



**COORDINATING MINISTRY FOR MARITIME AFFAIRS  
REPUBLIC OF INDONESIA**



**MINISTRY OF ENVIRONMENT & FORESTRY  
REPUBLIC OF INDONESIA**

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# **Combating Marine Plastic Debris In Archipelagic Country\***

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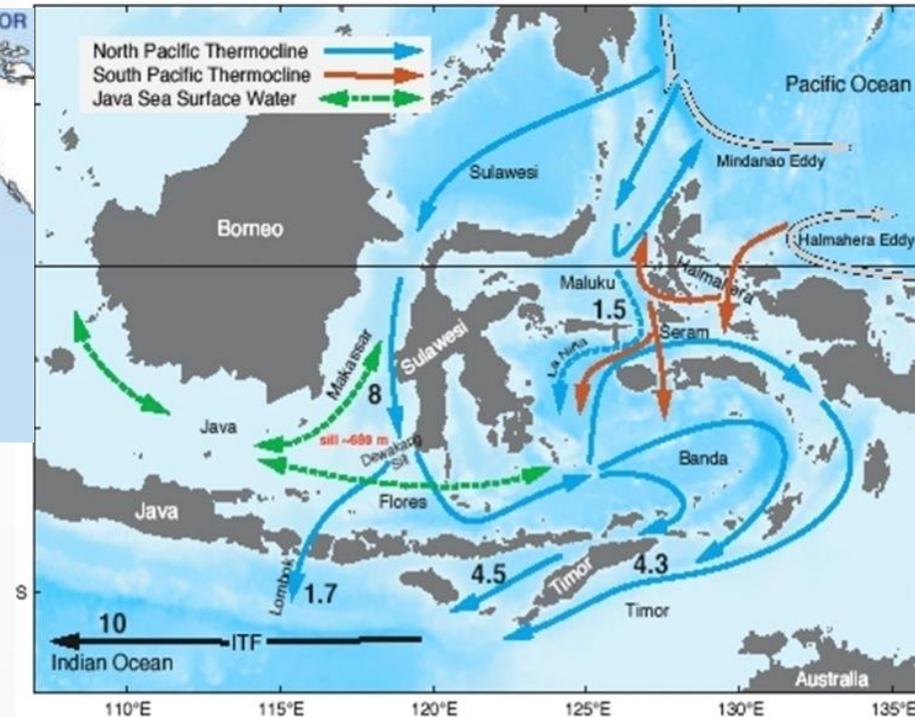
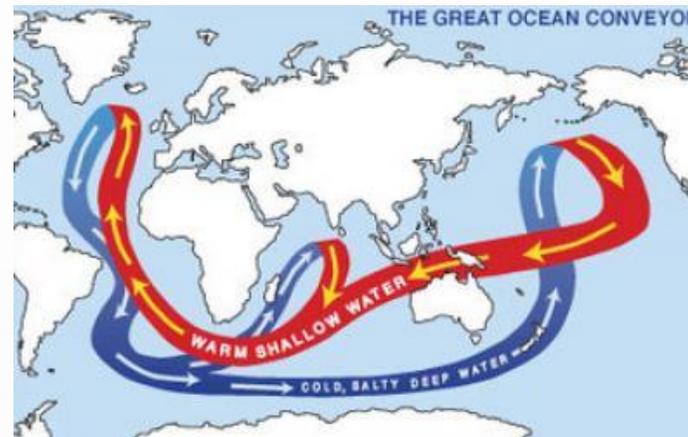
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**The East Asian Seas Congress  
28 November 2018-Iloilo, The Philippines**



# INDONESIA

1. Largest archipelagic state in the world, with more than 17.000 islands
2. 6 million square km of waters, more than 91.000 km of coastal lines
3. Three time zones
4. 10 neighboring countries
5. Home of 23 % of global mangroves
6. The largest home of Mangrove & Seagrass
7. Home of 75% of all known marine life
8. Indonesia Through Flow (Fig)





