics life cycle to restrain demand, enhance circularity, and close leakage pathways. Upstream interventions are essential to reduce impacts and costs. Equally important would be to achieve international alignment of design and product policies, trade and circular economy, and regulation of hazardous substances across plastic value chains.

Session 1: The role of data in evidence-based policymaking to address marine plastic pollution

Moderator:

- **Ms Natalie Harms**, Project Officer on Marine Litter, COBSEA

Scene-setters:

- **Ms Myriam Linster**, Principal Administrator, Environmental Performance and Information Division, OECD Environment Directorate
- **Mr Shardul Agrawala**, Head of Environment and Economy Integration Division, OECD Environment Directorate

Panellists:

- **Mr Sith Roath**, Deputy Director General, General Directorate of Environmental Protection, Ministry of Environment, Cambodia
- **Mr Rofi Alhanif**, Director of Waste Management, Coordinating Ministry of Maritime Affairs and Investment, Indonesia
- **Mr Sidxay Makvilay**, Deputy Head of Environment Policy Division, Department of Environment, Ministry of Natural Resources and Environment, Lao PDR
- **Mr Eddy Masuaansyah Bin Mohd Ali Murad**, Deputy Undersecretary, Ministry of Natural Resources, Environment and Climate Change, Malaysia
- **Ms Wassana Jangprajak**, Environmentalist, Senior Professional Level, Pollution Control Department, Ministry of Natural Resources and Environment, Thailand
- **Ms Nguyen Thi Thu Thuy**, Officer, Vietnam Ocean Data and Information Center, Viet Nam Agency of Seas and Islands, Ministry of Natural Resources and Environment, Viet Nam

Ms Myriam Linster shared some lessons from prior and ongoing OECD work on environmental information systems, while going specifically into the case of plastics. Notably, to properly manage environmental information systems, it is key to have as a foundation for: 1) cost-effectiveness of the information system; 2) proper institutional arrangements and coordination; 3) effective collection processes, that ensures continuity and coherence over time. This may involve the creation of a) framework for an integrated national waste information system; b) monitoring to evolve with advances in waste management policies; c) proper dissemination and communication; d) pragmatic, step-wise approach to monitoring. Going into plastics in particular, she emphasised the importance of gathering information on the full plastics value chain (upstream, midstream, downstream), and the role to be played by EPR schemes, material flow analyses and mass balances, and earth observation techniques in gathering such data, which would involve developing practical guidance, harmonised methodologies and metrics.

¹ South and East Asia refers to countries in the South and East Asia region, excluding China, India, Japan, and Republic of Korea. ASEAN member states are included.



Mr Shardul Agrawala presented the plans for the upcoming Regional Plastics Outlook report focusing on ASEAN +3 countries. Concerning the Asia Pacific region, findings from the Global Plastics Outlook reveal more than a quadrupling of growth in plastic waste by 2060, in “other non-OECD Asia” (which includes ASEAN member states)—moreover, that mismanaged waste would remain an issue, with 22% of all waste remaining mismanaged by 2060. This being the case, the key questions for the Regional Plastics Outlook would be to examine what the economic drivers of plastics use are in the ASEAN +3 countries, how much plastics would accumulate in the environment in the absence of new policies, what policies would help promote a plastics lifecycle with lower environmental impacts, while exploring how to harmonise policies between countries within the Asia Pacific region, so as to align ambitions with the global agenda on ending plastic pollution. He also touched on what the data needs would be such as incorporating data on plastics use for some SEA countries, for end-of-life fates other than recycling at the waste stage, as well as assumptions regarding evolution of waste collection rates and end-of-life fates, recycling loss rates, plastic use phase lifetimes, and embedded plastics content in internationally traded products.

The Dialogue then moved on to the Roundtable Discussion, during which panellists from SEA country ministries presented their respective country challenges regarding data and information on marine plastic pollution:

Mr Sith Roath noted that in Cambodia, there is yet no systematic nationally managed data, but rather data is kept by individual agencies and there is no harmonisation between them. National surveys do get conducted—with the combined effort of public and private sector—but data is collected using pen and paper and only subsequently digitised, leading to potential inaccuracies causing a difficulty to carry out data analysis for policymaking purposes. There is also no institutional mechanism to keep the data with the agencies—rather the data records are often kept at the individual level.

Mr Rofi Alhanif stated that a national digital platform for waste management data has now been established, which compiles the data received from local government, and monitoring for both land-based and ocean-based leakage is carried out every year to measure progress towards achieving the 70% marine plastic debris reduction target. However, he cited the challenge of fragmented data governance in Indonesia, as there are more than 500 local governments in Indonesia, and it is through their input that the national database is updated. He concluded by mentioning the use of AI and satellite observation as a promising tool to carry out plastic debris monitoring at the national level.

