

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)



### Pollution reduction and waste management: PEMSEA's approach

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#### **EAS Congress**

### **PEMSEA's Mission**

To foster and sustain healthy and resilient coasts and oceans, communities and economies across the Seas of East Asia through integrated management solutions and partnerships













UNDP/GEF Yellow Sea LME Project (YSLME)

of Korea (MABIK)

2 www.pemsea.org

Oil Spill Response (OSR)

International Environmental

Management of Enclosed

**IPIECA** 

Korea Maritime Institute

(KMI)

Oil Spill Response

Agency (SIDA)

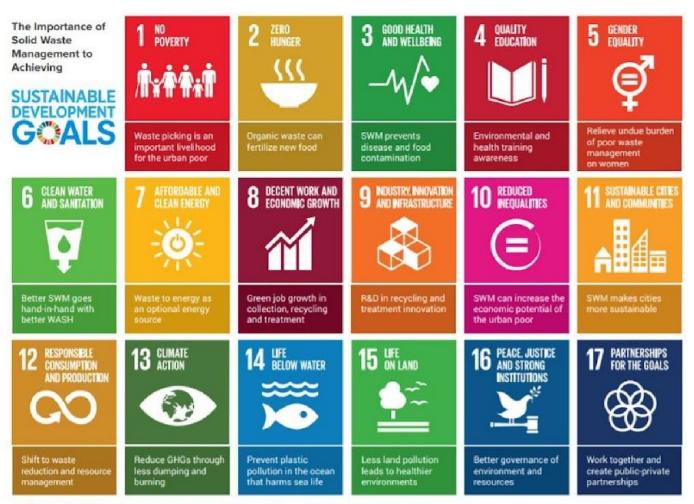
Swedish International Development Cooperation





Marine Biodiversity Institute

### Waste management and UN SDGs



Graphic supplied with assistance from Zoë Lenkiewicz, WasteAid UK and contributor to Be Waste Wise.



### PEMSEA strategy/actions on pollution reduction and waste management (SDS-SEA 2018-2022)

**1.ENHANCE** accession to and/or compliance with relevant international conventions/agreement (UN SDG, Aichi Biodiversity Targets, IMO conventions, ASEAN Cooperation Plan for transboundary pollution Global Plan of Action for the Protection of Marine Environment from Land-Based Activities)

**2.REDUCE marine pollution loadings** in PEMSEA partner countries (marine debris, plastics/microplastics and nutrient pollution)

**3.DEMONSTRATE good practices and experiences** in integrated river basin and coastal area management **for improved source to sea governance,management and investments in** the East Asian region.



CONVENTION	MARPOL 73/78 Annex					LONDON CO	VENTION	COLREG Convention	Intervention		CLC			FUND		
						Convention	Protocol		Convention	Protocol	Convention	Protocol	Protocol	Convention	Protocol	Protocol
COUNTRY	1/11		IV	V	VI	72	96	72	69	73	69	76	92	71	92	03
Brunei Darussalam	86	16A		16A				87			D	92	03	D	03	
Cambodia	95	94	94	94				94			95	01	01		02	
China	83	94	06	88	06	85	06	80	90	90	D	D	00	D	*00	
DPR Korea	85	85	85	85				85a								
Indonesia	86	12	12	12	12			79A			78		00	D		
Japan	83	83	83	83	05	80	07	77	75		D	94	96	D	96	05
Lao PDR																
Malaysia	97	10	10	97	10			80			D		05	95	05	
Philippines	01	01	01	01		73	12	13					98		98	
RO Korea	84	96	04	96	06	93	09	77A			D	93	98	D	98	10
Singapore	91	94	05	99	00			77			D	82	98		98	
Thailand	08							79					17a			
Timor-Leste																
Viet Nam	91	х	х	х	х			90					04			

Legend: Numbers represent year of ratificati	on/accession
<ul> <li>Y - Participated in the Conference</li> <li>W - Withdrawn</li> <li>r - ratification</li> <li>a - accession</li> <li>s - signature</li> <li>A - acceptance</li> </ul>	<ul> <li>Signature</li> <li>Only at conference, does not indicate status of current participation</li> <li>Year of entry into force</li> <li>AA – approval</li> </ul>



# Supporting a circular economy approach to reduce marine plastics pollution in Asia

Develop an enabling environment to support circular plastics economy
Mobilize finance and investments to implement circular plastics solutions
Implement innovative sustainable production and consumption (alternatives to single use plastics)
Share knowledge, build capacity



### Two pronged approach

## 1. Major producers/users of plastic



## 2. Local government units





### UNDP/GEF/ASEAN Project:

Reducing Pollution and Preserving Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management in ASEAN Countries

Designated River Basins/Coastal Areas

- •Cambodia: Kampong River (Kampong Bay)
- •Indonesia: Ciliwung River (Jakarta Bay)
- Lao PDR: Louangnamtha River (Mekong River)
- •Malaysia: Keda-Muda River Basin (Kota Setar-Kuala Muda)
- •Myanmar: Bago-Yangon Rivers (Gulf of Martaban, Andaman Sea)
- Philippines: Imus Ylang-Ylang Rivers (Manila Bay)
- •Vietnam: Vu Gia-Thu Bon Rivers (Da Nang Bay)



### **PEMSEA** and proposed marine litter platform

- Help identify **empirical driven research agenda and potential researchers** (ex.PNLC)
- Conduct **joint research initiatives** (ex. pollution origin and composition, microplastics in inland water bodies, circular plastic solutions)
- Co-organize events at regional/global events
   (PEMSEA Partnership Council, IMO meetings, Our Ocean Conference, World Circular Economy Forum, World Economic Forum, GEF assembly)
- Utilize SeaKB as online sharing platform need partners and funding



# Data/ information barrier to policy reform and behavioral change

- Lack of data on hazards, risks, impact and mitigation measures of waste management greatly inhibit decision making
- Limited awareness and understanding among the general public on the scope and seriousness of marine pollution issue (health, environment, ecosystem, economy) as well as solutions and practical actions



## Improving the economics of waste management is challenging

Vertically integrate the system to allow cross-subsidization, ensure waste coordination and co-locate infrastructure, and workers where possible to reduce costs
<ul> <li>Increase collection volumes and aggregate to generate scale</li> <li>Use wet/dry separation techniques to improve residual value of waste stream</li> </ul>
Collection Sorting Treatment Landfill
<ul> <li>Work with, train and equip the informal sector to better capture the value of recyclables</li> <li>Use "manipulation" technologies to separate, dry and clean waste to prepare waste for treatment</li> <li>Secure offtake agreements for end products, e.g. fertilizer, naphtha, recyclate or electricity</li> </ul>
Reuse Recycling end products

Trash Free Seas Alliance and Ocean Conservancy, 2017. The Next Wave: Investment Strategies for Plastic Free Seas.



### Seas of East Asia Knowledge Bank (seaknowledgebank.net)



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The Seas of East Asia (SEA) Knowledge Bank serves as a knowledge platform for policymakers, planners, managers, investors and other stakeholders to scale up Integrated Coastal Management (ICM) and investment in sustainable development of coasts and oceans across East Asia.

The platform provides access to a collection of case studies, manuals, technical reports and other resources, along with opportunities for engaging and collaborating with peers and experts and guidance for jumpstarting coastal management programs, or taking them to the next level. The platform also supports local governments and other stakeholders in identifying and developing projects that could attract investment, including a series of rapid assessments and the ability to submit a project for further evaluation.

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