# Marine Plastic Debris – IMPACTS & GLOBAL PROBLEM

## **TOURISM:**

Marine plastic debris are invading more and more tourism and coastal areas

## **ENVIRONMENT AND MARINE LIFE:**

Millions of marine life are threatened by marine plastic debris

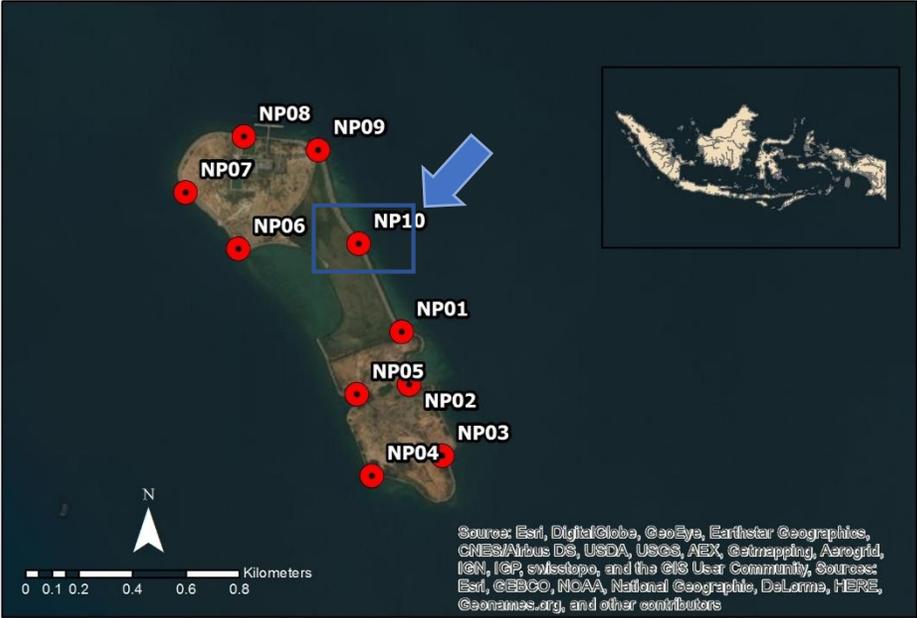
## **HUMAN HEALTH:**

More than one third of sampled commercial fish have been found consuming plastic or micro-/nanoplastic



# Marine Plastic Debris in Outer Island

Nipah Island (NP10) : Sources of Debris are from different countries.



# OUR COMMITMENT



- Mr. President Joko Widodo -

Indonesia is to reduce wastes through **reduce-reuse-recycle** up to **30% until 2025**, while targeting reduction of marine plastic debris as much as **70% by 2025**

