



THE WORLD BANK

Environment, Natural Resources & Blue Economy

Challenges of Plastics Problem in the ASEAN countries and the Role of the World Bank

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Context

Solid Waste Generation and Disposal Method by Income

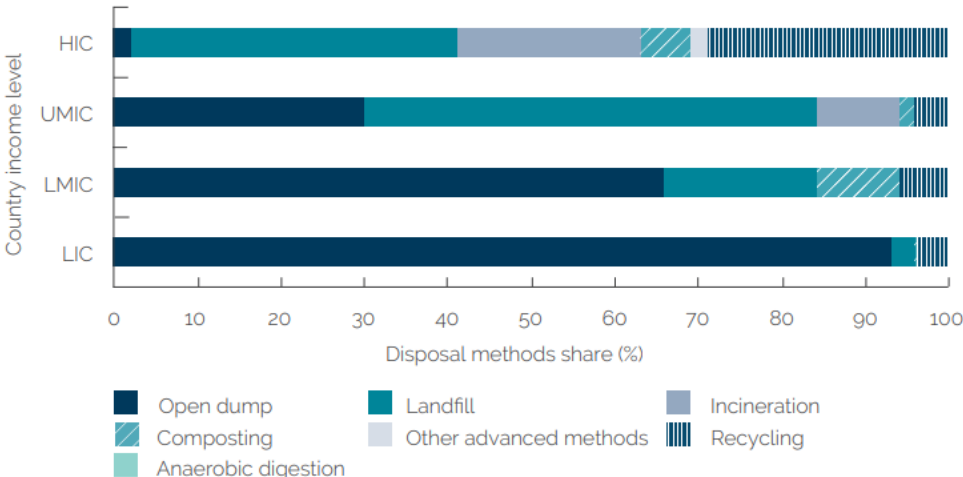
Increasing waste and quality of waste management is a challenge in low-and-middle-income countries

- Largest increase in waste generation is expected in LMICs and LICs
- Most of the waste in LICs and LMICs is improperly managed in open dumps (over 90% and 60% respectively)

Estimated Waste Generation by Country Income Classification



Disposal Methods Share by Country Income Category



World Bank IEG, An Evaluation of the World Bank Group’s Support for Municipal Solid Waste Management (2010–20)