Mr Sidxay Makvilay noted that there is no national data centre for Laos, and in addition, data collection is only carried out in a number of provinces. While Laos does not carry out monitoring for marine plastic pollution, it does monitor river plastic pollution, and there is the enduring challenge of lack of regulation and subsequent enforcement regarding plastic pollution in Laos, nor the adequate infrastructure to do so. He concluded by highlighting another ongoing challenge, that of raising public awareness about plastic pollution.

Mr Eddy Masuaansyah Bin Mohd Ali Murad highlighted, in the case of Malaysia, a fragmented data governance system: Malaysia is governed at the federal level, but also a number of provinces maintain significant autonomy with regard to self-governance. This could lead to a subsequent fragmentation of data collection, and lack of harmonisation, both with respect to collection and with respect to methodologies. Taking a regional perspective with respect to the SEA region, he mentioned that a lack of baseline data on the state of plastic pollution remains a key challenge regionally.

Ms Wassana Jangprajak mentioned that Thailand works with the private sector to develop a database on waste, from production, to consumption, to waste management, but that Thailand still lacks information on plastics along the entire lifecycle. Since raw data comes from the local governments, Thailand also experiences fragmented data governance, and there is a wide discrepancy in large municipal areas where data collection can be carried out, but smaller areas face difficulties, and would result in inconsistency of data. She concluded by highlighting whether it would be possible to harmonise the data concerning land-based leakage to the ocean with data on sea-based leakage.

Ms Nguyen Thi Thu Thuy noted that Viet Nam has established national environmental databases—VASI Viet Nam manages ocean/marine data, and another database exists for land-based waste data, managed by the department of waste management. No national study has yet been done on marine plastic pollution in Viet Nam, thus data on marine plastic pollution has not been integrated



into the national data system. She cited the lack of consistent methodology in assessment and monitoring as a key challenge for Viet Nam, as well as lack of resources.

Session 2: Towards coherence: efforts to expand use of data & indicators towards a circular and sustainable ocean economy in SEA

Moderator:

- **Mr Gede Hendrawan**, Senior Lecturer in Marine Sciences, Faculty of Marine Sciences and Fisheries, Udayana University, Indonesia

Presenters:

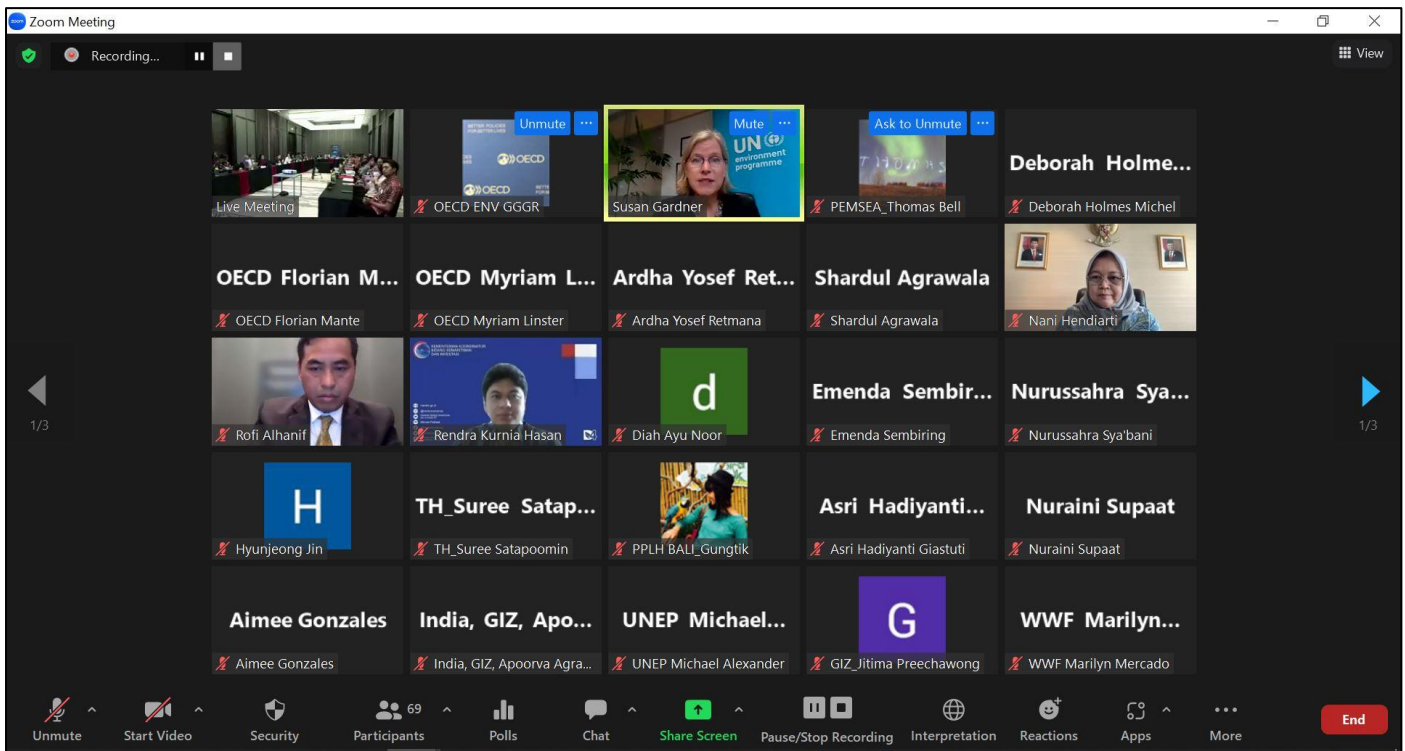
- **Ms Therese El Gemayel**, Programme Management Officer, SDG and Environmental Statistics Unit, United Nations Environment Programme
- **Ms Nguyen Thi Thu Thuy**, Officer, Vietnam Ocean Data and Information Center (VODIC), Viet Nam Agency of Seas and Islands (VASI), Ministry of Environment and Natural Resources, Viet Nam
- **Mr Florian Mante**, Statistician, Environmental Performance and Information Division, OECD Environment Directorate

