



World Bank Group Experiences in Abating Marine Plastic Pollution in East Asia and the Pacific

6 February 2023



Marine plastics in EAP: a growing development challenge with a key role for the region

- Plastics have been a **development driver** for decades
- Turned into a **development problem** due to their omnipresence in the environment



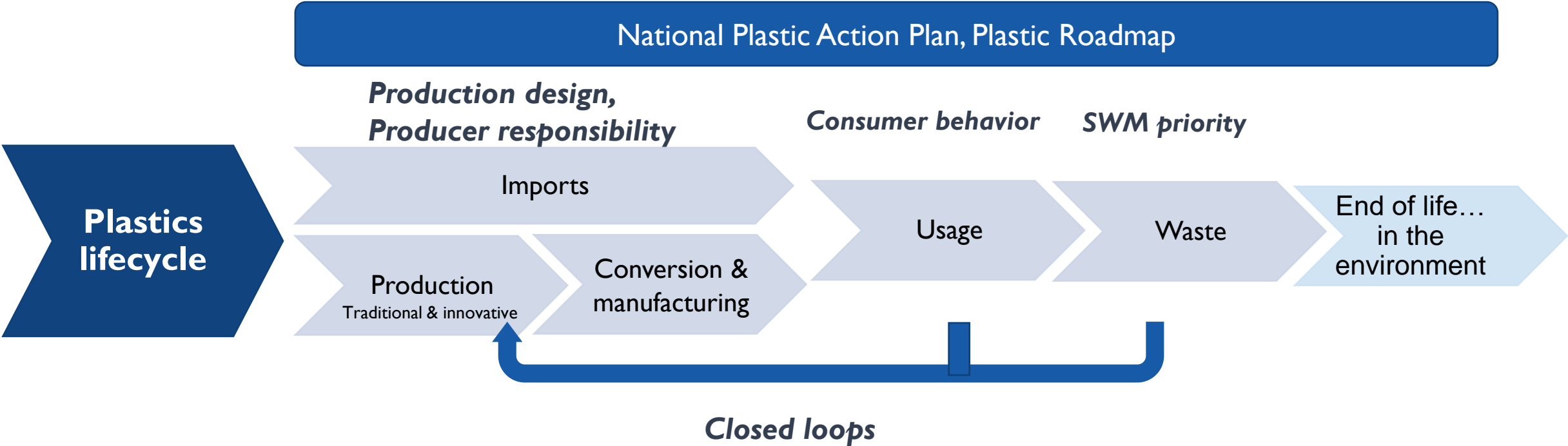
- **The EAP region has become a champion in supporting solutions to plastic pollution**
 - Regional commitment and collective actions
 - Innovative policies and financing
 - Technology development and transfer
 - New business models

EAP has a key role to play in the UN negotiations



WBG's solutions to plastic pollution

Plastic transitions need systemic change and a life-cycle approach



WBG's Analytics – Evidence Base for Plastic Policy Making

NIKKEI Asia

World Trending Business Markets Tech Politics Economy

OPINION

Plastic waste is a growing menace, and a wasted opportunity

Southeast Asia has emerged as a hot spot for plastic pollution

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Where Is the Value in the Chain?

Pathways out of Plastic Pollution

WORLD BANK GROUP

World Bank Group PROBLUE

PLASTICS CIRCULARITY OPPORTUNITIES AND BARRIERS IN MALAYSIA

Low plastic recycling rates are a wasted opportunity in Malaysia.

- 1.1 MILLION TONNES**
1.1 million tonnes of plastics are disposed of each year.
- 24 PERCENT**
About 24% of key plastic resins are recycled.
- 1.1 BILLION USD \$**
\$1 - 1.1 billion of the material value of plastics is lost annually.

THE PROPORTION OF PLASTICS COLLECTED FOR RECYCLING (CFR) VARIES SIGNIFICANTLY ACROSS DIFFERENT RESIN* TYPES.