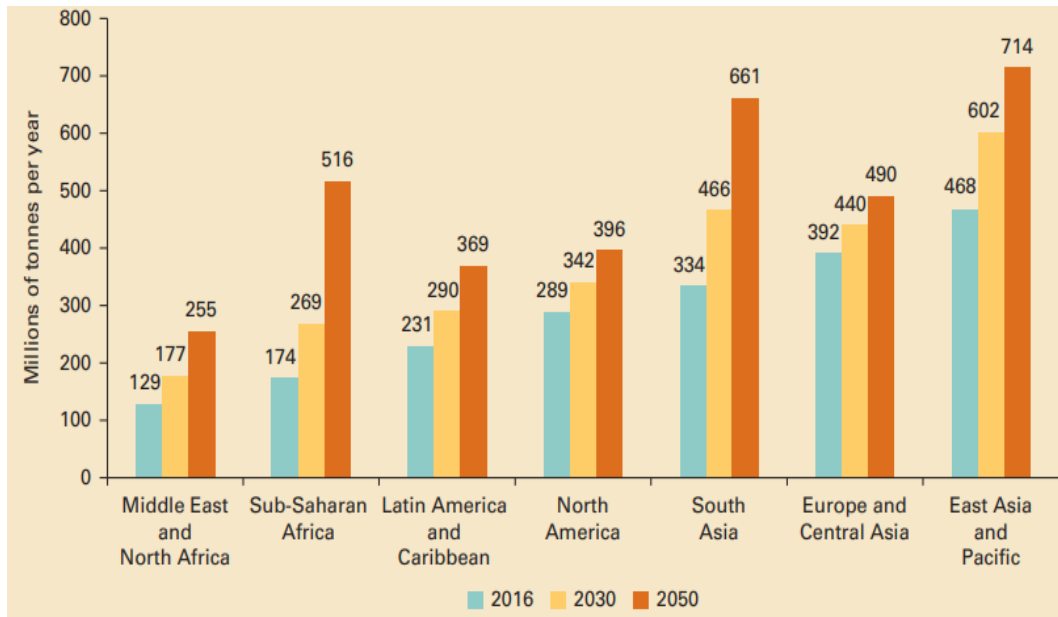


Background

Waste Generation and Plastic Waste

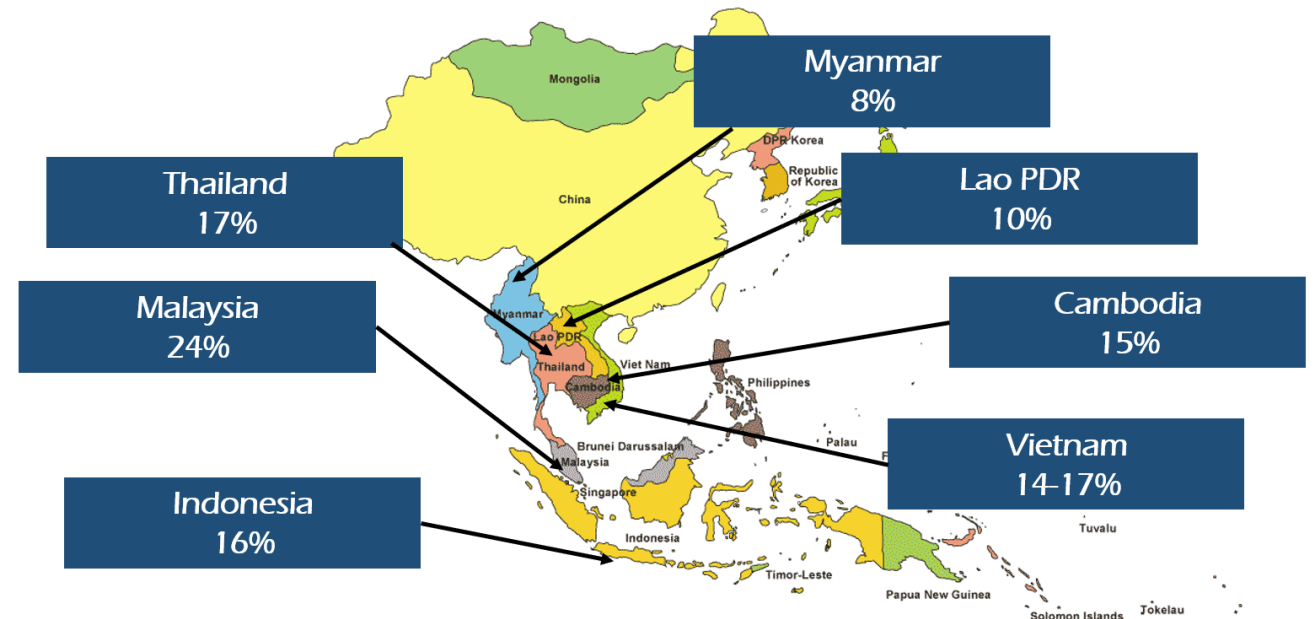
The volume of solid waste across ASEAN has increased rapidly and is projected to increase
Plastics comprise significant portion of the waste in the region

Projected Global Waste Generation by Region



What a Waste 2.0, World Bank, 2018

Proportion of Plastic Waste in Southeast Asia



* There is variation depending on sources.