Ms Therese El Gemayel, on behalf of UNEP, presented the ONE UNEP Plastic Initiative, with the purpose of accelerating global circular plastic economy to reduce plastic pollution and its impact—one component of which is to develop technical guidelines to enable National Statistics Offices (NSOs) and other relevant organisations to measure flows of plastic along the lifecycle. Recognising the importance of providing policymakers with high-quality and comparable statistics on plastics, the first draft of the technical guidelines is planned to be published in 2024 alongside the development of tools and training for capacity building. This will help to enhance the technical capacity of NSOs and relevant line ministries to regularly produce circular economy and waste datasets to inform policy.

Ms Nguyen Thi Thu Thuy shared some past and ongoing work by the Viet Nam Agency of Seas and Islands (VASI) on integrating ocean data towards circular economy and sustainable ocean economy. Citing Viet Nam's National Action Plan for Management of Marine Plastic Litter that targets to reduce ocean plastic waste by 75% by 2030, and the revised law on Environmental Protection that came into force in 2022, which would serve as a legal basis for the development of Extended Producer Responsibility (EPR) programmes. Furthermore, the National Development Plan on a Circular Economy was issued in June 2022, with a goal to reuse, recycle and treat 85% of plastic waste by 2025. To tackle plastic waste, work is already being done for information collection and establishing a database of plastic waste through a digital platform. The national database of marine and island resources and environment—which has been developed since 2008—was presented as a centralised platform to monitor the country's coastal and marine natural resources, including natural capital conditions, satellite imagery, etc. She concluded by stating that work would still need to be done as to how to integrate the current available data sources on marine plastic waste into the aforementioned national database.



Mr Florian Mante next presented OECD's work on the [Sustainable Ocean Economy Database](#), which is a comprehensive database covering all aspects of the ocean economy, categorised broadly into: a) natural capital; b) well-being & resilience; c) environmental & resource productivity; d) economic opportunities; e) policy responses; f) socio-economic context. In addition, he gave an overview of the conceptual monitoring framework for the circular economy, which looks at the material lifecycle and value chain in interaction with the environment and policy responses, while considering socio-economic implications and opportunities. This was furthermore pointed to as a key area of work of relevance for the SEA region, with the building blocks of indicators considering a) policy response; b) material lifecycle and value chain; c) interactions with the environment; d) socio-economic opportunities. In this respect, areas of work in which OECD would seek further co-operation with SEA countries include geospatial analysis (marine & coastal protected areas, monitoring exposure to climate-related hazards, coastal population) and policy data (policy instruments, fossil fuel support, environmentally harmful fisheries subsidies).





