

Marine Littering and Microplastic in Asia and the Pacific - Regional & National Rules, Action Plans and Present Status

ASEAN Region Perspective on Plastic Waste/Marine Debris - Challenges and Countermeasures

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13th International Conference on Sustainable Waste Management & Circular Economy & IPLA Global Forum 2023 on 30 November 2023
at 11:30 – 13:00 IST, K J Somaiya Institute of Management, India

IGES
Institute for Global
Environmental Strategies

Project Title

Strengthening Capacity for **Marine Debris** Reduction in ASEAN region through Formulation of National Action Plans for ASEAN Member States and Integrated Land-to-Sea Policy Approach (Phase2)

(Phase1) January 2019 - September 2020

(Phase2) January 2022 – December 2023



Stocktaking of the Regional Training Workshop on the Development of National Action Plan on Marine Debris and Evidence-based Policy Making for Sound Solid Waste Management in ASEAN Member States (AMS) 26-28 September 2023 in Bangkok, Thailand



Japan-ASEAN Cooperation



環境省

Ministry of the Environment
Government of Japan



IGES
Institute for Global
Environmental Strategies



IDEA Consultants, Inc.

Situation of NAP and RAP Development in ASEAN



Brunei
National Action Plan for combatting plastic pollution and marine debris (on-going)



LAO PDR
National Plastic Action Plan (draft)



Thailand
Thailand's Roadmap on Plastic Waste Management 2018–2030
Action Plan on Plastic Waste Management Phase II (2023-2027)



Philippines
The National Plan of Action for the Prevention, Reduction and Management of Marine Litter



Cambodia
NAP Process (on-going)



Myanmar
NAP Process (on-going)



Singapore
Singapore's National Action Strategy on Marine Litter



Viet Nam
National Action Plan for management of marine plastic litter by 2030



Malaysia
Malaysia's roadmap towards zero - single-use-plastics



Indonesia
Indonesia's Plan of Action on Marine Plastic Debris 2017–2025

ASEAN Regional Action Plan for
COMBATING MARINE DEBRIS
in the ASEAN Member States
(2021-2025)



The goal of the Regional Action Plan (RAP) is to enhance coordination at the regional and international levels for achieving sustainable management of coastal and marine environments through responding to marine plastic pollution.

Advancing Plastic Waste and Marine Debris in ASEAN

Indonesia

- **Baseline:** Ranked second globally in plastic leakage (2015).
- **Targets and Timelines:**
 - **Presidential Commitment (2017):**
 - Deal with 70% of plastic waste by 2025.
 - **Regulatory Framework (2018-2025):**
 - Presidential Regulation Number 83
 - Mandated 16 ministries and institutions for collaborative action.
 - Five national action plans for marine debris management (2018-2025).
 - **National Target (2017):**
 - 30% reduction of waste at the source
 - Effective handling of 70% of waste
- **Indicators:**
 - Achieved a remarkable 35% reduction in marine debris leakage (2022).
- **Future Strategies:**
 - Strengthen policies, raise public awareness, enforce regulations
 - Minimise waste generation, limit single-use plastics
 - Integrate circular economy concepts into the national agenda.
- **Recent Achievements:**
 - Significant progress in reducing marine debris.
 - Specific regulations (2019) to reduce plastic production and encourage recycling.

Thailand

- **Baseline:** Ranked sixth globally in plastic leakage (2015).
- **Targets and Timelines:**
 - **Roadmap on Plastic Waste Management (2018- 2030):**
 - **2019:** Ban cap seal, Oxo-degradable plastics and micro beads
 - **2022:** Ban foam packaging, plastic straws, specific plastic bags and plastic cup
 - **2027:** Recycling targeted plastic wastes by 100%
 - **Action Plan Phase I (2020-2022):**
 - Banned plastic items (bags, foam packaging, cups, straws)
 - Target: Recycle at least 50% of seven types of plastic waste by 2022.
 - **Action Plan Phase II (2023-2027):**
 - Reduce target plastic to landfill by 100% in 2027.
 - Add target plastic to the system for 100% recycling in 2027.
 - Reduce the likelihood of plastic waste entering the ocean by 50% by 2027.
 - Develop ten effective tools for managing plastic waste.
- **Indicators:**
 - Reduction in plastic usage and post-consumption waste.
- **Recent Achievements:**
 - Comprehensive five-year Action Plan on Marine Debris Management (2023 - 2027)
 - Initiate a pilot program in collaboration with the private sector to test and implement EPR practices.
 - Develop regulations on packaging, including plastics, to ensure responsible management throughout their lifecycle.