*The Leaders Retreat, G20 Summit, Hamburg-Germany, 7 July 2017*

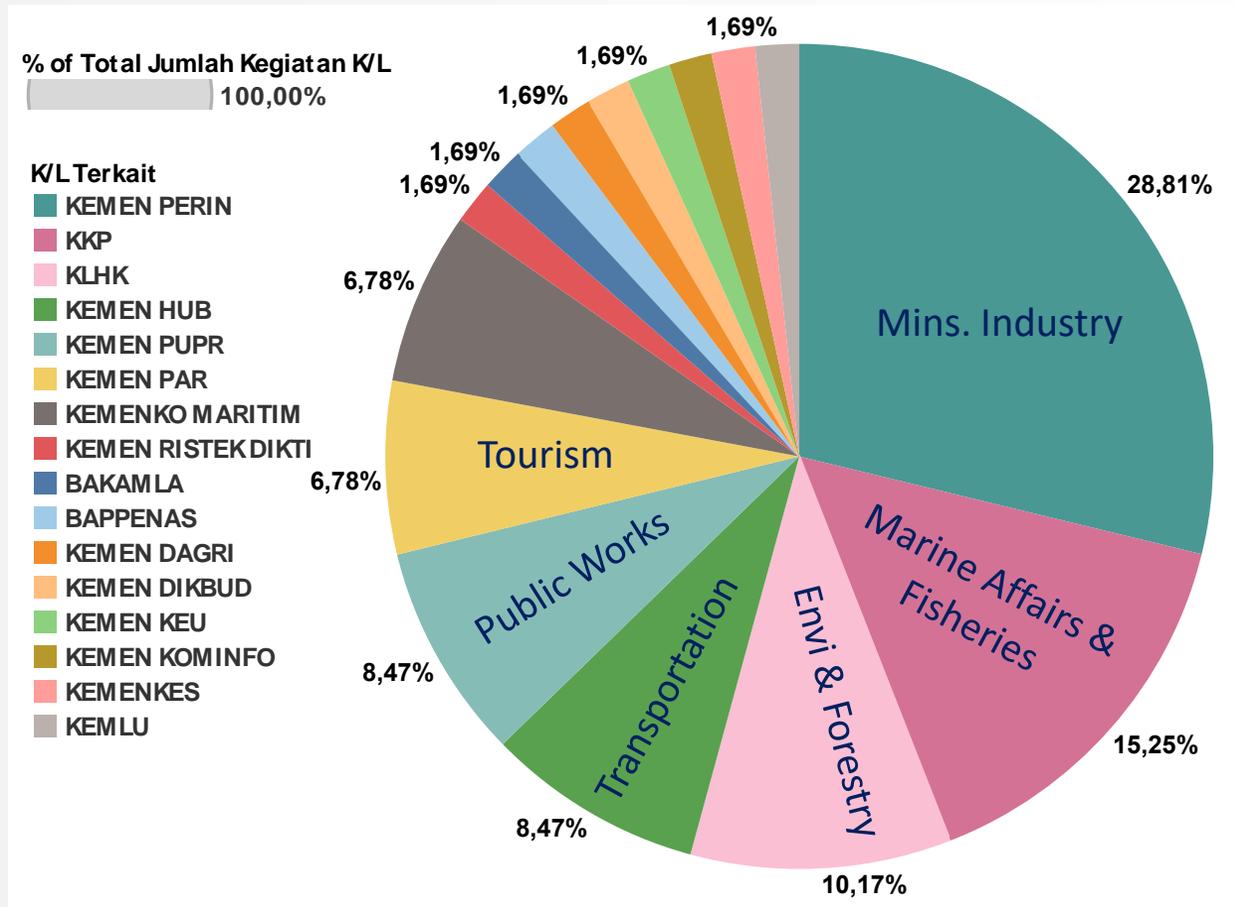




# CROSS-CUTTING APPROACH FOR COMBATING MARINE DEBRIS

5 Strategies and 59 Activities from 16 Ministries

## The involvement of Ministries



## Presidential Decree No. 83 / 2018

1

Behavioral Change

2

Reduced Land-based Leakage

3

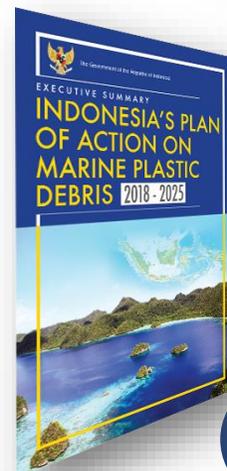
Reduced Sea-based Leakage

4