Day 2 (morning): Policy Coherence

Key Takeaways:

- The existence of too many different agencies, different local and national frameworks on plastics could likely create a rift between policy design and implementation on the one hand, and between policy implementation and enforcement on the other
- There is a need for co-ordination between development co-operation partners to avoid duplication, ensure efficient and targeted use of resources, as well as to reduce the reporting burden on organisations
- There is room to use existing good practices to promote policy coherence, for instance harmonised labelling, and EPR schemes
- Plastic bans may not be a one-size-fits-all solution, pointing to a need to consider the capacities / specificities of the waste management infrastructure (or lack thereof)
- Buy-in from the local community is a key element, and challenges of implementation should be identified within the context of a community—emphasising the importance of promoting dialogue with local-level stakeholders across the waste value chain, e.g. junkshop owners, informal waste-pickers, intermediate traders, end-of-chain recyclers
- A persistent barrier exists for changing public behaviour on waste, despite the existence of public awareness of the problem

Session 3: Implementation challenges in tackling marine plastic pollution at the local level – towards coherent policy solutions

Moderator:

- **Mr Shardul Agrawala**, Head of Environment and Economy Integration Division, OECD Environment Directorate

Panellists:

- **Mr Made Janur Yasa**, Founder, Plastic Exchange, Indonesia
- **Ms Josephine Tan Mei Ling**, General Manager, Penang Green Council, Malaysia
- **Mr Dimanche Long**, Vice Governor, Preah Sihanouk Province, Cambodia
- **Ms Souksaveuy Keotiamchanh**, Founder, Zero Waste Laos, Lao PDR

Day 2 of the Dialogue began by inviting provincial / local-level actors and stakeholders to take the floor—from Indonesia, Malaysia, Cambodia, and Laos respectively—to share their respective projects / initiatives, as well as share the policy implementation challenges they face at the local level in combatting marine plastic pollution. The ensuing Roundtable Discussion provided an opportunity for policymakers at the national level to hear about the local-level challenges, and exchange ideas on how these may be overcome:

Mr Made Janur Yasa provided an overview of the work of his organisation, Plastic Exchange, in promoting plastic recycling by setting up a system in which villagers help sort plastic waste in exchange for rice. In addition, to deal with the food waste that is often generated alongside plastic waste (as plastic packaging is often packaging for food) he introduced another initiative from his organisation that builds composting contraptions made from cement, able to be installed in each household. He holds that promoting active participation from village stakeholders is a key ingredient for successful grassroots waste management initiatives.

Ms Josephine Tan Mei Ling provided an overview of the work of the Penang Green Council, that supports the province of Penang, Malaysia through policy support, project collaboration, and promoting education & awareness. Specifically, Penang Green Council developed a “Green Community Model” to improve waste management practices in local communities, through campaigns



such as the “No Single Use Plastic” campaign, and supporting data collection through domestic waste surveys. She emphasised that, to solve the plastic challenge, buy-in from the local community is important and that challenges should first be identified within the context of a community.

Mr Dimanche Long gave an overview of various initiatives taking place in Preah Sihanouk Province, Cambodia, in tackling marine plastic pollution. The province has introduced a plastic bag charge of 0.1USD/bag at all supermarkets, as well as installed clean water dispensers in schools and public zones to discourage the use of plastic bottles. To stop leakage, the province has also installed waste filters in rivers to catch the plastic before it reaches the ocean, as well as setting up a facility to collect used fisheries equipment. He emphasised the importance of setting up such a system for fishing gear, in the context of a coastal province where fisheries contribute substantially to the economy.

Ms Souksaveuy Keotiamchanh gave an overview of the work of Zero Waste Laos, a youth-led organisation with a focus on environmental communication, awareness-raising and pilot projects in support of recycling. Notably, the organisation works with schools in Southern Laos to set up plastic waste recycling points from which plastic waste is separated and sorted. The initiative plans to expand to 100 schools in Laos by 2025. Noting the essential role of informal waste pickers in the waste value chain, the organisation collaborates with other projects to study and monitor the situation and well-being of waste pickers at landfills. She emphasised the importance of engaging youth as a key stakeholder to tackle the plastic problem.

Session 4: Towards coherence: co-ordination of efforts at the international and national levels to tackle marine plastic pollution

Moderator:

- **Ms Natalie Harms**, Project Officer on Marine Litter, COBSEA

Scene-setters:

- **Mr Vong Sok**, Head of Environment Division, Assistant Director of Sustainable Development Directorate, ASEAN Secretariat
- **Ms Eija Kiiskinen**, Senior Global Relations Advisor and **Mr Bum Cheul Park**, Junior Policy Analyst, Finance, Investment and Global Relations Division, OECD Environment Directorate

Presenters:

- **Mr Ujang Solihin Sidik**, Deputy Director for Producer Governance, Directorate of Solid Waste Reduction, Ministry of Environment and Forestry, Indonesia
- **Mr Voltaire Acosta**, Project Manager, UN-Habitat Philippines
- **Ms Yumi Nishikawa**, Plastic Smart Cities Lead, WWF
- **Mr Michikazu Kojima**, Senior Advisor to the President, Economic Research Institute for ASEAN and East Asia (ERIA)