Vietnam

- **Baseline:** Ranked fourth globally in plastic leakage (2015).
- **Targets and Timelines:**
 - **National Action Plan (2019):**
 - Goals: 50% reduction of marine plastic litter by 2025, and 75% reduction by 2030
 - **Legal Framework (2020):**
 - Environmental Protection Law and regulations on ocean plastic waste
 - **Prevention Measures:**
 - Charges on single-use plastics
 - Increased taxes on non-biodegradable packaging
 - Ban specific single-use plastics, non-biodegradable packaging, and products containing microplastics by 2031
 - Implementation of EPR Regulations
 - **Innovative Solutions:**
 - Public-private partnerships
 - Education and awareness programs
- **Indicators:**
 - Reduction of marine plastic pollution through charges on single-use plastic products.
 - Indicators for MPL has not yet been developed.
- **Recent Achievements:**
 - Focus on government policies, private sector involvement, and international collaboration.
 - Renewal of legal documents and policies on the environmental protection law related to plastic waste pollution and marine plastic litter.

Stock-Take the Regional Process on Plastic Waste and Marine Debris Countermeasures

Challenges

Countermeasures

<div>Ambitious NAP targets</div> <div>01</div>		<div>01</div> <div>Setting realistic and feasible goals along with appropriate indicators</div>
<div>Data Harmonisation and Monitoring</div> <div>02</div>		<div>02</div> <div>Standardised framework incorporating local contexts</div>
<div>Capacity Building and Knowledge Sharing</div> <div>03</div>		<div>03</div> <div>Open communication channels through existing/new platforms</div>
<div>Coordination Mechanism</div> <div>04</div>		<div>04</div> <div>Promote regional collaboration and coordination</div>
<div>Local Implementation</div> <div>05</div>		<div>05</div> <div>Mobilisation of Technical and Financial Support</div>
<div>Legal Consequences/fines for Non-compliance</div> <div>06</div>		<div>06</div> <div>Strengthening enforcement mechanisms</div>

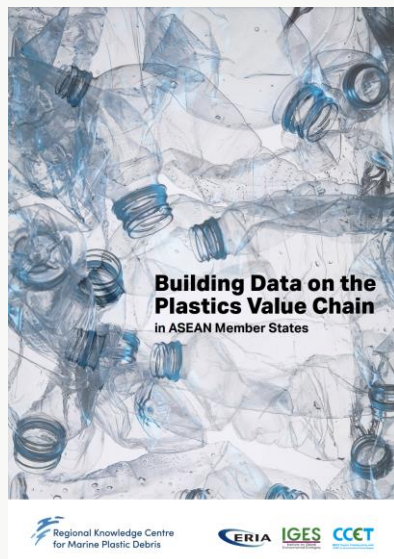
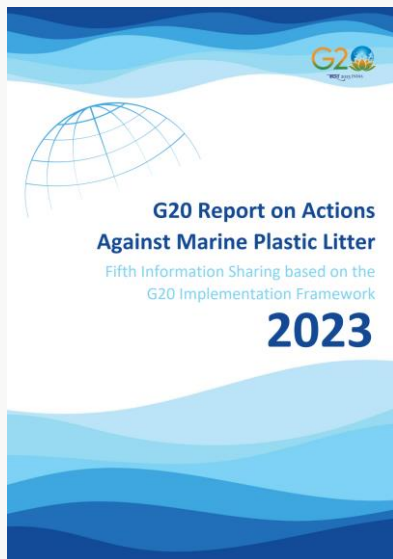
Data Focus, Capacity Building and Knowledge Sharing



ERIA Experts Working Group (EWG) on Marine Plastic Debris



Knowledge Products



Coming Soon...
www.iges.or.jp

For more information, please contact:
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Scaling up Innovations at Local Level: Zero Plastic Waste Island

Utilising

- Using produced oil and charcoal within the island aiming to develop closed island plastic recycling system
- Promoting tourism as a Zero Plastic Island



Collection system

- Collecting plastic waste and marine plastics and improve the solid waste management system on the island

Collaboration



Rayong PAO/ Phra Sub-district Governments

Established Recycling System

- Recycling system using superheated steam to convert plastic and organic compounds into oil and charcoal



Study & Certification Scheme for Zero Plastic Island

- Measuring and verifying the plastic neutrality of the island to offset activities through recycling



• Create zero plastic waste by developing a closed-loop island system which can convert plastic waste and other waste to oil on Samet Island, Thailand. If successful, this model can be applied and replicated in other locations that show interest in implementing a similar project.

• Support local authorities and stakeholders in implementing a resource circulation model on the island to add value to communities and resorts and promote tourism.

• Supported by ADB-APAC Sustainability Seed Fund through the Asian Venture Philanthropy Network (AVPN)

Project Implementation

Expansion to other areas

Samet Island

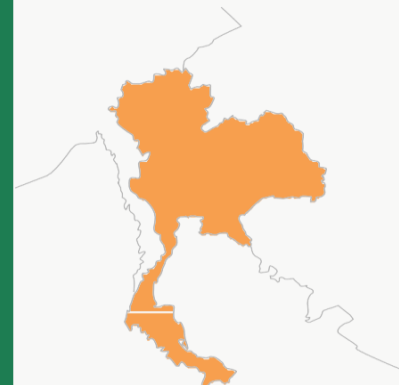


Operation for the plastic waste into Oil

Planned Project Activities

- Provision of technological advance to convert plastic waste into recovered oil
- Local engagement through waste collection system improvement, awareness raising campaigns, capacity building, community enterprise, waste bank etc.
- Incorporation of IoT through Google.org.
- Marketing channel of recycled oil

