



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

MARINE PLASTIC DEBRIS MANAGEMENT IN INDONESIA

National Plan of Action

African Marine Waste Conference, 9-13 July 2017

Safri Burhanuddin
Deputy Minister for Human Resources, Science and Technology, and Maritime Culture

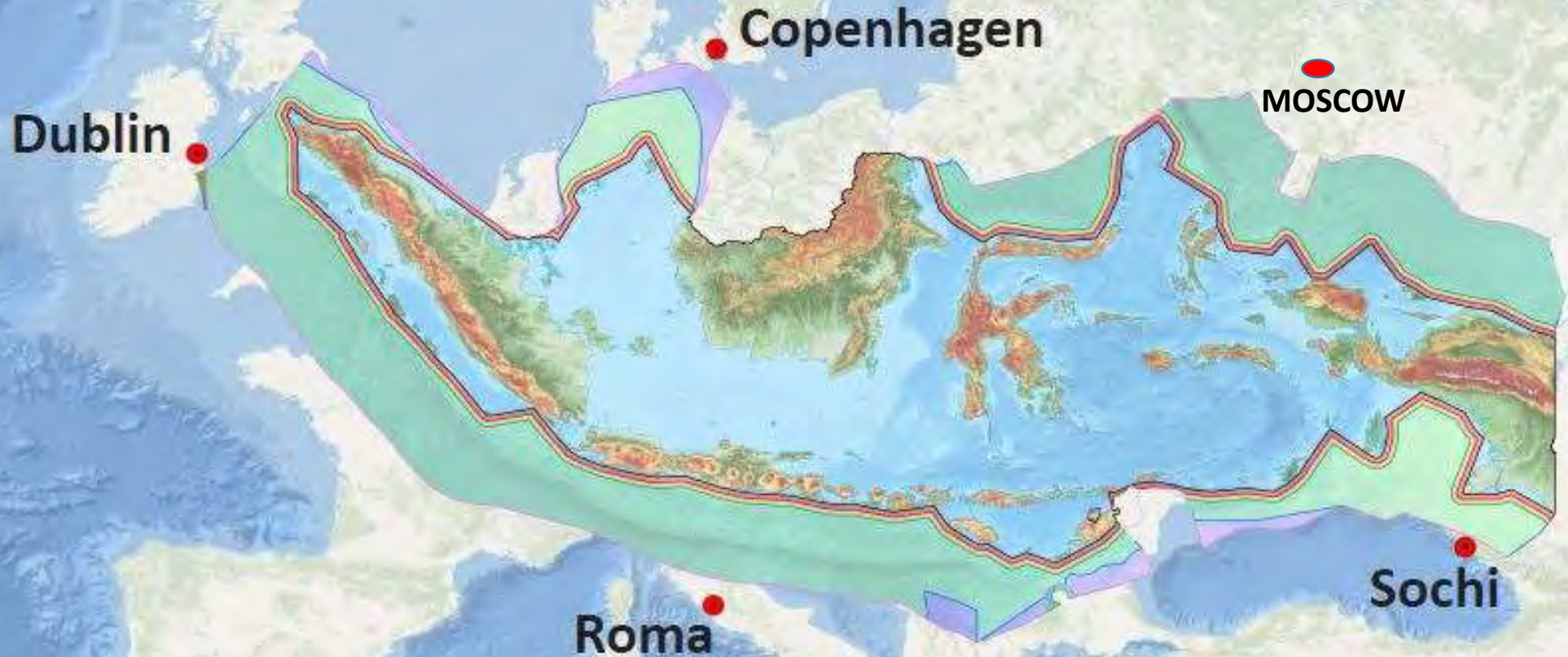
Port Elizabeth, 11 July 2017

INDONESIA

1. Member of G20
2. Largest archipelagic state in the world, with more than 17.000 islands
3. 6 million square km of waters, more than 91.000 km of coastal lines
4. Three time zones
5. 10 neighboring countries
6. Home of 23 % of global mangroves
7. Home of 30.000 km² Seagrass
8. Home of 75% of all known marine life
9. 4 Critical Choke Points for global navigations



OVERLAY INDONESIA - EUROPE



CHALLENGES



1. **fight poachers**
2. **armed robbers at sea,**
3. **hijackers at sea**
4. **slavery at sea,**
5. **people trafficking at sea,**
6. **mitigating climate change effect,**
7. **governmental services to remote islands**
8. **health of the ocean**