Mr Vong Sok, Head of the Environment Division and Assistant Director of Sustainable Development Directorate at the ASEAN Secretariat, began by drawing attention to the [ASEAN Leaders' Declaration on the Blue Economy](#) of 2021 which emphasised the continued importance of the blue economy on ASEAN member states not only for economic growth, but also for its potential to address the ongoing social and environmental challenges, of which marine plastic pollution is one. Regarding this, ASEAN is in the process of developing an ASEAN Blue Economy Framework to provide concrete routes to implementation. He pointed to the [ASEAN Regional Action Plan on Combating Marine Debris](#), currently at its implementation stage, as a key document to promote coherence at the regional level and underscored the importance of continued dialogue on how to co-ordinate and work with all the key players, particularly at the local government and at the city level. To serve as a forum for dialogue, he drew



attention to the work of dedicated working groups at the ASEAN level, such as the ASEAN Working Group on Coastal and Marine Environment (AWGCME), in which marine debris is one of the main topics. He concluded by affirming ASEAN's role as a provider of guidance, capacity building and good practices at the regional level.

Ms Eija Kiiskinen and **Mr Bum Cheul Park** informed participants of OECD's work on the concept of Policy Coherence for Sustainable Development (PCSD), which provides an analytical framework for measuring policy coherence. Composed of 8 building blocks (political commitment; policy integration; long term planning horizons; policy effects; policy coordination; subnational and local involvement; stakeholder engagement; monitoring & reporting) the framework illustrates how different institutional mechanisms could fit together and synergise with one another. An opportunity was provided to update the SEA participants on the ongoing project to develop [Country Notes on marine plastic pollution](#) for the ASEAN member states—with the first versions published January 2022—and the Country Consultations that have taken place with some SEA countries (Cambodia, Viet Nam, Malaysia) to discuss updates to the Country Notes, with the addition of a policy matrix and a table of donor projects. These would aim not only to help guide donor co-ordination in the region, but also to provide and at-a-glance overview of the policy landscape on marine plastic pollution at a more granular level, categorised into different types of instruments, from governance arrangements to market-based instruments, and financing instruments, among others.

Mr Ujang Solihin Sidik drew attention to Indonesia's national waste management target of 30% waste reduction at source, and 70% proper handling of waste by 2025, and the marine litter reduction target of 70% reduced marine plastic waste by 2025; as well as outlining the Indonesia's legislative instruments to help shift the waste management paradigm from 1) end-of-pipe solutions; to 2) promoting the 3Rs & EPR; to 3) circular economy, and eventual elimination of single-use plastic items along with eco-design. Notably, the rise of online shopping was pointed to as a big driver in the increase of consumer plastic waste (i.e. packaging). To tackle the challenge and to foster coherence, he drew attention to the set of activities carried out at the national level, divided into five categories: a) increase stakeholder awareness; b) land-based waste management; c) waste management in the coastal and marine areas; d) funding mechanism, institutional strengthening, monitoring, and law enforcement; and e) research and development.

Mr Voltaire Acosta argued that, as stipulated in the Philippine National Plan of Action on Marine Litter, there is a need for a localisation guide / framework to support local-level implementation. This specifically relates to the passing of the EPR Act of the Philippines in 2022, which obliges large enterprises to declare "rigid" or "flexible" packaging. As an organisation that works at the local level, he argued the sharing of knowledge through local stakeholder dialogue was essential, and the importance of waste diversion data management as an integral part of EPR-readiness at the local level. Responding to a need to develop city-level Action Plans to complement the National Action Plans, the speaker also shared the development of city-level Action Plans for six cities in the Philippines (Legazpi, Cagayan de Oro, Ormoc, Calapan, Manila, Davao).

Ms Yumi Nishikawa spoke of the vision of WWF to have "No Plastic In Nature" through a global campaign to pilot on-the-ground solutions, as well as to scale up the knowledge base. Working primarily with cities, the Plastic Smart Cities initiative works to understand the problem, plan strategic solutions, and subsequently take action through policy, advancing waste infrastructure, engaging businesses and encouraging innovation. Working with more than 20 cities in the SEA region, WWF tailors its focus to work on improving waste infrastructure, waste management systems, behavioural change, and reducing unnecessary plastics use. She ended by showcasing some examples of interventions made on the ground, which included technology implementation, upscaling solutions, stakeholder roundtables, and capacity building.