Local manufacturing



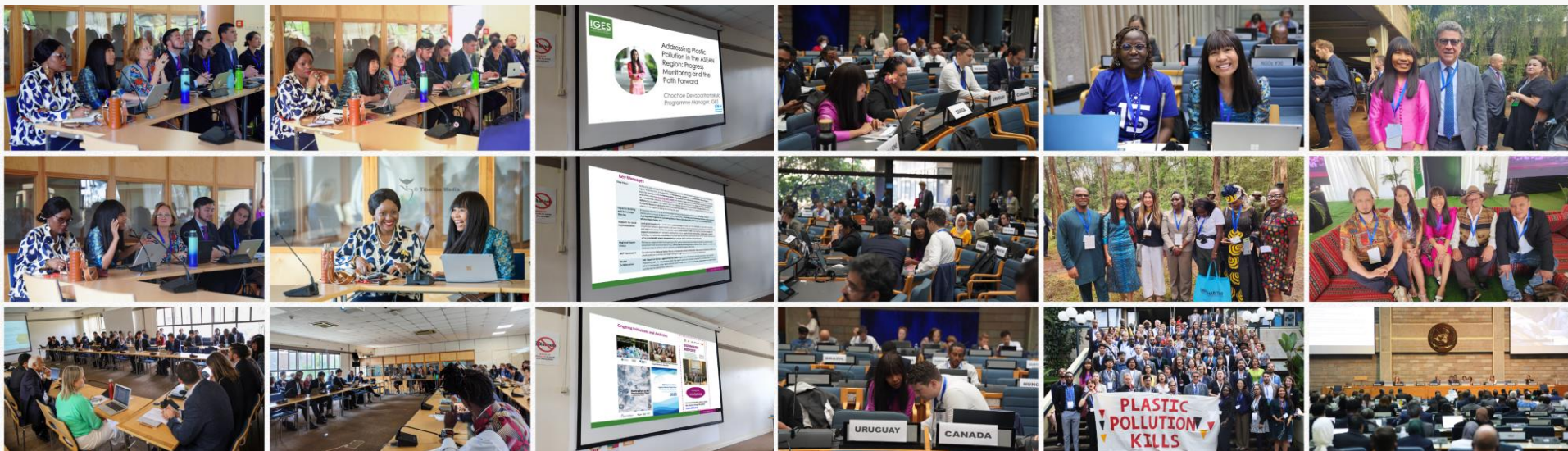
Marketing to other areas of Thailand



With support of:



Global Negotiation Platform – INC on Plastic Pollution



- International Cooperation
- Coordinated Approach
- Transboundary Issues
- Standardised Policies
- Knowledge Sharing
- Capacity Building
- Monitoring and Evaluation
- Financial Support
- Global Awareness

Key Messages

Data Focus	Addressing data collection and reporting gaps are crucial for effective plastic pollution management in the ASEAN region. To achieve this, a focused effort on transparency, consistency, and standardised methodologies is essential, placing priority on data traceability, digitalisation, and technology integration . It's crucial to harmonise approaches while incorporating local context and establish clear standards with robust compliance mechanisms for accurate data collection. Initiatives such as the ongoing development of the Regional Plastics Outlook in ASEAN+3 by the OECD with support from the Institute for Global Environmental Strategies (IGES) and the Economic Research Institute for ASEAN and East Asia (ERIA) play a vital role in establishing foundational data on plastics in the region, bridging the existing data gap.
Capacity Building and Knowledge Sharing	Enhancing capacity building and knowledge-sharing initiatives among government officials and relevant stakeholders is crucial for data-driven policy-making (e.g., Knowledge and Partnerships Platform of the Southeast Asia Regional Program for Combating Marine Plastics (SEA-MaP-KPP) , ERIA's Regional Knowledge Centre for Marine Plastic Debris etc.)
Support for Local Implementation	Local governments play a crucial role in implementing the Treaty, and their inclusion is essential for successful cooperation between governments at all levels. Policymakers should emphasise the importance of mobilising cities and regions for action before the possibly treaty's enforcement in 2024 , ensuring that concrete messages and support mechanisms are tailored to address the diverse needs of local communities . Collaboration, capacity building, and resource accessibility at the local level should be fundamental aspects of the Treaty's framework to achieve sustainable waste management and combat plastic pollution comprehensively.
Regional Expert Group	Setting up a regional technical expert group for policy analysis and coordination function on evidence-based assessment and recommendation (e.g., ERIA's Experts Working Group on Marine Plastic Debris) is a valuable and necessary step to address plastic pollution in the ASEAN region effectively.
Global Collaboration	G20 Report on Actions against Marine Plastic Litter , led by the Ministry of the Environment, Japan and G20 Presidency, with the support from IGES. The report serves as a valuable resource for countries to learn from each other's experiences, share best practices, and consider new initiatives. It fosters collaboration on a global scale to combat marine plastic litter effectively.