CHALLENGES: Health of the Ocean

OIL SPILL

SLUDGE OIL

OIL POLLUTION FROM FIXED PLATFORM

MARINE LITTER

LAND-BASED LEAKAGE OF PLASTICS INTO INDONESIA'S MARINE ENVIRONMENTS

135 M
Urban
Pop

38 MT/YR
waste
generation

80% plastics
leakage is
land-based

17 MT/YR
uncollected
waste

45% waste
disposed in
waterways,
parks &
burned

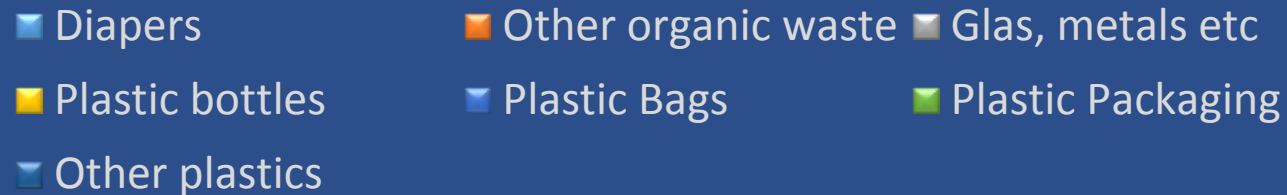
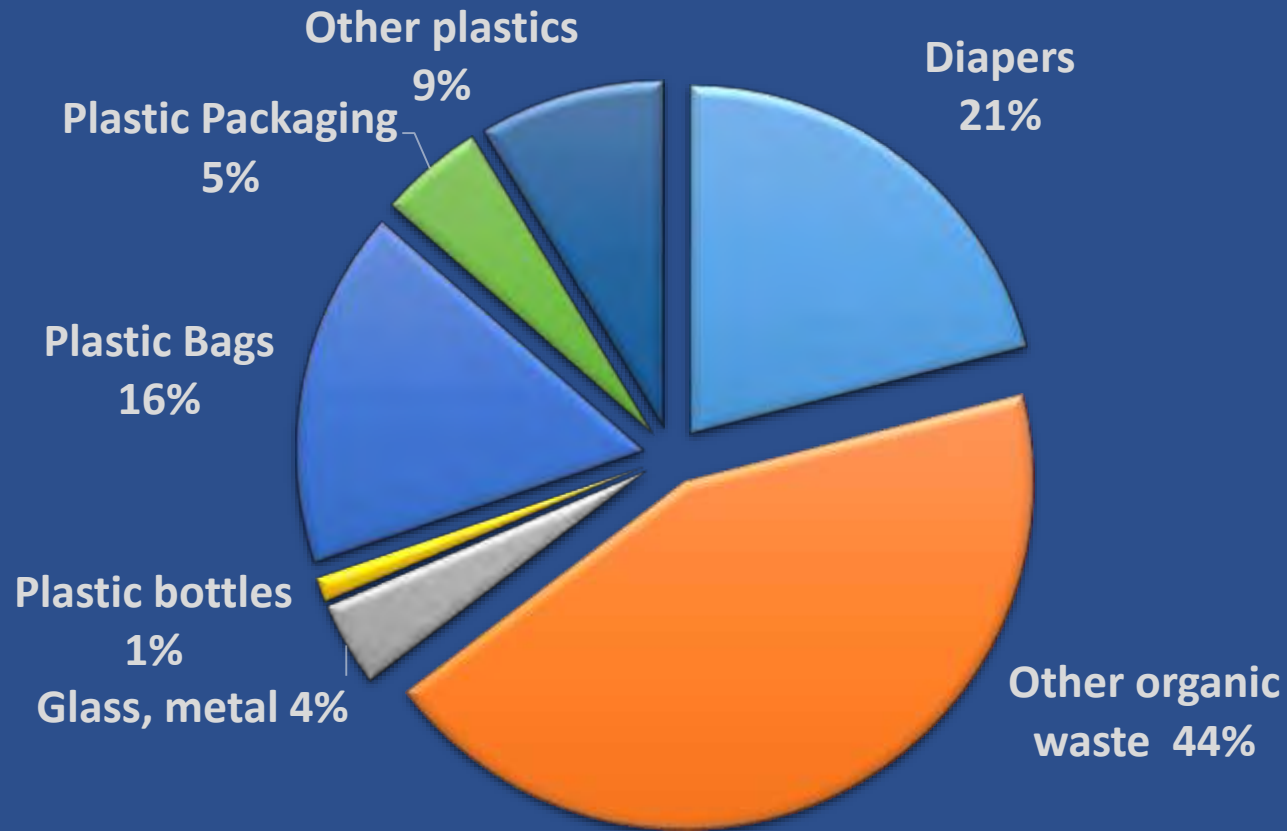
1.29 MMT/YR
plastic
leakage
to Oceans

