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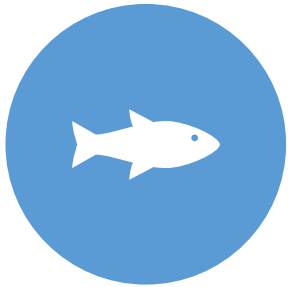
Challenges and Opportunities for Marine Debris Management in Southeast Asia

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Regional Environmental and Resilient Development
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Overview of Marine Debris Issue

Macro Debris
($>20\text{mm}$)



Micro Debris
($<20\text{mm}$)

What Is Marine Debris?

80% of marine debris
come from
land-based sources &
they are **plastics!**

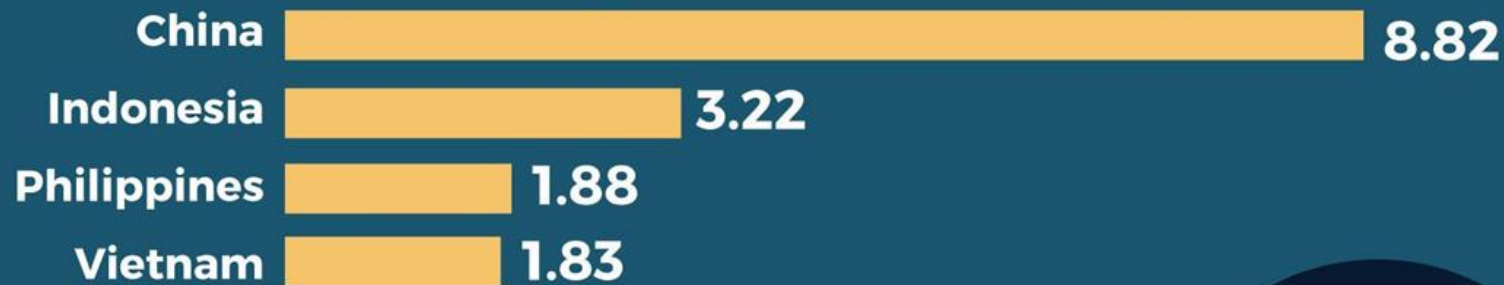




Asia emits 80% of plastic waste in the sea but almost no effort to treat it.

Top sources of plastic trash in the world's oceans

● million metric tons per year



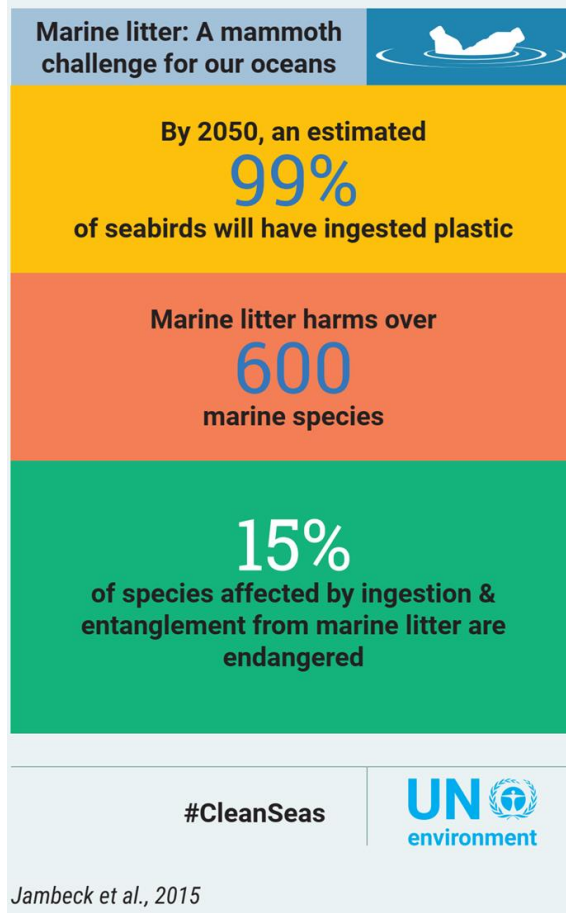
More than **5 trillion pieces of plastic** in the ocean are **94%** of which are **microplastics**.

Marine Debris Can ...