Enhanced Law Enforcement & Finance

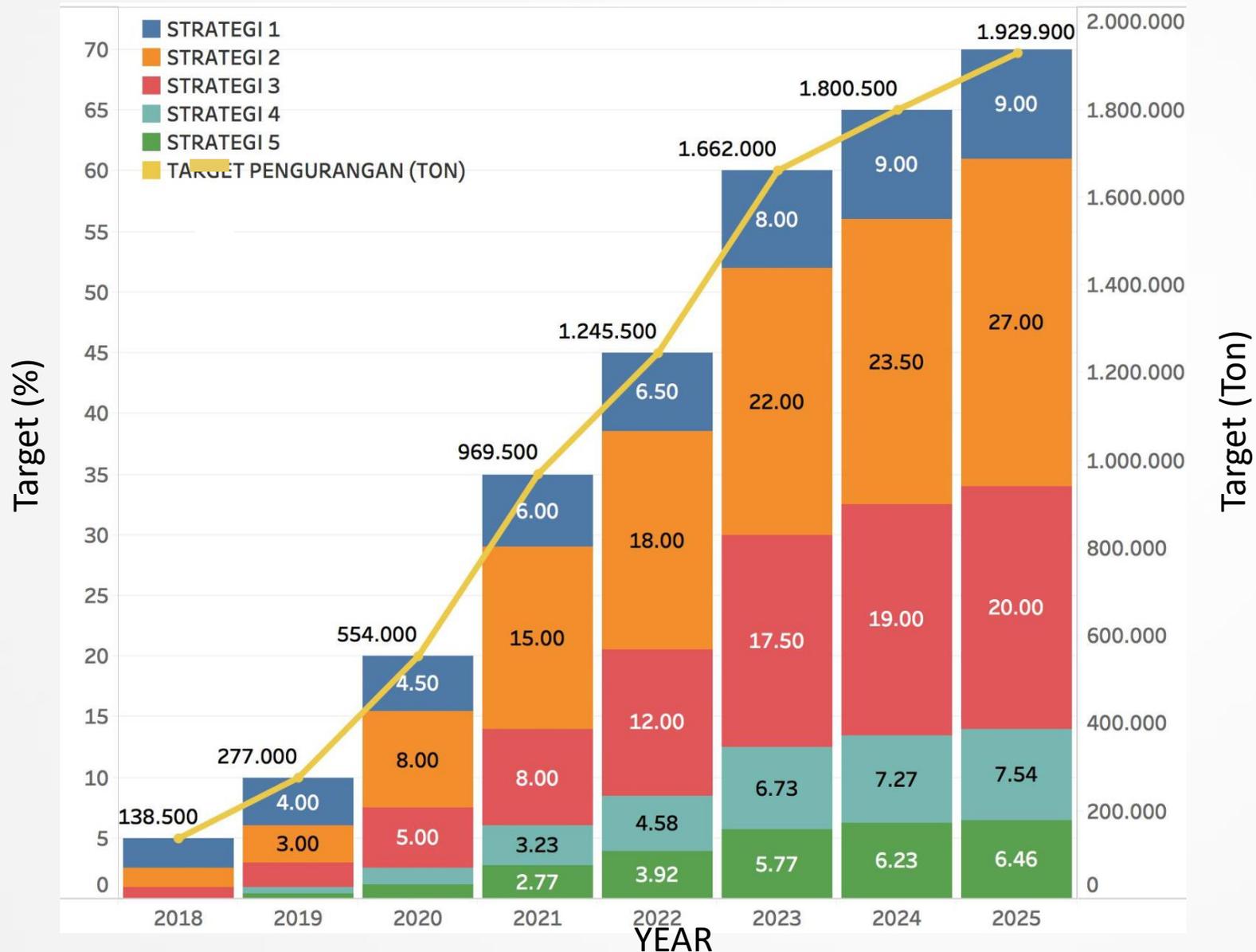
5

Research and Development





# ANNUAL TARGET For REDUCING MARINE PLASTIC DEBRIS 2018 - 2025



**Total Waste Nationally**  
**65,8 Mill Ton (2017)**  
**14-16% Plastic Debris**  
 Source: Jakstranas KLHK

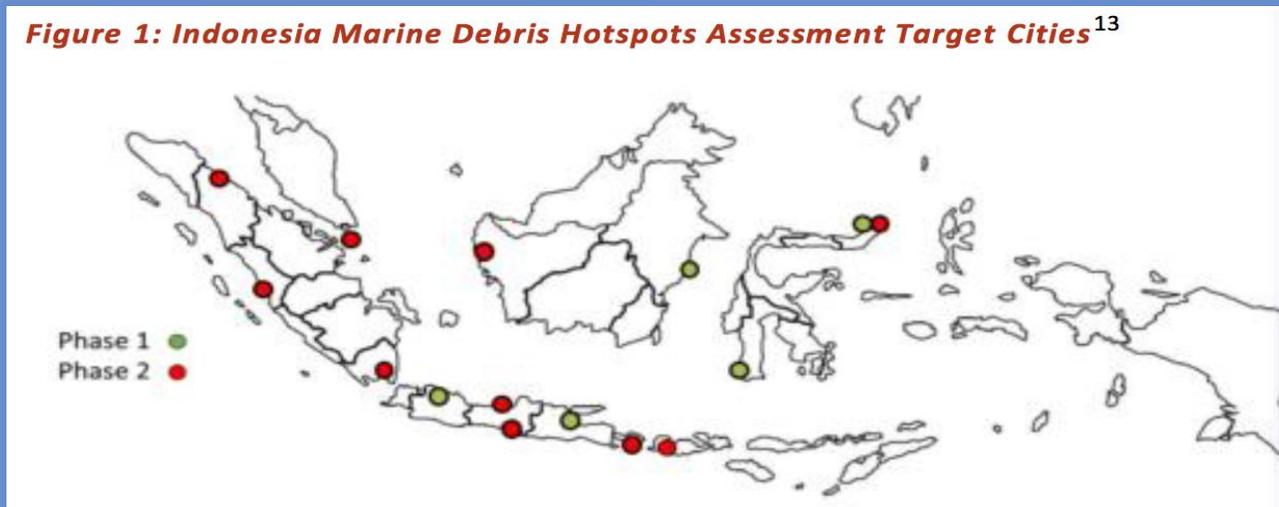
**Est Total Plastic Debris=**  
**1,692 Mill Ton/Year**  
 (Managed & Unmanaged)  
 Source: BPS & Inaplas (Kemenperin)