30% waste
leakage
is plastics

MEASUREMENT KEY

Pop Population
M Million
MT Million tonnes
YR Year
MMT Million metric tons

COMPOSITION OF INDONESIAN MARINE LITTER



MARINE PLASTIC DEBRIS : CONSEQUENCIES



TOURISM : MARINE PLASTIC DEBRIS, MORE AND MORE INVADED TOURISM AND COASTAL AREA



ENVIRONMENT AND MARINE LIFE : MILLIONS OF MARINE LIFE THREATENED BY MARINE PLASTIC DEBRIS



HUMAN HEALTH : MORE THAN A THIRD OF CAPTURED COMMERCIAL FISH FOUND, CONSUMED PLASTIC OR MICROPLASTICS

Coelacanth, ancient fish in northern Sulawesi, Indonesia



The living fossil “coelacanth: captured by fisherman, found consuming marine plastic debris, captured in Manado Bay, North Sulawesi (Newspaper, Tribun Manado, may 24th, 2012)

WHAT WE HAVE DONE

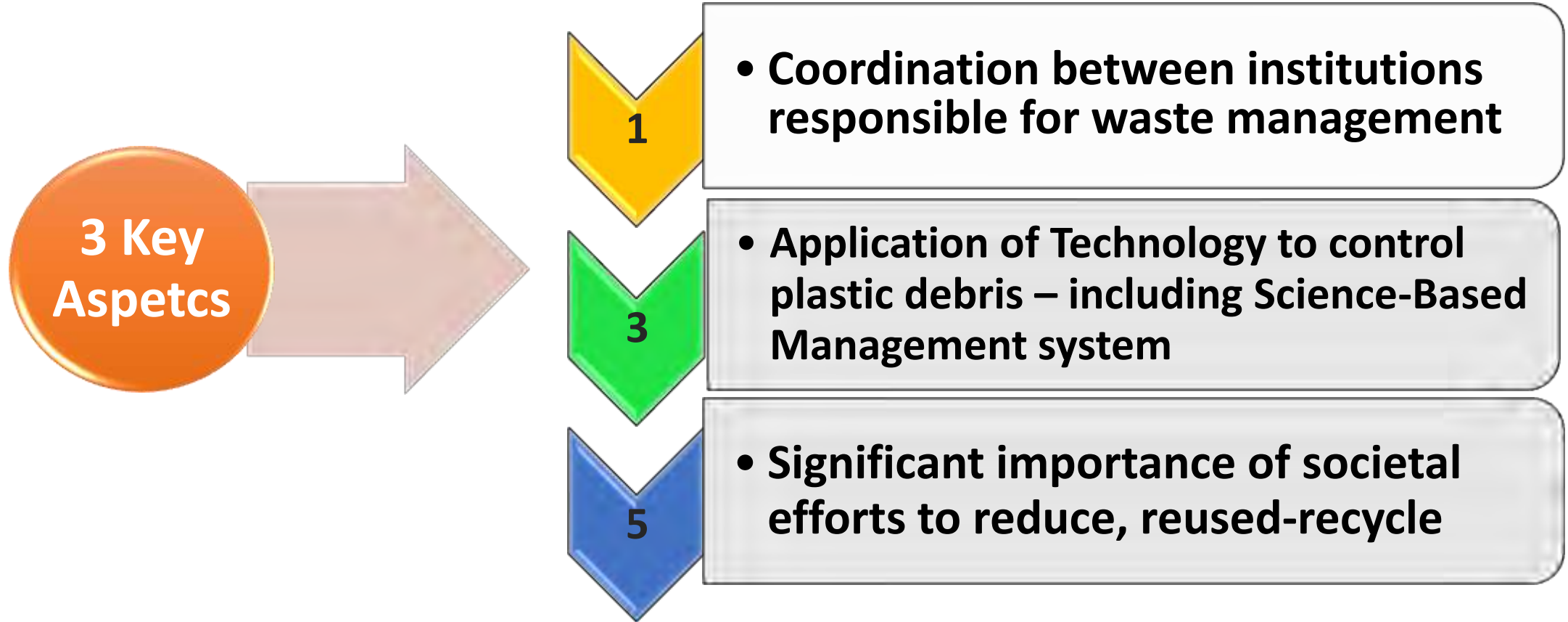


Launched Presidential Decree of The Republic of Indonesia, No.16 of 2017 on INDONESIA OCEAN POLICY, February 2017