- injure or kill wildlife
- pollute habitats
- interfere with navigational safety
- cause economic loss to fishing and maritime industries
- degrade the quality of life in coastal communities
- threaten human health and safety.



Dead whale in Philippines with 40 kg of plastics in stomach (Photo Credit: OrissaPost)





International and Regional Initiatives

International Commitments

London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972) and Protocol (1996)

United Nations Convention on the Law of the Sea - UNCLOS (1982)

International Convention for the Prevention of Pollution from Ships (MARPOL) - Annex 5

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

Regional Initiatives

ASEAN +3 Marine Plastics Debris
Cooperative Action Initiative (2018)

Bangkok Declaration on Combating Marine
Debris in ASEAN Region (2019)

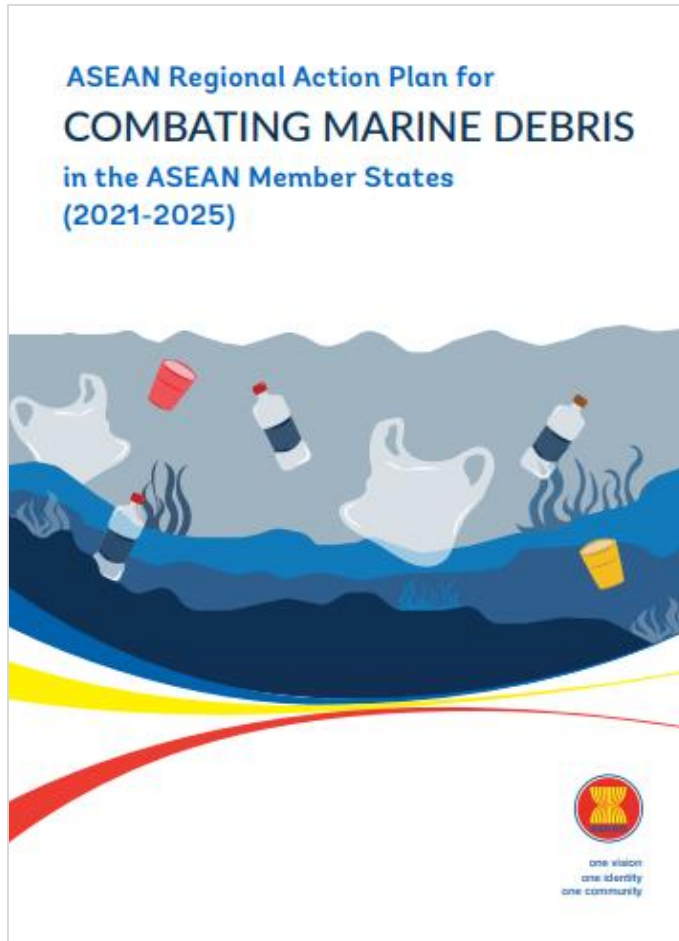
ASEAN Framework of Action on Marine
Debris (2019)

ASEAN Regional Action Plan for Combating
Marine Debris in the ASEAN Member States
(2021-2025)