**Est Total Marine Debris**  
**2,77 Mill Ton**



# Indonesia Marine Debris – Hotspots Rapid Assessment in 15 Cities

Figure 1: Indonesia Marine Debris Hotspots Assessment Target Cities<sup>13</sup>



**Key Findings:** Findings from this assessment show that the plastics content is double these earlier. The most prevalent type of plastics found in the samples are plastic bags, at an average across all cities of **16%**.



Launching Report, 20 Feb 2018



# Behavioral Change : Educations and Campaign



Students of Elementary School



High School and College



Communities..And NGOs



# Before and After in Cilincing Canal Clean Up, North Jakarta



Before Clean Up action



Clean Up action lead by Minister LBP,, supported by foreign embassies

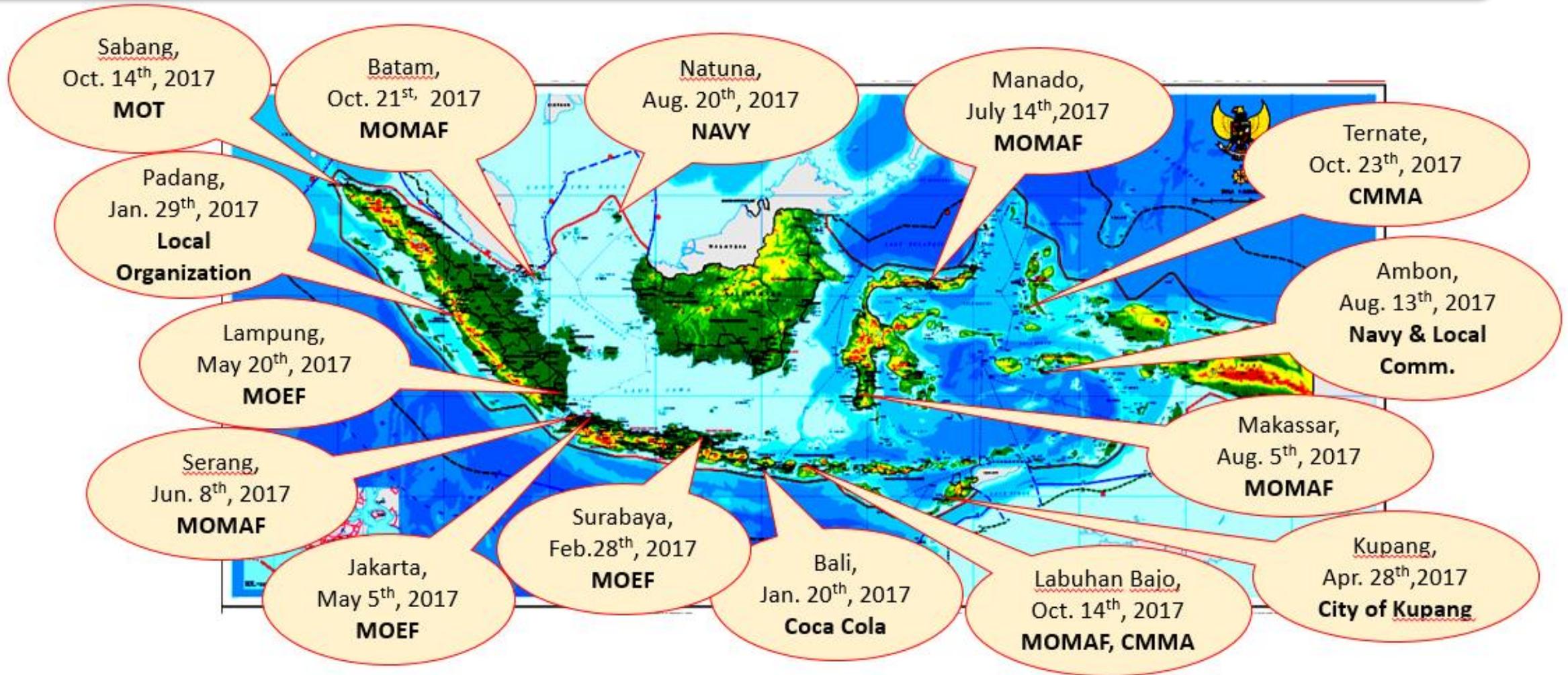


After Clean Up action



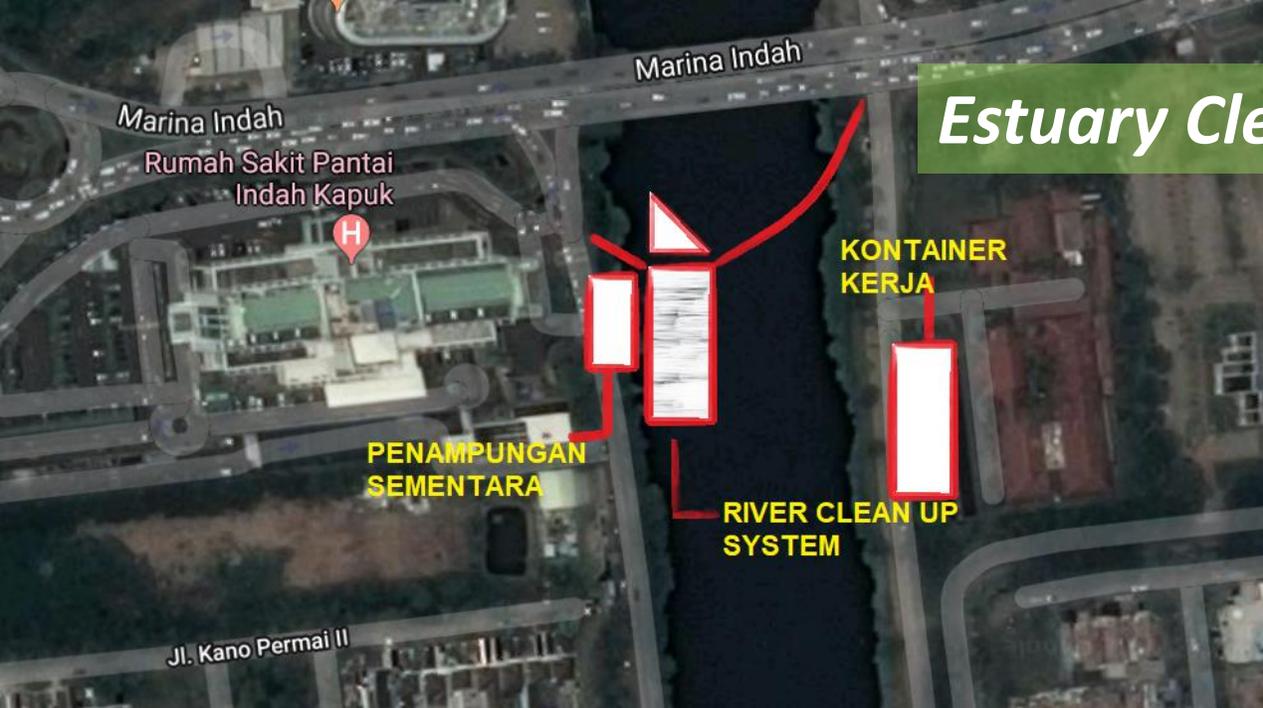
Using Plastic Waste for Plastic-Tar Road

# Coastal Clean Up in 2017...at least and more in 2018



CMMA – Coordinating Ministry for Maritime Affairs  
MOMAF – Ministry of Marine Affairs and Fisheries  
MOT – Ministry of Tourism  
MOEF – Ministry of Environment and Forestry