Established National Plan of Action on Marine Plastic Debris (2017-2025). May 2017



NATIONAL PLAN OF ACTION



NATIONAL PLAN OF ACTION

NPOA – 5 Pillars

- 1 • Improving Behavioral Change
- 2 • Reducing Land-Based Leakage
- 3 • Reducing Sea-Based Leakage
- 4 • Industrial Sector
- 5 • Research and Development

NPOA – 5 Strategy

- 1 • Local Government or Provincial Level
- 2 • National Level
- 3 • International Level
- 4 • Industrial Sector
- 5 • Research and Development

IMPROVING BEHAVIORAL CHANGE



- EDUCATING YOUNG PEOPLE
- INCREASING STAKEHOLDER AWARENESS
- INTER GOVERNMENTAL COLLABORATION
- CROSS SECTOR COLLABORATION
- CHALLENGING OF ELIMINATING PLASTIC WASTE

CAMPAIGN ON COMBATTING MARINE PLASTIC DEBRIS



Attended by more than 200 high school, college students and communities at @America, JAKARTA

REDUCTION LAND BASED LEAKAGE

JAKARTA CLEAN-UPS ACTION



- PLASTIC DEBRIS COME FROM HOUSINGS, CITY STREETS CARRIED INTO THE OCEAN THROUGH CANAL
- MARINE POLLUTION TO SEA LIFE, ECOSYSTEM AND HUMAN



Cilincing - North Jakarta,
May 4th 2017

CANAL CLEAN-UPS, May 6th, 2017



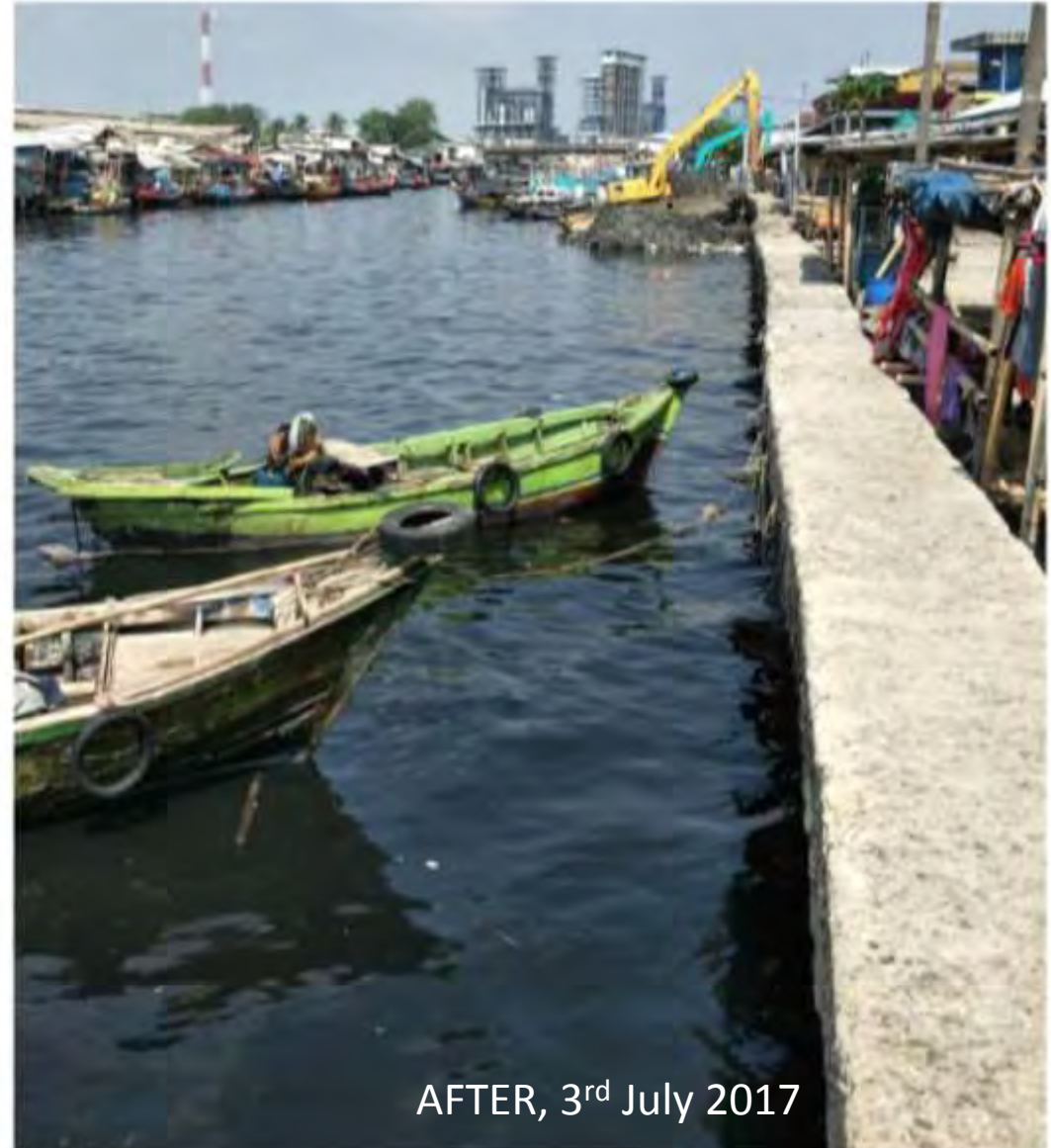
Minister Luhut Pandjaitan leads the Canal Clean Ups