Plastic Waste in Southeast Asia, UNESCAP, 2020; Asia Waste Management Outlook, UNEP, 2017; Plastic Waste Material Flow Analysis for Thailand, WB, 2021

Background

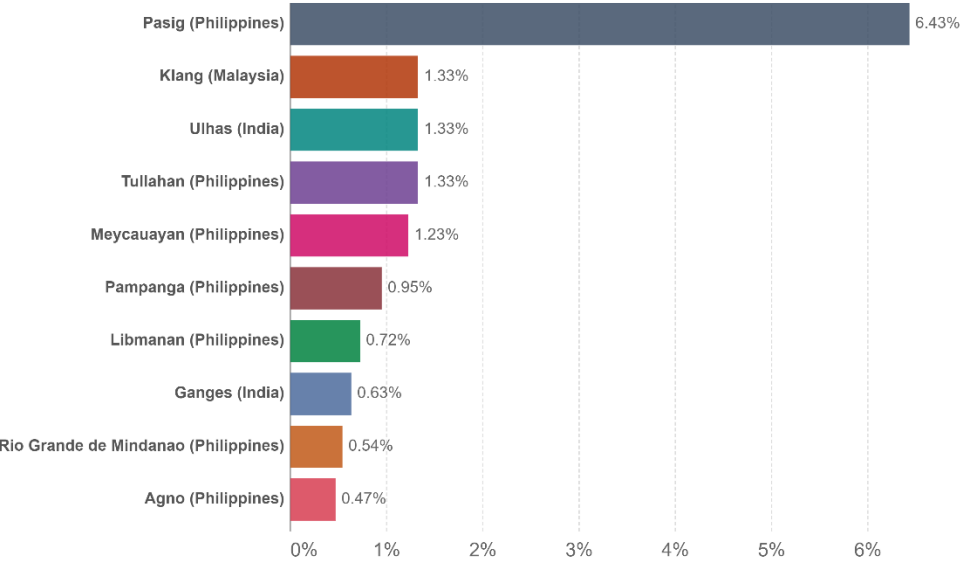
Plastic Pollution in Southeast Asia Region

More than half of waste in the region is uncollected and less than half of the collected waste is treated
Plastic pollution in the region contributes significantly to the global marine plastic pollution



ASEAN Regional Action Plan for Combating Marine Debris in the ASEAN Member States, ASEAN Secretariat, 2021

Share of ocean plastics that come from the largest emitting rivers
 Shown is the share of global ocean plastic pollution that comes from the world's largest emitting rivers. Our World in Data






Source: Meijer et al. (2021). More than 1000 rivers account for 80% of global riverine plastic emissions into the ocean. Science Advances. CC BY