Located in 15 Provinces, with  
over 9000 People





# CITARUM River Clean Up Actions

**The Citarum river**, now known as one of the most polluted in the world,

- 70 km east of Jakarta, Indonesia, the river Citarum runs over 270 km from the Wayang Mountain (west Java) to the Java Sea.
- The island's largest river supports more than 26 million residents who rely on the water source for agricultural, domestic and personal use.
- Plastic, packaging, and other detritus floats in the scummy water, rendering the river's surface invisible beneath its carpet of junk.
- Need an integrated and comprehensive rapid actions



80% Marine Debris is land-based leakage

BEFORE April 2017



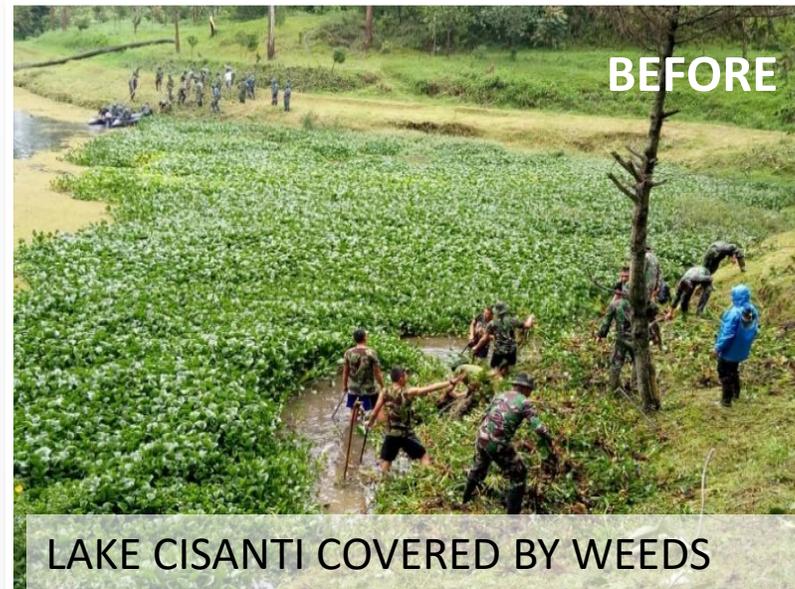
AFTER Januari 2018



# CITARUM River Clean Up Plan of Actions 2018

- EDUCATE PEOPLES
- CLEAN UP ACTIONS FOR 6 MONTHS CONTINUESLY (LEAD BY ARMY)
- IMPROVEMENT SOLID WASTE MANAGEMENT SYSTEMS, BUILD INTEGRATED WATER TREATMENT
- RELOCATE 2.403 PEOPLES IN UPSTREAM,
- CHANGE THEIR LIVELIHOOD, 13.189 LOCAL AQUACULTURE IN THREE DAMS, IN DOWNSTREAM
- REFORESTATION 80.000 HA IN THE UPSTREAM
- LAW ENFORCEMENT

## UP STREAM CITARUM River Clean Up Actions



LAKE CISANTI COVERED BY WEEDS

JANUARY 2018



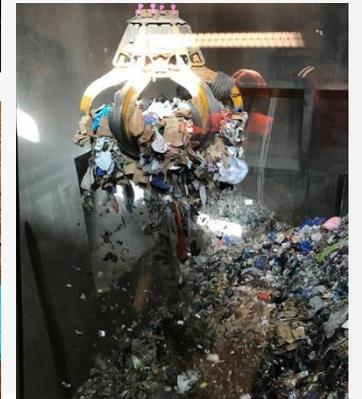
LAKE CISANTI

FEBRUARY 2018



## Law Enforcement and R&D

- Law Enforcement
- Introducing Paid Plastic Bags
- Encouraging Manufacturers to Use Recycled Plastics as Input Materials as much as possible
- Producing More Biodegradable Plastics from Cassava, Seaweed and Palm Oil
- Developing Plastic-Tar Roads (Started in June 2017)
- Waste to Fuel (piloting in Tangerang)
- Waste to Energy (piloting in 8 Cities)