Mr Michikazu Kojima provided a regional perspective on co-ordination to combat marine plastic pollution, as well as a number of good practices to guide future policy initiatives. He introduced the work of the online knowledge platform, the Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD), which is an online knowledge hub to share up-to-date policies, and best practices from governments and the private sector. He touched on a number of regional coordination mechanisms that have the potential to synergise, among them: 1) the ASEAN Regional Plan for Combating Marine Debris; 2) the COBSEA Regional Action Plan on Marine Litter; 3) the PEMSEA Network of Local Governments for Sustainable Coastal Development Marine Debris Prevention Initiative; and 4) the Marine Plastics Debris Cooperative Action Initiative adopted at the ASEAN+3 summit in 2018. He also outlined common regional challenges which included geography (i.e. a number of SEA countries are archipelagic states with a high cost of transportation between islands); lack of harmonisation on design for recycling; and regulatory barriers across ministries. As for good practices, partnerships with shipping companies to reduce the cost of domestic transportation of waste was mentioned as potentially replicable in ASEAN, the practice of banning the colouring of PET bottles to facilitate recycling, and the practice of the perforation of labelling for easy removal.





Day 2 (afternoon): Financing

Key Takeaways:

- **There is room to scale up financing from both public and private sources to tackle marine plastic pollution** – but resources also need to be targeted better, to be aligned with country needs and priorities all the while adopting international good practices, in addition to making room for innovation
- **Challenges at the international level** include a fragmented regulatory landscape, lack of harmonised data, and a lack of adequate disclosure of plastic-related externalities and impacts
- **Need for a gradual shift to a life-cycle approach in SEA**, i.e. prioritising upstream interventions, and financing mechanisms that fit with that approach (e.g. bonds, guarantees, loans and grants)
- **Lack of bankable projects** a big challenge in the SEA region—pointing out the need to consider credit risks, high transaction costs, and high capital expenditure to build waste management infrastructure, and making waste management a viable investment
- **Need for a collaboration with the private sector** on circular economy transitions, value chain improvements, new technologies and materials, livelihood improvements, developing strategies for waste stakeholders and recyclers
- **Small interventions may generate significant returns and benefits down the road**—stressing the need for flexible, patient funding, and giving MSMEs not only access to finance, but also de-risking their activities (e.g. through capacity building)

Session 5: Taking stock of private sector financing for a sustainable ocean economy / plastic waste reduction

Moderator:

- **Ms Mathilde Mesnard**, Deputy Director, OECD Environment Directorate

Presenters:

- **Ms Peggy Lefort**, Pollution and Circular Economy Lead, UNEP Finance Initiative
- **Mr Crispian Lao**, Founding President, Philippine Alliance for Recycling and Materials Sustainability (PARMS)
- **Ms Kristen Linscott**, Senior Program Officer, Plastics Policy and Markets, Verra
- **Ms Angela Noronha**, Director for Growth, Asia, SecondMuse

The afternoon of Day 2 started by inviting international partners and private sector stakeholders to take the floor to present their work on how to mobilise private finance to combat marine plastic pollution. A Roundtable Discussion followed the session on private finance, in which SEA country representatives and panellists from multilateral and bilateral development banks deliberated on the role of development co-operation and how public finance can best be targeted to address marine plastic pollution in SEA:

Ms Peggy Lefort argued for an emphasis on prevention before management, i.e. prioritising upstream measures, in the targeting of finance to curb marine plastic pollution, alongside due consideration of the local context (e.g. regulatory backdrop, informal sector). In presenting the work of UNEP FI—known for their 2018 [Sustainable Blue Economy Finance Principles](#)—she also spoke of the need to look ahead towards an eventual need to explore interlinkages with the financing clauses of other multilateral environmental agreements, such as with Article 2.1c of the Paris Agreement, and Goal D of the Kunming-Montreal Biodiversity Framework, in the context of the Convention on Biological Diversity. Notably, UNEP FI convenes the “Finance Leadership Group on Plastics”, which is a core group of leading finance institutions to build readiness in the finance sector to respond to the future



international legally-binding instrument on plastic pollution (ILBI). For the ILBI, she emphasised the need to have clear implementation pathways based on science-based targets.

Mr Crispian Lao went into detail on the proposed EPR system for the Philippines, and how it could effectively serve the function of a financing instrument to generate revenue for recyclers. He presented the work of the Philippine Alliance for Recycling and Materials Sustainability (PARMS), serving as a Producer Responsibility Organisation (PRO), in drafting standards to implement the EPR scheme, and the certification mechanisms that would allow waste diverters (recyclers) to sell their waste diversion credit/certification (which would be certified by independent third-party auditors) to the product producers and subsequently generate revenue for their operations. The waste diverters would encompass all stakeholders in the recycling value chain (e.g. junkshops, waste cooperatives, social enterprises, and civil society actors). This scheme would help move the country towards the “zero waste to nature” by 2030 goal in which 100% of plastic waste would be diverted from landfills by 2030.