TONS OF LOCAL RESIN CONSUMED			TONS CFR
HDPE	PP	LDPE / LLDPE	rPP
		PET PACKAGING	rHDPE
		PET POLYESTER	rPET PACKAGING
			rPET POLYESTER
			rPET POLYESTER
			rPET POLYESTER
			rPET POLYESTER
			rPET POLYESTER
			rPET POLYESTER
			rPET POLYESTER
			rPET POLYESTER

1.4M tons of resin consumed per year 0.3M tons recycled per year

PLASTICS CIRCULARITY OPPORTUNITIES AND BARRIERS IN THE PHILIPPINES

Low plastic recycling rates are a wasted opportunity in the Philippines.

- 0.8 MILLION TONNES**
0.8 million tonnes of plastics are disposed of each year.
- 28 PERCENT**
About 28% of key plastic resins are recycled.
- 790-990 MIL USD \$**
\$790 - 990 million of the material value of plastics is lost annually.

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			rPET POLYESTER	rPET POLYESTER
			rPET POLYESTER	rPET POLYESTER
			rPET POLYESTER	rPET POLYESTER
			rPET POLYESTER	rPET POLYESTER
			rPET POLYESTER	rPET POLYESTER
			rPET POLYESTER	rPET POLYESTER
			rPET POLYESTER	rPET POLYESTER
			rPET POLYESTER	rPET POLYESTER

1.1M tons of resin consumed per year 0.2M tons recycled per year

PLASTICS CIRCULARITY OPPORTUNITIES AND BARRIERS IN THAILAND

Low plastic recycling rates are a wasted opportunity in Thailand.

- 2.9 MILLION TONNES**
2.9 million tonnes of plastics are disposed of each year.
- 18 PERCENT**
About 18% of key plastic resins are recycled.
- 3.6-4 BILLION USD \$**
\$3.6 - 4 billion of the material value of plastics is lost annually.

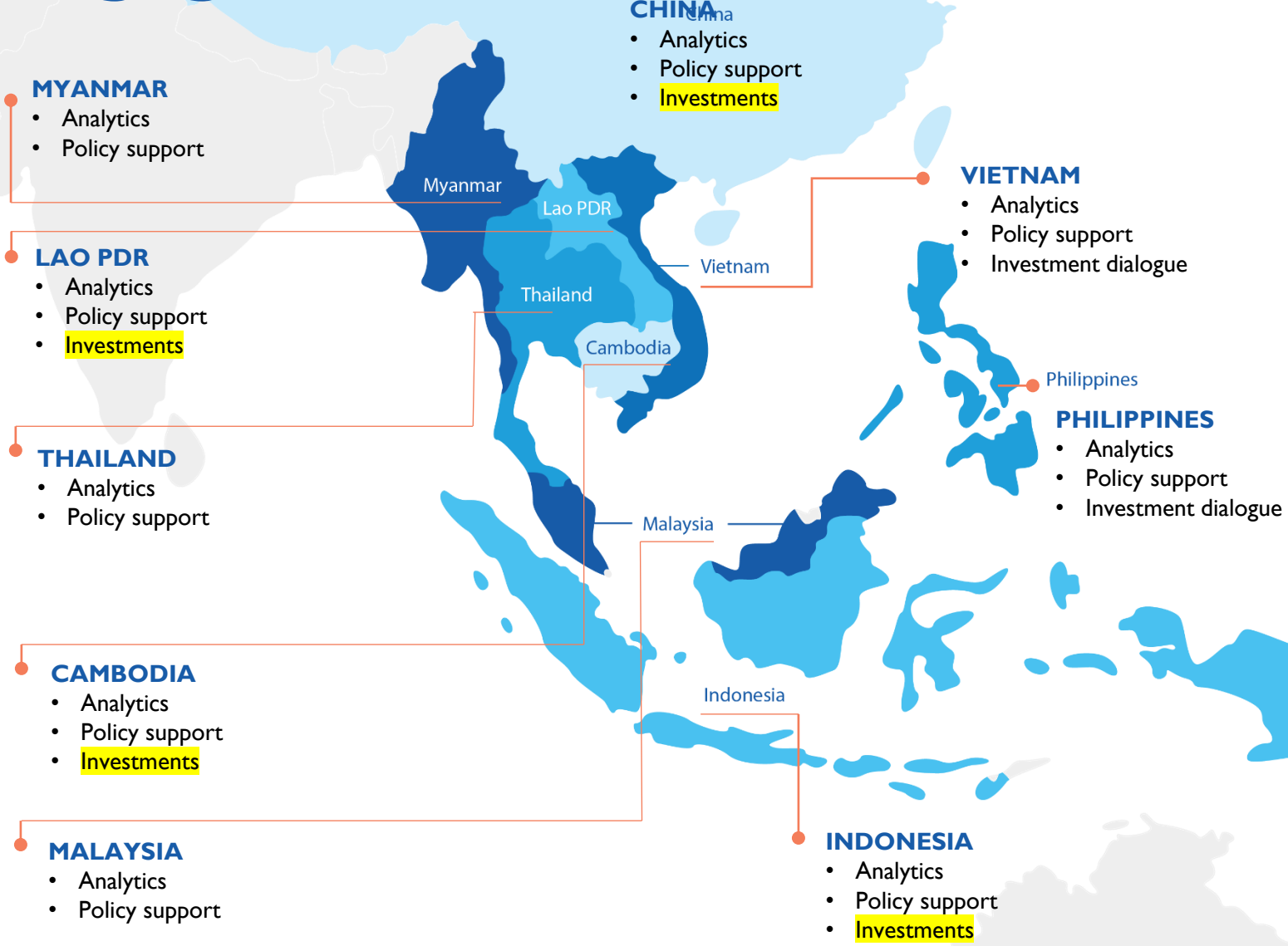
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			rPET POLYESTER
			rPET POLYESTER
			rPET POLYESTER
			rPET POLYESTER