CANAL CLEAN-UPS, before & 6 weeks later



BEFORE, 5th May 2017



AFTER, 3rd July 2017

CANAL CLEAN-UPS, 6 weeks later



REDUCING SEA-BASED LEAKAGE

BEACH CLEAN-UPS



Divers Communities, NGO participated on Beach Clean-Ups in Thousands Regions



- GARBAGES COULD COME FROM MANY PLACES
- NEED BILATERAL AND REGIONAL COLLABORATION
- IMPROVING RELEVANT TECHNOLOGY FOR MONITORING AND COLLECTING THE PLASTIC DEBRIS FROM THE OCEAN

REDUCING SEA-BASED LEAKAGE



The Mayor of Makassar (South Sulawesi-INDONESIA), built a trash collecting boat, locally designed

RISING DOMESTIC TOURIST INITIATIVES



Beach Clean-Ups in Lanjukang Island, Makassar Indonesia



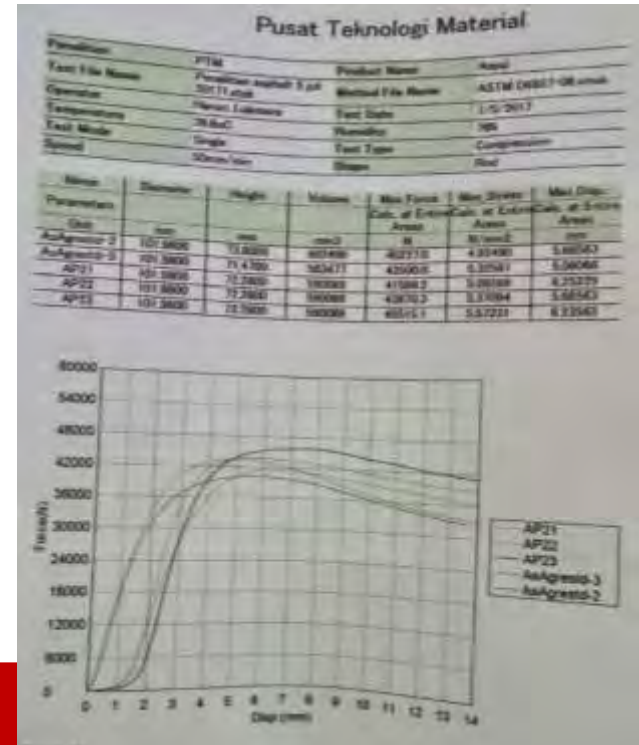
Lanjukang island

REDUCING PLASTICS PRODUCTION AND USE

1. INTRODUCING PLASTIC BAG PAID
2. ENCOURAGING MANUFACTURERS TO USE RECYCLED PLASTICS AS INPUT MATERIALS AS MUCH AS POSSIBLE
3. PRODUCING MORE BIOGRADABLE PLASTICS FROM CASSAVA, SEAWEED AND PALM OIL
4. DEVELOPING PALSTIC TAR-ROAD (started June 2017)
5. WASTE TO ENERGY