Ms Kristen Linscott introduced plastic credits issued by Verra, which supports and scales up activities in plastic waste recycling and leakage recovery through their purchase by companies wishing to meet corporate stewardship commitments, as well as through supporting EPR schemes. With 1 plastic credit = 1 tonne of waste collected from nature and/or recycled, Verra issues the credits accredited through its in-house Plastic Waste Reduction Standard, launched in 2021, with credits going to fund a broad range of downstream activities, such as recovery of ocean plastics, mechanical and chemical recycling, and municipal waste collection infrastructure. Verra has thus far 3 registered projects, with 25+ projects in the pipeline, including with SEA countries such as Indonesia and Thailand. Of the current projects, it is estimated that >2 Mt of plastic waste is estimated to be collected or recycled over their first crediting periods.

Ms Angela Noronha argued that traditional financing leaves little room for innovation, and that pilot projects require “flexible” funding and “patient” timelines to fully develop their nascent solutions and drive towards scale. A case study was presented of a small recycling project that was able to redesign their collection centres and improved collection capacity from 30 tonnes/month to 120 tonnes/month, all through a relatively small grant. Noting that SMEs run most of the collection and aggregation operations in the SEA region and yet are largely untapped in formal recycling networks and investment plans, there is a case for supporting the right set of SMEs with patient midsize loans to increase system capacity. She ended by stressing of the need also to de-risk the activities of SMEs through capacity building.

Session 6: Bringing it together: public sector-led efforts to bridge the financing gap, the role of public finance, and development co-operation

Moderator:

- **Ms Emenda Sembiring**, Associate Professor, Faculty of Civil and Environmental Engineering, Institute of Technology Bandung, Indonesia

Scene-setters:

- **Mr Shardul Agrawala**, Head of Environment and Economy Integration Division, OECD Environment Directorate
- **Ms Anna M. Fink**, Senior Country Economist, Indonesia Resident Mission, Asian Development Bank

Panellists:

- **Mr Sith Roath**, Deputy Director General, General Directorate of Environmental Protection, Ministry of Environment, Cambodia
- **Mr Gerry Pramudya Sulaiman**, Senior Analyst, Fiscal Policy Agency, Ministry of Finance, Indonesia
- **Mr Eddy Masuaansyah Bin Mohd Ali Murad**, Deputy Undersecretary, Ministry of Natural Resources, Environment and Climate Change, Malaysia
- **Mr Crispian Lao**, Founding President, Philippine Alliance for Recycling and Materials Sustainability, the Philippines



- **Ms Anjali Acharya**, Marine Plastics Lead, Senior Environmental Specialist, World Bank

Mr Shardul Agrawala provided scene-setting remarks on the role of development co-operation in tackling marine plastic pollution. Over 80% of mismanaged waste (70Mt) in 2019 came from non-OECD countries, and non-OECD countries is projected to account for the largest increase in plastics use to 2060. Adding to this, a disproportionate burden of the costs of curbing plastic leakage will be put on developing countries, making the case for enhanced international support, and ODA. The role of development co-operation in this field is growing, with major international fora (G7, G20) acknowledging its role in tackling plastic pollution, and as a result a growth in the number of ODA initiatives specifically focused on marine pollution, with increased recognition from beneficiaries. However, total development finance for this goal still represents a fraction of total development finance—less than 1%—suggesting a scope for better targeting of finance to focus on the geographical leakage hotspots, and better alignment of finance to curb plastic pollution. A number of proposals were given to better mobilise development finance, including scaling up total resources, and co-ordination to develop guidance for effective development co-operation in this area.

Ms Anna M. Fink, the second scene-setter, introduced ADB's Action Plan for Healthy Oceans and Sustainable Blue Economy, with a USD 5 billion commitment to fund sustainable ocean economy-related activities by 2024. In addition, the Blue SEA Finance Hub initiative aims to create bankable blue projects worth USD 300 million by 2024, by catalysing both public and private flow of capital. Specifically, the project on "Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific" works with four SEA countries (Indonesia, Philippines, Thailand, Viet Nam) on a number of activities, from data, metrics and baselines to city-level action plans, pilot projects and test facilities focusing on high-level technologies, capacity building, catalytic financing, and supporting alignment with the future ILBI on plastic pollution. ADB also works closely with the private sector, a notable case being the with Indorama Ventures in 2020 to expands PET recycling facilities in 3 SEA countries (Indonesia, Philippines, Thailand) and beyond.