ASEAN Regional Action Plan for Combating Marine Debris

ASEAN RAP: Three Key Themes



Reduce inputs into the system



Enhance collection & minimize leakage



Create value for waste reuse

ASEAN RAP: Four Components for Action



Policy support & planning



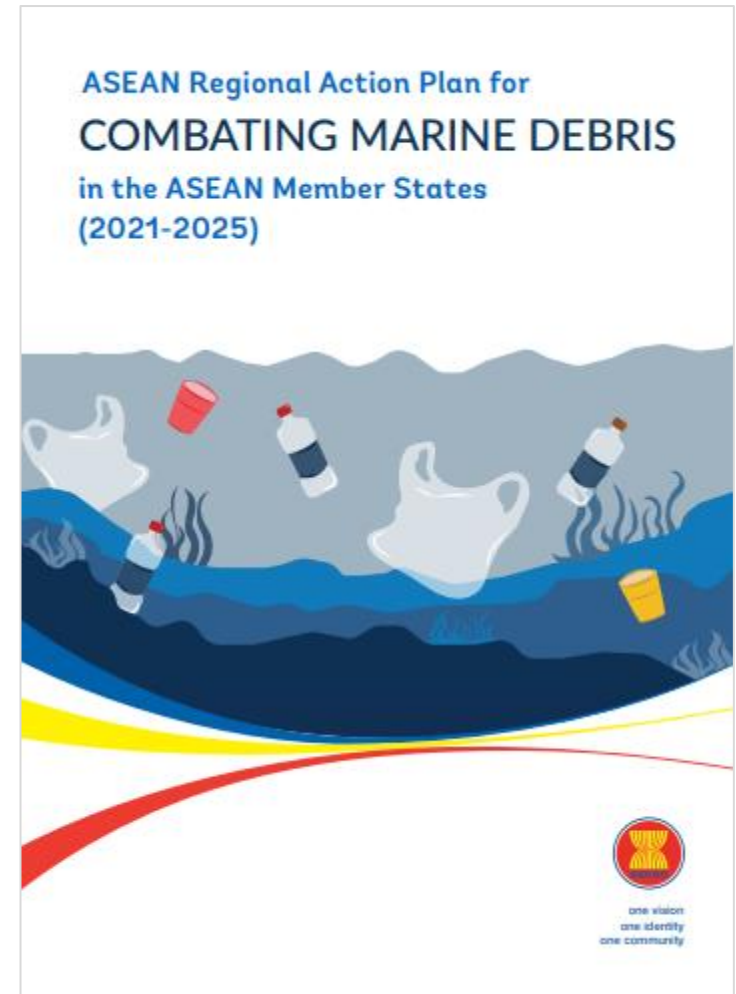
Research, innovation & capacity building

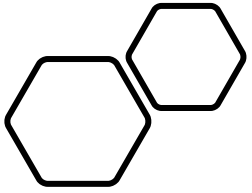


Public awareness, education & outreach



Private sector engagement





POLICY SUPPORT & PLANNING

RAP on Policy Support & Planning

1

Guiding Principles for Phasing out Single-use Plastics (SUPs)

- Policies for consumption reduction, product requirements, Extended Producer Responsibility (EPR)

2

Best Practice Manual for Development of Minimum Standards & Technical Requirements for Plastic Packaging & Labeling

- Standards for sustainable packaging, biodegradability and composability

3

Regional Stocktaking of Green Public Procurement (GPP)

- Manual on GPP best practices and criteria for plastics-related product groups and services

RAP on Policy Support & Planning

4

Regional Guidebook on Financial Mechanisms

- EPR fees, deposit refund schemes, funding mechanisms for plastic waste separate collection and recycling

5

Best Practice Manual for Managing Sea-based Litter

- Guide for regulating waste disposal from vessels, controlling fishing activities, best practices for waste management and clean-up operations

6

Regional Guidebook on Standards for Responsible Plastic Waste Trade, Sorted Plastics Waste, and Recycled Plastics

- Stocktaking of existing grade classification quality & trade requirements for recycled plastics, quality assurance mechanisms and tracking code-system

Comparison with EU Waste Strategies



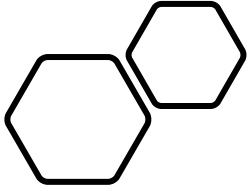
Inadequate data on the common plastic items leaked from ASEAN rivers to oceans may hinder the effectiveness of the policies on SUPs consumption reduction.



The ASEAN RAP is lacking clear quantitative and temporal targets.



Strategic partnership with research institutions is crucial to enhance evidence-informed policy making.



RESEARCH, INNOVATION & CAPACITY BUILDING

RAP on Research, Innovation, & Capacity Building



Develop Guidebook for Common Methodologies for Assessment and Monitoring of Marine Litter

to understand the magnitude of land-based and sea-based sources of marine debris and identify the most common plastic items

Strengthen ASEAN Regional Knowledge Network on Marine Plastics

to enable research collaboration on plastics knowledge and solutions



RAP on Research, Innovation, & Capacity Building



Conduct a Regional Study on Microplastics

to contribute to the global efforts on microplastics research


Coordinate Regional Training Programs on Plastics and Waste Management

to develop regional-level capacity building programs efficiently and effectively



Plenty of good ideas and provides good frameworks, but needs to ...