3.5M tons of resin consumed per year 0.6M tons recycled per year

* Plastic resins assessed: Polyethylene Terephthalate (PET), Low Density Polyethylene (LDPE), High Density Polyethylene (HDPE) and Polypropylene (PP).

WBG's Marine Plastic Engagement in EAP



EAP portfolio FY17-22 Addressing plastics USD +1b
 EAP Analytics informing Private & public investments & policy reforms USD +10M

Pipeline/existing lending includes plastics-related activities
 Cambodia (USD 60M),
 Lao PDR (USD40 M),
 Indonesia (USD 100M)
 and China (USD 1 billion)

ASEAN Regional Action Plan on Marine Plastics

Regional harmonized approach to plastics metrics
 Regional plastics recycling market and plastic waste trade

Southeast Asia Regional Program on Marine Plastics (SEA-MaP) USD 20M
 supporting policy and innovation platform and implementation

Pacific Island Countries

China: Backing up the government efforts through plastic reduction projects in urban and rural areas

- **\$1 billion** projects in total contribute to plastic reduction through investments in waste, water management in urban and rural areas and agricultural practices
- **\$400 million** project in addressing plastic pollution control and ecosystem restoration in Yangtze river

China Plastic Reduction Projects



- Policy and regulatory work at the national level with investments and technical assistance at the subnational and local level
- Implementation of the new national policy framework for plastic waste management will take place in Ningbo and Chongqing