Mr Sith Roath, in highlighting financing challenges for Cambodia, noted the issue in making fee collection schemes work. Notably, there is at present no mechanism for the government to channel fees derived from import/export of plastic waste back to the waste management system. The issue of high cost of financing for waste-to-energy infrastructure was also pointed to as an issue that needs addressing. Furthermore, he noted that challenge in financially supporting private sector recyclers, as primary plastics remain more economically viable than recycled plastics.

Mr Gerry Pramudya Sulaiman shared the experience from the Indonesia Ministry of Finance, namely its work on developing an excise tax on plastics, prior to the COVID-19 pandemic. Originally intended only for plastic bags, the Parliament of Indonesia requested the MoF to expand the tax to include multilayer plastic packaging, as well as plastic straws and Styrofoam. The updated proposal with these new items is currently under discussion with the Ministry of Industry prior to its finalisation and submission to Parliament, in Q3 2023.

Mr Eddy Masuaansyah Bin Mohd Ali Murad shared that, since 2010, Malaysia has mobilised the Green Technology Financing Scheme (GTFS) amounting to around 4 billion Malaysian Ringgit (around 805 million Euros) alongside the creation of 2 500 green jobs—this scheme is used to finance projects such as mechanical recycling facilities, sanitary landfills, etc. However, he noted that only a minor share of investment came from foreign investors, and he asked what can be done to catalyse foreign investment, as well as address high cost of financing. He also pointed to the need for proper waste management infrastructure in Malaysia.

Mr Crispian Lao opined that city and local level authorities have a more difficult time gaining access to finance, as public and international finance goes through the national level and it is harder, at the sub-national level, to achieve the project scale to cover the cost of financing and ensure security for the loans. The main challenge for the Philippines is how to channel the financing down to the Local Government Unit (LGU) level, which is tasked by law to implement solid waste management. He pointed to a cost-sharing scheme shared between the national government and the local level as a possible solution to ease the financing burden on localities.

Ms Anjali Acharya shared their work of the World Bank with PROBLUE, a multi-donor trust fund with a USD 37 million active portfolio on plastics. In addition to the funding of analytical work, plastic lifecycle assessments, and policy support for countries, the



World Bank also puts an emphasis on a lifecycle approach (i.e. prioritising upstream interventions and using clean-up only as a last resort) to plastics management, and that a range of financing options should be available adapted to the country context (e.g. plastic fees, taxes, credit schemes, product charges, EPR system, market-based approaches, voluntary contributions, philanthropy), as there are no silver bullets in financing to curb plastic pollution.

Closing remarks

The partners organising the 3rd Regional Ocean Policy Dialogue (the Indonesian Coordinating Ministry of Maritime Affairs and Investment, the COBSEA and the OECD) thanked for all on-site and on-line participants for their active participation at the Regional Dialogue and highlighted the following: **Mr Rofi Alhanif, Director of Waste Management at the Coordinating Ministry of Maritime Affairs and Investment of Indonesia** noted that the discussion was fruitful and a good opportunity to discover how SEA countries deal with the plastic waste problem, with a view to mitigating further leakage into the environment and to seek further opportunities for collaboration in the future. He took note that data quality and establishing a monitoring system for data remains a challenge for most SEA countries, and further discussions could focus on how the data can be made comparable, standardised and harmonised at the SEA regional level. On a broader note, he pointed out that marine plastic pollution is high on the international development agenda and dialogue is needed at the regional level to propose collaborative activities to which SEA countries can join.

Ms Natalie Harms, Project Officer on Marine Litter at the Coordinating Body on the Seas of East Asia noted, that a shift in the narrative for the SEA region may be in order—the fact that there is such a wealth of initiatives and willingness for change in the SEA region belies the current framing of the region as where the plastic “problem” is. Furthermore, there is much potential for scalable action in the region, and an appetite for collaboration and for action—a conversation which should be continued at the global level as well. She echoed the need for harmonised and comparable data, but also for more coherence policies not only at the national level and across sectors, but also at the regional level. As for financing, she found the discussion on financing waste management infrastructure to be particularly interesting, as well as for innovative financing mechanism partnering with different institutions.



Ms Mathilde Mesnard, Deputy Director of the OECD Environment Directorate started she highlighted the preparation of the OECD Regional Plastics Outlook on ASEAN +3 countries, and that OECD will be reaching out to SEA countries for follow-up. In addition, she noted that SEA representatives will be welcome to participate in upcoming OECD meetings during which the report will be discussed, Furthermore, she reminded participants of updates to the OECD Country Notes on marine plastic pollution, and that OECD will be sharing them soon for countries' feedback on the new elements, including the policy matrix and the donor projects table. She concluded by emphasising that OECD is ready to seek synergies with all major actors and stakeholders active in the SEA region to develop tailored guidance, capacity building and collaboration for other events.