- include citizen science, particularly involving youth, as part of the research frameworks
- involve R&D institutions that are attached to the industry or the private sector
- provide seed fund to support innovative research on plastics and waste management
- focus on youth as agents of change in the training
- promote cross-jurisdiction exchanges between similar actors.




Pilih Lokasi Survei

Gunakan pertimbangan-pertimbangan ini untuk memilih lokasi survei:

- Dapat kembali secara berkala
- Sesuai dengan keahlian dan pengalaman penyelaman semua peserta
- Survei danau dan sungai air tawar
- Memerlukan izin?

Pembersihan Bawah Air atau Daratan?

Laporkan melalui Dive Against Debris® hanya sampah laut yang ditemukan oleh penyelam di bawah air



© Camel Dive Club Eco Tribe, Egypt

Rencanakan Penyelaman

B2: Waktu Penyelaman

Panduan Survei
Dive Against Debris®

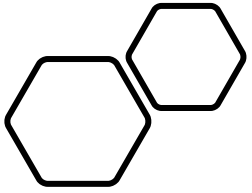
19

CALL FOR APPLICATION!
12 APRIL - 24 MAY 2021



ASEAN YOUTH SOCIAL INNOVATION CHALLENGE:

Finding Alternative Solution to Plastic Pollution



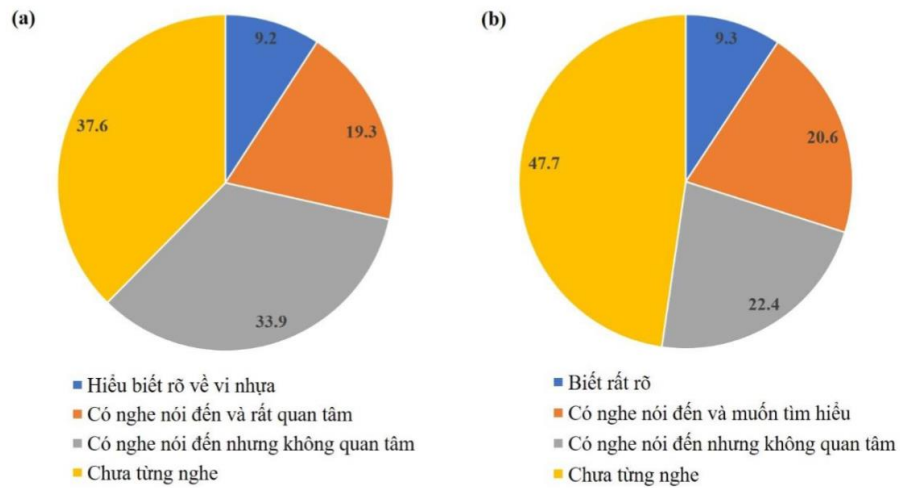
PUBLIC AWARENESS, EDUCATION & OUTREACH

RAP on Public Awareness, Education, & Outreach Programs

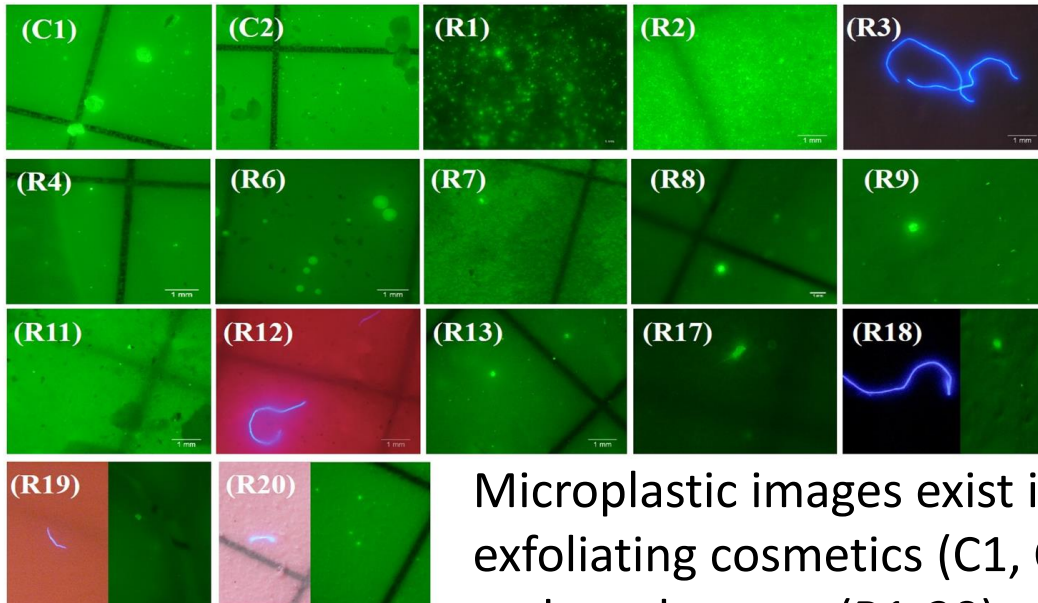
- 1 ☐ **Communication strategy:** Creation of effective campaign designs for the different target groups reflecting different consumption behavior.
- 2 ☐ **Training:** Integration in the training program at all levels