PLASTIC TAR-ROAD



ENHANCING FUNDING MECHANISMS, POLICY REFORM AND LAW ENFORCEMENT

FINANCING PLAN: 1ST PHASE

- Indonesia is structuring a budget to address the land-based management of waste over a period of four years with finance of up to **one billion USD**
- Policy Reform based on NPOA
- Law Enforcement



We hope to have more foreign investment in waste to energy area in Indonesia

5 STRATEGIES OF NATIONAL PLAN OF ACTION

- (a) **local governments** to take care of the waste management properly and reduce the amount of plastic waste leaking to the ocean.
- (b) **national level**, Indonesia is promoting paradigm change within the society towards plastic waste and to respect the coastal areas through education curriculum and campaign, waste to energy, paid plastic bag, plastic debris as asphalt mix for “plastic tar road”,
- (c) **international level**, Indonesia has been working with the World Bank, some donors and plan to organize East Asia Summit Conference on marine plastic debris, on 6-7 September 2017 in Denpasar BALI and also executed already discussions on this matter under the Indian Ocean Rim Association.
- (d) **industrial sector** is designed to encourage these manufacturers to use recycled plastics as input materials as much as possible, while at the same time producing more biodegradable plastics.
- (e) involvement of **academics and community service organization (CSO)** for new and efficient technologies to cope with the problem, such as recycling technologies, and waste for energy and so on into practice.

COMMITMENT



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

President Joko Widodo, at the Leaders Retreat, G20 Summit, Hamburg-Germany, Friday July 7th, 2017



APEC High-Level Meeting on Improving Waste Management and Reducing Marine Litter

Bali, Indonesia
September 5, 2017

Participants

- Representatives from government ministries with roles in waste management, infrastructure development, ocean related issues, and international cooperation; multilateral development banks; relevant international organizations; investors; NGOs; industry brands and resin producers; waste management sector; recycling and treatment technology providers; and others.

Objectives

1. Advance implementation of the APEC Policy and Practice Recommendations
2. Exchange best practices on the development and implementation of national strategies to address waste management and marine debris.
3. Discuss innovative waste management technologies and the policy environment that enables them to be used effectively.

For more information:

Dr. Nani Hendiarti - nanihendi@gmail.com



The poster features a top section with logos for the Indonesian Ministry of Maritime Affairs and the Ministry of Research, Technology, and Higher Education. Below this is the title 'International Symposium on Marine Plastic Debris' and the dates 'Makassar, 9 - 10 August 2017'. A central image shows a coastal cityscape with a banner that reads 'which one do you like' over two contrasting underwater scenes: a healthy coral reef with a sea turtle on the left, and a polluted reef with plastic debris on the right. The bottom section is a red banner containing the 'OBJECTIVES', 'OUTCOMES', and 'SYMPOSIUM FORMAT' sections, along with contact information for the Secretariat and Contact Person.

OBJECTIVES

- To provide strategic information as input, for the implementation of Indonesian National Plan of Actions on Marine Debris;
- To develop short-term actions in narrowing the gap of information on the prevalence and impacts of marine debris in different marine areas and population;
- To discuss possible measures of debris removal initiatives in terms of
 - Impact on stock and flow of marine debris
 - Public awareness and behavior change for the public, fisherman, and industry
 - Cost-effectiveness of the measures proposed;
- To determine the viable technology interventions and measures to mitigate plastic pollution in marine and coastal habitat;

OUTCOMES

It is expected that the outcomes of the meeting will include:

- Provision of Strategic input to National Plan of Actions on Marine Plastic Debris
- List of recommended activities for the next 2 - 5 years

SYMPOSIUM FORMAT

Main topics related to Marine Plastic Debris that will be discussed including:

- Social and people's Behavior
- Technology and Innovation
- Research and Development including International Cooperation
- Legal and Enforcement

Secretariat
Kemenko Maritim, Bld. 15th Floor,
Jl. MH. Thamrin, No. 8 Jakarta 10340 - Indonesia
Phone: +62 21 23951100, Fax: +62 213912959
<https://maritim.go.id>

Contact Person :
1. Prof. Dr. Akbar Tahr
University of Hassaruuddin
email : akbar.uba1@gmail.com
2. Andreas A. Hutahaean, Ph.D
Coordinating Ministry Of Maritime Affairs Republic Of Indonesia
email : andreas0212@gmail.com

WE need to fight this problem with passion to care our oceans that have given us so much for our human life. Lets get rid of this problem because **WE CAN** and **WE CARE**



Padar Island, East Nusa Tenggara, INDONESIA

THANK YOU



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