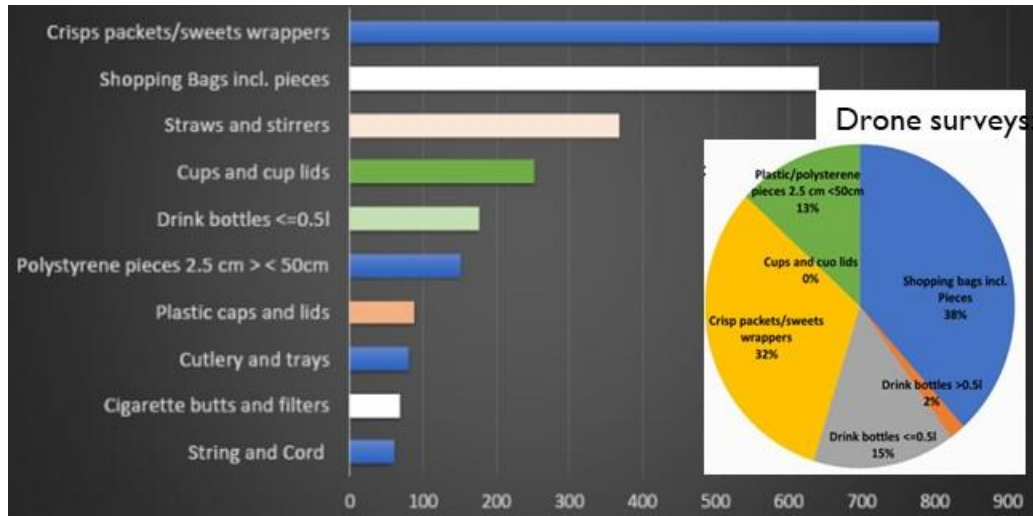
Yangtze River Protection and Ecological Restoration Program



- Developing incentives for the collection of agricultural plastic film to help reduce plastic pollution

Cambodia and Laos: Survey on top 10 single-use plastics leads to policy dialogue and investment

Analytics



Policy support

- National Plastic Sub-Decree development and stakeholder engagement (Cambodia)
- National Plastic Action Plan development and stakeholder engagement (Laos)

Pipeline Investments

- Solid Waste and Plastic Management Improvement Project, \$60m (Cambodia, IDA)
- Environmental and Waste Management Project, \$40m (Laos, IDA + PROBLUE)



Indonesia: comprehensive support (from upstream policy to waste management and fisheries)

Analytics

Indonesia generates 7.8 Mt of plastic waste annually
58% is uncollected, 9% of which is disposed directly into water
Fisheries and aquaculture drivers



Graphic for Plastic discharge study

Policy development

Supporting government policy actions with policy recommendations for both land-based and marine sources



Investment

Building municipal solid waste management systems and infrastructure in priority urban areas to halve the daily amount of waste leaking into the ocean

Behavioral Change

Developing resources for local communities to develop and organize campaigns and raise public awareness

Monitoring

Monitor and report lost gears and disused end of life gears
Monitor waste discharge into rivers

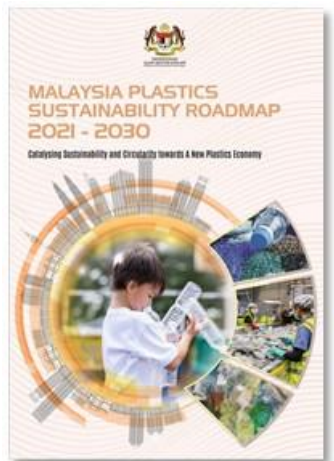
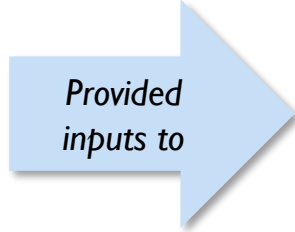
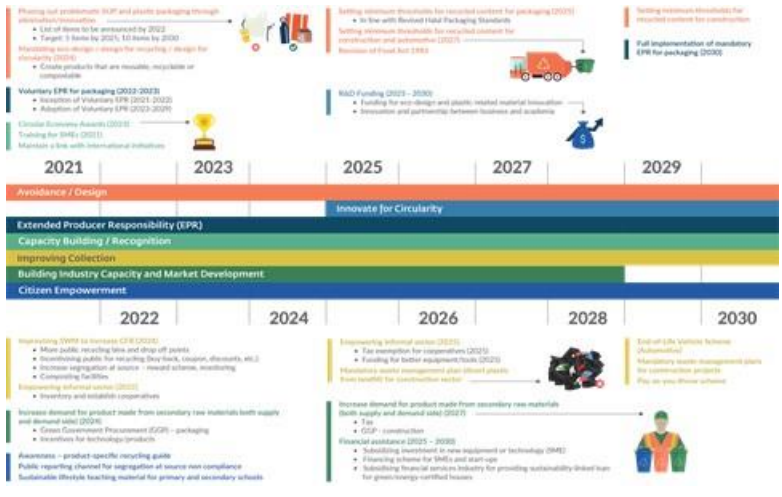