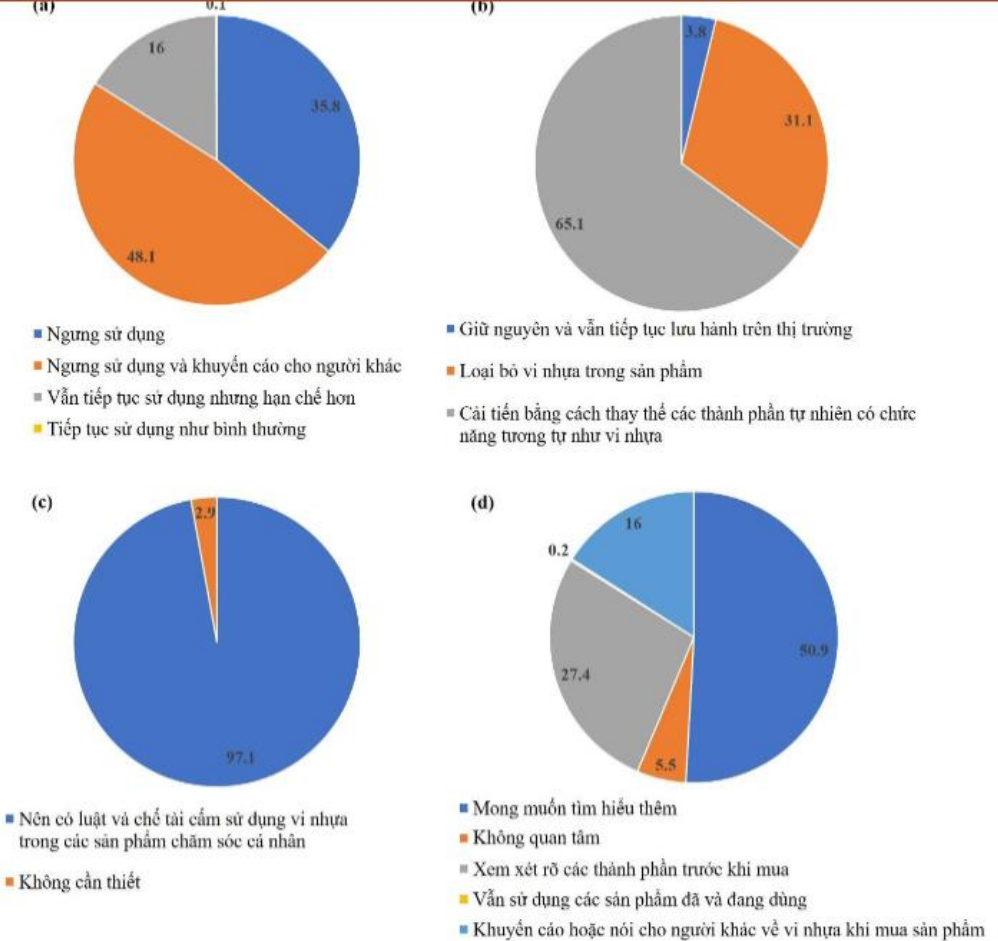
EARTH DAY 2018
END PLASTIC POLLUTION



Survey on consumer awareness and concern about microplastics in the environment (a) and in personal care products (b)



Microplastic images exist in exfoliating cosmetics (C1, C2) and toothpastes (R1-20). (Anh & Truc, 2021)