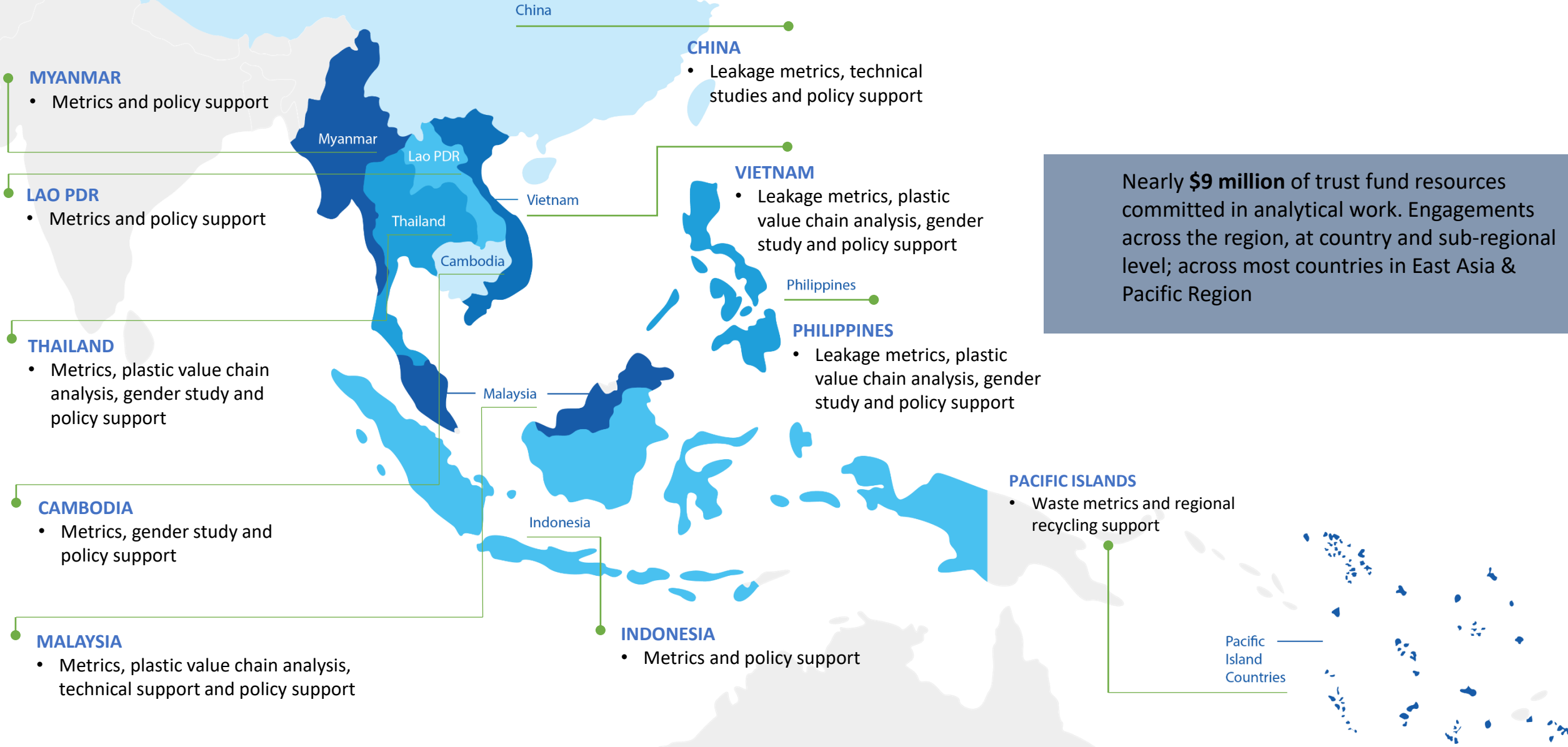
Background

Comprehensive Impact of Plastic Waste

Impact of mismanaged plastic waste is significant across sectors and layers with damages to economies, ecosystems, and food security

Economies, Sectors	Ecosystems, Biodiversity	Food Security
<i>The cost of ocean plastics to tourism, fishing and shipping industries in APEC economies along was \$10.8 billion in 2015</i>	<i>Damage caused by plastics to marine ecosystems estimated to be at least \$13 billion per year</i>	<i>In Makassar fish market, plastic found in 28% of individual fish and in 55% of species sampled</i>
		

WB role towards analytics and policies



Nearly **\$9 million** of trust fund resources committed in analytical work. Engagements across the region, at country and sub-regional level; across most countries in East Asia & Pacific Region

WB role towards analytics and policies

Analytical Support for Countries in Southeast Asia

WB supports ASEAN uncover opportunities and overcome barriers related to plastic waste.

Supported development of regional action plan to manage plastic waste

Regional Action Plan (RAP)

- Identified waste reduction, collection and recycling as key elements of action plan across the plastic value chain
- Aims to achieve waste management through four pillars (policy support and planning; research, innovation, and capacity building; public awareness, education, and outreach; and private sector engagement)



Economics of Plastics Management

- Less than 25% of the total amount of key plastics resins available for recycling in Thailand, Malaysia and the Philippines are recycled
- More than 75% of the material value of plastics is lost (valued at nearly US\$6 billion per year across all three countries)
→ Untapped business opportunity

Key Actions in Regional Action Plan

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
- 4. Best Practice Manual for Development of Minimum Standards & Technical Requirements for Plastic Packaging & Labelling
- 5. Regional Stocktaking of Green Public Procurement

- 1. Regional Guidebook on Financial Mechanisms for Investments in Plastic Waste Management
- 6. Best Practice Manual for Reducing, Collection and Treatment of Sea-Based Litter

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

 **Research, innovation and capacity building**


- 8. Strengthen ASEAN Regional Knowledge Network on Marine Plastics
- 9. Regional Study on Microplastics