Malaysia and Philippines: Plastics as entry point for systemic change towards a Circular Economy

Analytics



Policy development



Lending (Philippines)

- Metro Manila Flood Management Project includes component “Minimizing Solid Waste in Waterways” (\$48m)
- Sustainable Recovery Development Policy lending is under preparation

Focuses on upstream actions, related to:

- Phasing out problematic single-use plastics
- Extended Producer Responsibility (EPR) for plastic packaging
- Setting targets for plastic recycling, plastic recyclability, plastic recycled content, and plastic collected-for-recycling

Thailand (IFC)

Indorama Ventures PCL (IVL)

- ✓ **\$300m** first-ever blue loan to global plastic manufacturer
- ✓ **50 million PET bottles** to be recycled by 2025 (in Asia and Latin America)

- Major global intermediate petrochemicals producer and one of the largest vertically integrated resin producers in the world:

- **1 in 5 PET bottles in the world made from IVL's resins**
- **1 in 2 premium baby diapers in the world made from IVL's fibers**
- **1 in 4 airbags in the world made from IVL's yarns**
- **One of the early entrants in recycling space-** started producing PET flakes from discarded PET bottles.







ASEAN Regional SEA-MaP

- Southeast Asia Regional Program on Combating Marine Plastics (SEA-MaP)
- Duration: 2022-2026
- Regional Implementing Entity: ASEAN Secretariat
- \$20 million grant program

ASEAN regional action plan for Combating Marine Debris

ELEMENTS OF THE WASTE VALUE CHAIN

	Reducing inputs into the system	Enhancing collection and minimizing leakage	Creating value for waste reuse
FRAMEWORK COMPONENTS  Policy Support and Planning	2. Guiding principles for phasing out select single-use plastics	1. Regional guidebook on financial mechanisms for investments in plastic waste management	3. Regional guidebook on standards for responsible plastic waste trade, sorted plastic waste and recycled plastics
	4. Best practice manual for development of minimum standards and technical requirements for plastic packaging and labeling	6. Best practice manual for reducing, collection and treatment of sea-based litter	
	5. Regional stocktaking of green public procurement		
 Research, Innovation and Capacity Building	8. Strengthen ASEAN regional knowledge network on marine plastics	7. Guidebook for common methodologies for assessment and monitoring of marine litter	
	9. Regional study on microplastics	10. Coordinate regional training programs on plastics and waste management	
 Public Awareness, Education and Outreach	11. Behavioral change communication strategy playbook	12. Enhance regional awareness for consumers of labeling of plastics and packaging	
 Private Sector Engagement		13. Establish a regional platform for EPR knowledge support and implementation support	14. Establish a regional platform to support innovation and investments in plastics and plastic waste management

SEA-MaP supports implementing actions

- Strengthen institutions, harmonize policies, catalyze public and private sector actions
- Establish regional platforms to promote innovation, knowledge, and partnerships



Pacific Countries

- **\$10m PROBLUE** grant funding for analytical work
- **Identifying solutions and actions to address context specific challenges**

Small island states have their own challenges...

- Reliance on imports
- Small market size
- Limited private sector attractiveness
- Lack of domestic solid waste management
- Affected by litter on their shores coming from elsewhere
- Vulnerability of infrastructure linked to climate change

... Requiring tailored solutions at the national and regional levels, to optimize costs and harmonize policies and interventions

Challenges going forward

- Transition to a more Circular Economy
- Waste and recycling infrastructure investment
- Waste management and plastic leakage preventive measures in rural areas
- Implementing plastic policy measures
- Sector-specific plastic and plastic waste management (e.g., fisheries, agriculture, tourism)
- Regional plastic policies and standard harmonization
- Plastic data collection and monitoring framework



WBG stands ready to support countries with plastic reduction



Epicenter of solutions
and innovation



Plastic reduction
demand is high and will
grow



One region but
different contexts,
interests and approach



Thank you so much!