Consumer attitudes and perceptions about the use of microplastics-containing personal care products: (a) continued use of the product when microplastics are detected, (b) desired for the manufacturer of non-plastic products and personal care products, (c) regulatory requirements for the use of microplastics in personal care products and (d) desire to learn more about products containing microplastics



Awareness program to
prevent ocean plastic waste
in Vung Tau, Vietnam 2019

Audience: students





A training course of plastic recycling for plastic companies SEA-PLASTIC- EDU Project (EU, Lao and Vietnam)





ĐẠI HỌC CÔNG NGHIỆP TP. HỒ CHÍ MINH
VIỆN KHOA HỌC CÔNG NGHỆ VÀ QUẢN LÝ MÔI TRƯỜNG



CUỘC THI SÁNG TẠO CHO CUỘC SỐNG "NÓI KHÔNG VỚI RÁC THẢI NHỰA"

Tài trợ bởi dự án SEA - PLASTIC - EDU thuộc chương trình Erasmus+ của Châu Âu

Ý tưởng, sản phẩm...nhằm giảm thiểu rác thải nhựa hoặc góp phần đem lại hiệu quả trong quản lý rác thải nhựa và bảo vệ môi trường

19 - 24/10
TẠI TRƯỜNG THPT
NGUYỄN THỊ MINH KHAI



Bài thi gửi về văn phòng Đoàn trường THPT Nguyễn Thị Minh Khai (Thầy Văn Ba) hoặc qua email hoang.ng39@gmail.com (anh Hoàng)

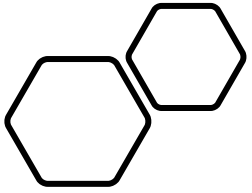
*Để biết thêm về thể lệ cuộc thi, vui lòng quét mã QR code



In our efforts:

- Organize media community events on ocean plastic pollution
- Participating in and building projects related to solid waste management in general and plastic in particular
- Research contests for students about plastic pollution, plastic recycling, like "Green residents", "recycling festival", etc.
- Develop relevant modules in the training program of the Natural Resources and Environment Management and the Environmental Engineering.
- Implement and promote research related to plastic recycling and decomposing, bioplastic and relevance





PRIVATE SECTOR ENGAGEMENT

RAP on Private Sector Engagement



RAP on Private Sector Engagement

1.

Establish a Regional Platform for
EPR Knowledge and
Implementation Support

Focus: Development of EPR handbook
> Implementation of online knowledge
sharing platform.

2.

Establish a Regional Platform to
Support Innovation and
Investments in Plastics and
Plastic Waste Management

RAP on Private Sector Engagement

1.

Establish a Regional Platform for
EPR Knowledge and
Implementation Support

2.

Establish a Regional Platform to
Support Innovation and
Investments in Plastics and
Plastic Waste Management

Focus: Development/strengthening
of regional online platform for
networking and collaborating.

Private Sector Engagement – Current Practices



EPR Policy Review Report, 2021



Recommendations from EPR Policy Review Report

- One industry-led, non-profit Producer Responsibility Organisation (PRO) is proposed for Malaysia
- Formulation of **regulation dedicated to EPR**
- Ministry of Housing and Local Government to be lead ministry on proposal
- Implementation of **voluntary EPR system**
- **Incorporate EPR scheme** in circular economy roadmap for plastics





Recommendation to Strengthen RAP and its Implementation

Recommendations to Strengthen RAP and its Implementation



Robust coordination, collaboration and commitment among AMSs



Exchange of information, knowledge & best practices among AMSs



Transparent and inclusive oversight mechanism & enforcement efforts


Recommendations to Strengthen RAP and its Implementation



Establishment of an ASEAN marine debris trust fund



Implementation and evaluation of pilot projects

The background of the image shows a clear plastic bag floating on the surface of dark, rippling water. The water's surface is covered in small, concentric ripples, and the overall color palette is a deep, dark teal or navy blue. A white rectangular box is superimposed over the center of the image, containing the text "Thank You Very Much!" in a clean, white, sans-serif font. The text is arranged in two lines, with "Thank You" on the top line and "Very Much!" on the bottom line.

Thank You
Very Much!