# Developing Plastic-Tar Roads

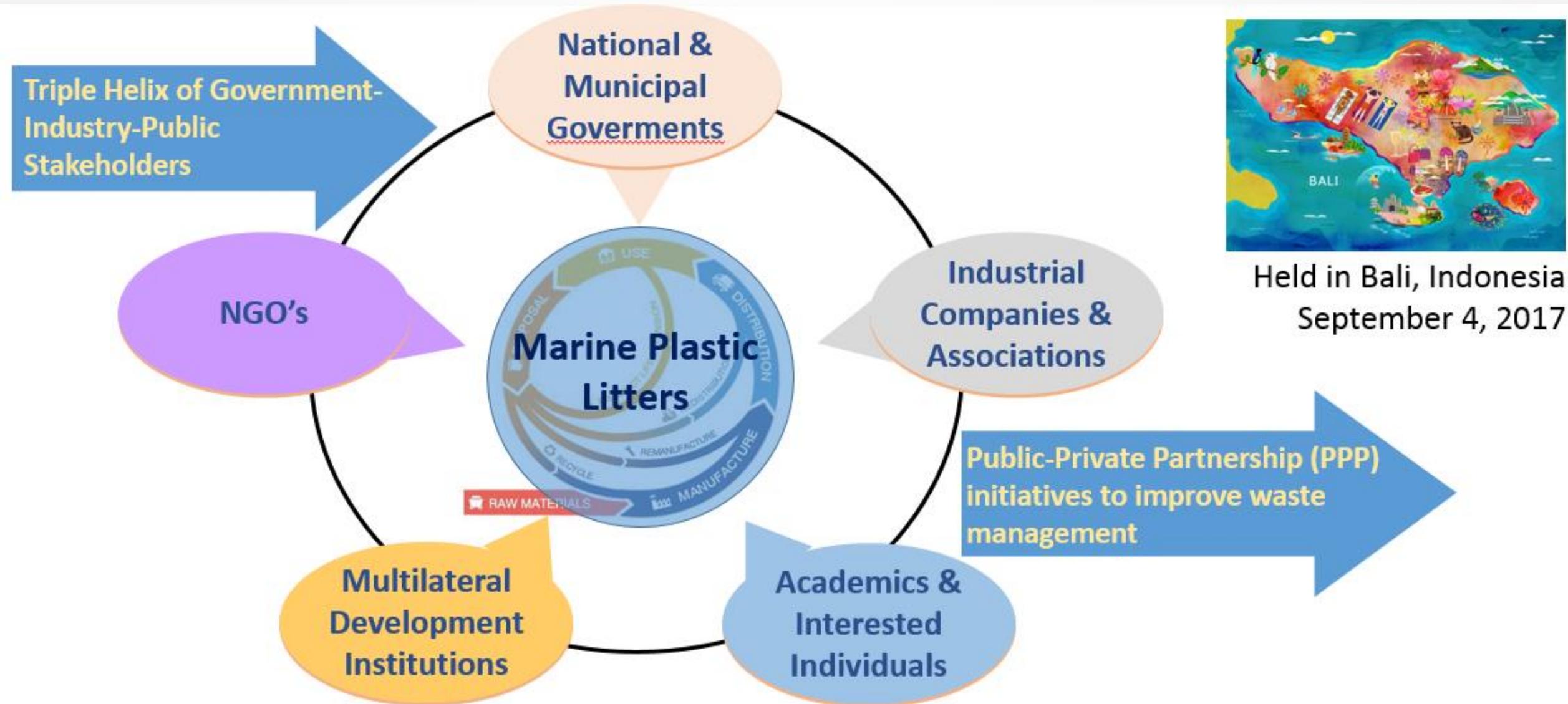


Collaboration with TCE India

- **Reduced plastic waste; 6-8% of plastic waste in the asphalt mixed;**
- **Production costs can save up to 10%; Durability and stability of the roads increased 40% of trials in Denpasar-Bali, Solo, Makassar, Jakarta, Banten and Bekasi.**



# Alliance for Marine Plastic Solutions (AMPS) Forum & Stakeholders – Circular Economy





# CONCLUSIONS



National Plan of Actions (NPOA)  
for Marine Plastic Debris  
Management

- Presidential Decree on MPD
- Stakeholders collaboration



Behavioral Change  
Clean Up Actions  
Increasing R&D  
Law Enforcement

- Educating and Increasing Awareness
- Increasing actions and Collaboration
- Challenging of eliminating plastic waste
- Pursuing by penalties



Indonesia Open to  
Collaborations

B2B, G2G, PPP, R&D, NGOs,  
Community based, etc.



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**Thank You**

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