- 7. Guidebook for Common Methodologies for Assessment and Monitoring of Marine Litter
- 10. Coordinate Regional Training Programs on Plastics and Waste Management

 **Public awareness, education, and outreach**

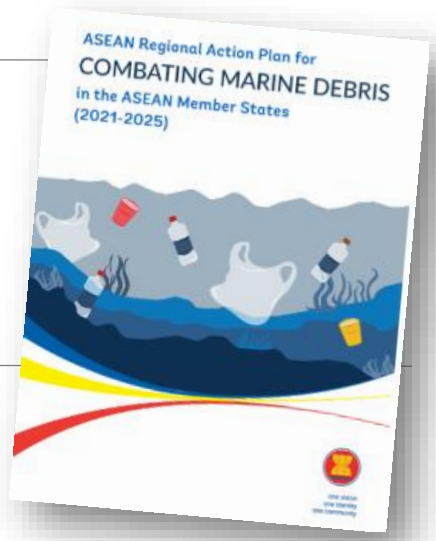
- 11. Behavioral Change Communication Strategy Playbook

- 12. Enhance Regional Awareness for Consumers of Labeling of Plastics and Packaging

 **Private sector engagement**

- 13. Establish a Regional Platform for EPR Knowledge and Implementation Support

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



WBG Country Support

Marine Plastics Activities in the Philippines

- 1** Plastics monitoring on the Pasig River
- 2** Policy option analysis
- 3** Market study on plastics circularity challenges and opportunities
- 4** SWM municipal investment plans
- 5** Support for development of Single use Plastics Phase Out Roadmap



WBG Country Support

Field Surveys: Top 10 Plastics Found in the Environment

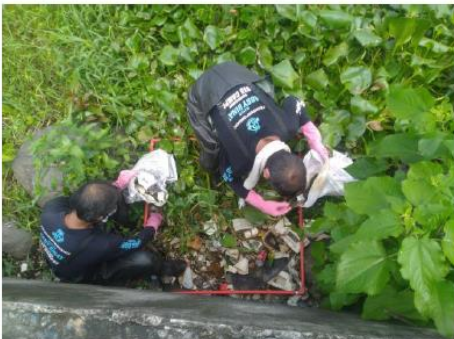
Fieldwork
Photos



Barangay Bagong Ilog



Barangay San Jose



Guadalupe Viejo

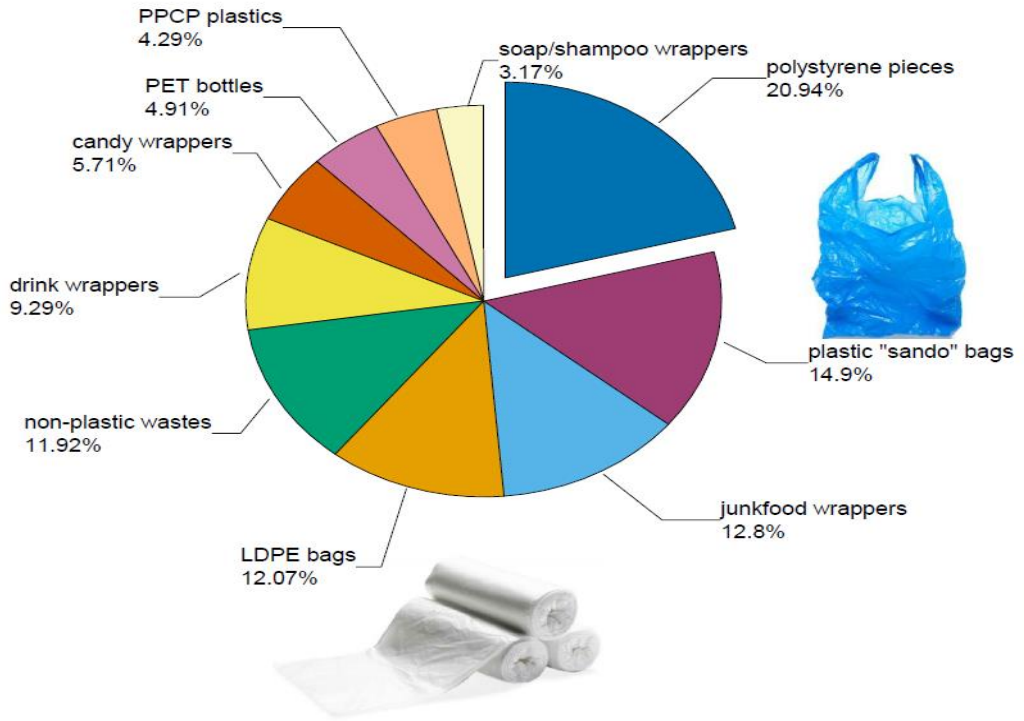


Balisampan Creek

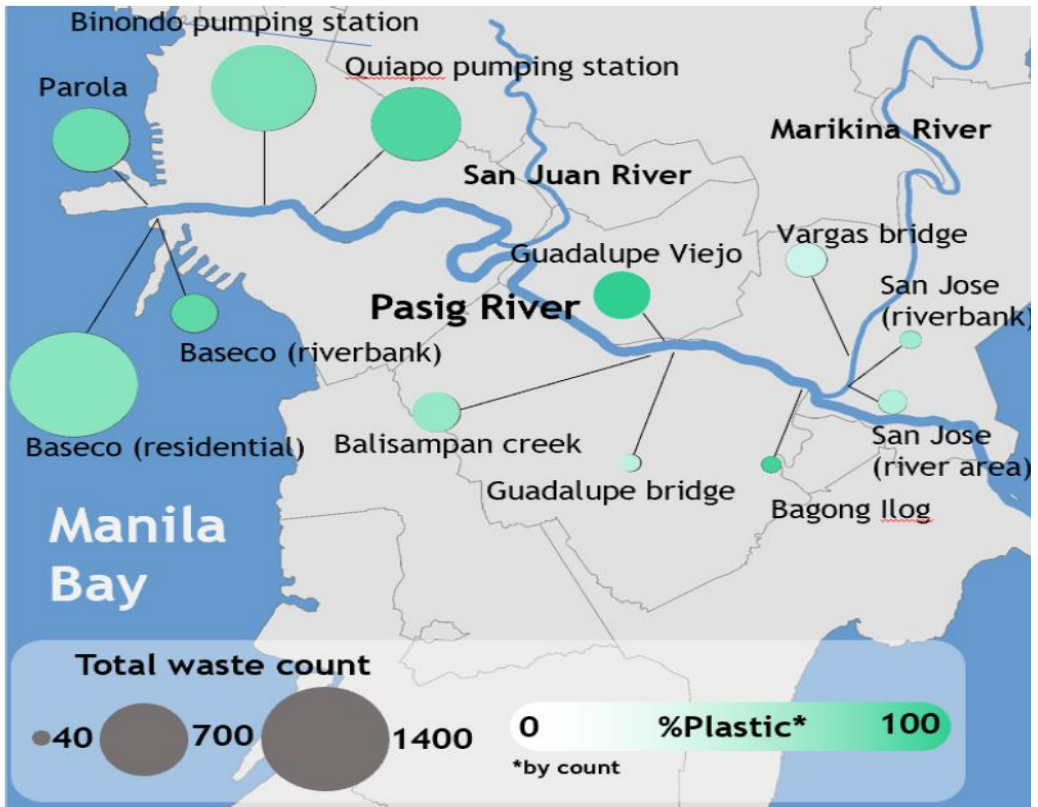
WBG Country Support

Field Surveys: Top 10 Plastics Found in the Environment

Top 10 Most Common Waste Types by Count



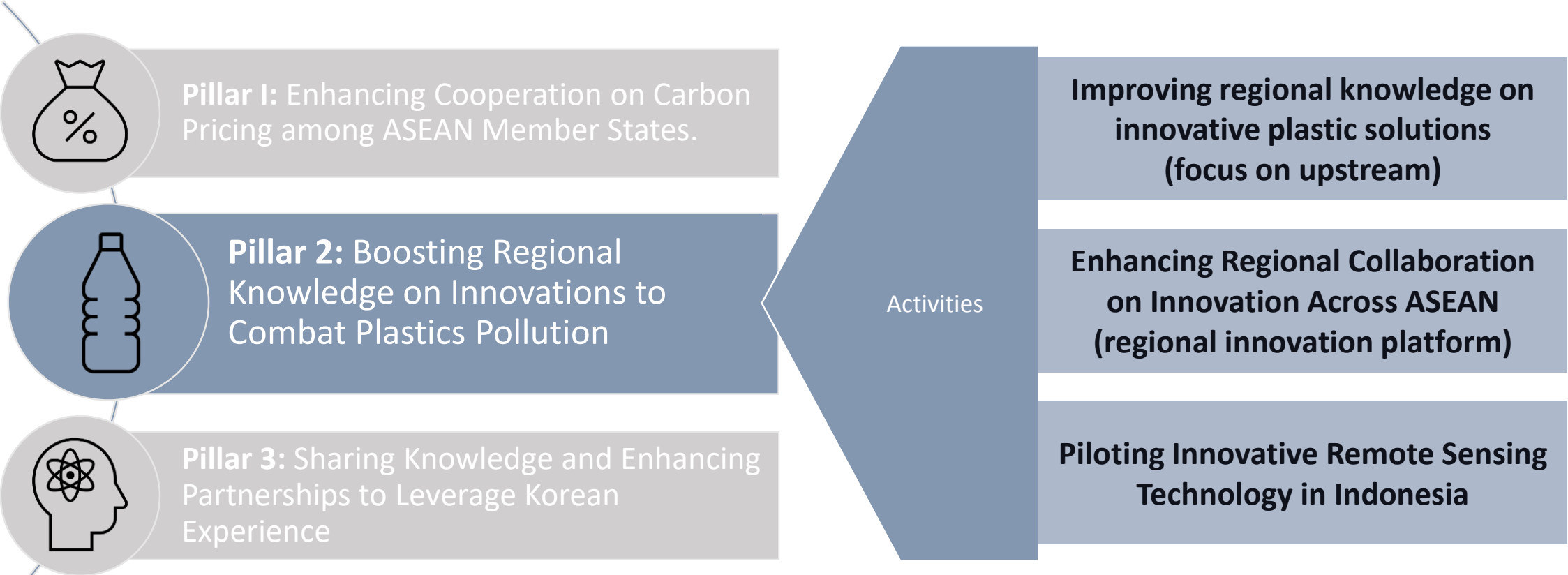
Waste Items Per Quadrant



Ongoing Program and Analytical Work

Environment and Climate Change Innovation in East Asia

Supports ASEAN Regional Action Plan (RAP) for Combating Marine Debris by improving knowledge on innovative solutions and closing the gap between entrepreneurs and potential investors



Ongoing Project

Southeast Asia Regional Program on Combating Marine Plastics (SEA-MaP)

Program Development Objective: Reduce plastics consumption, increase recycling, and minimize leakages to prevent land- and sea-based marine plastics pollution in Southeast Asia

Development Objectives for the ASEAN Project: Strengthen the plastics polices and regulatory frameworks and promote innovative solutions to help reduce plastic pollution in Southeast Asia.

[Investment Amount: USD 20 million]

Component 1.

Strengthening Regional Policies
and Institutions for Plastics
Circularity

Component 2.

Establishing Regional Platforms
to Promote Innovations,
Knowledge, and Partnerships for
Plastics Circularity

Component 3.

Project Management

RAP Actions supported by SEA-MaP

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Closing: Regional Collaboration and Knowledge Transfer

- Waste and plastics issues in the region is expected to increase
- Plastics and overall waste are a concern for other environmental, health and economic reasons
- WBG is providing regional and country level support (analytics, action plans, and investments)
- Sharing of knowledge and capacity building in countries with high plastics pollution issue is key
- Technological, policy and implementation know-how of countries with advanced waste management systems will be valuable

THANK YOU



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