



Updating Indonesia's National Action Plan on Marine Debris Handling And Circular Economy

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The Circular Economy in Indonesia

Background:

- Triple planetary crises: Climate change, pollution, and biodiversity loss have prompted a global shift towards more sustainable economic models.
- The circular economy reduces resource consumption and promotes recycling, aiming to minimize waste and environmental impact.

Targets for the Circular Economy in Indonesia 2025-2045

- By 2030, achieve substantial reductions in greenhouse gas emissions (39%) and waste (52%).
- Drive economic growth through a circular economy, contributing Rp 638 trillion to GDP and creating 4.4 million jobs.
- Transform key sectors: Food, construction, electronics, textiles, and plastic packaging will be at the forefront of this transition.

Indonesia is the largest archipelagic country With High Biodiversity Potential



270 million people in 514
Cities/Regencies
the Fourth Most Populated Country

17,500+ Islands
according to Countries by Coastline, Wisevoter

95,181 km Coastline Length
the Second Longest Coastline

Indonesian Plastic Waste Status



Total Plastic Raw Materials
in Indonesia

7,965

in 2021



Virgin Plastic Import

3,482

in 2021



the rate of plastic
recycling is still

12

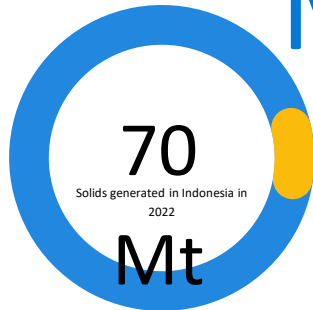
KEMENPERIN (2022)

Around
0,924 MMT

MMT

MMT

%



12

Consists of plastic waste

MT



Potential plastic waste in Indonesia (2022)

19,56 million tons per year

(Not yet disaggregated)

KLHK (2023)

72% of Uncollected PLASTIC WASTE



Bali tourists produce plastic waste

3,5x More

compared to the locals

*19 million tourists since 2019

World Bank (2019); Asia News Network (2023)



come from:

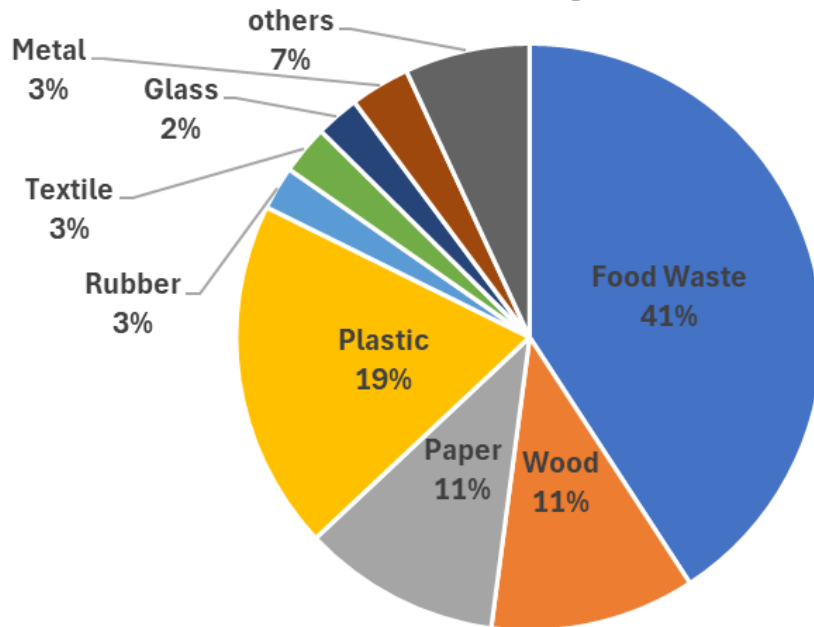
- Outer City (> 1 million people)
- Small and Medium-Sized City
- Rural Areas

due to inadequate services & lack of
infrastructure

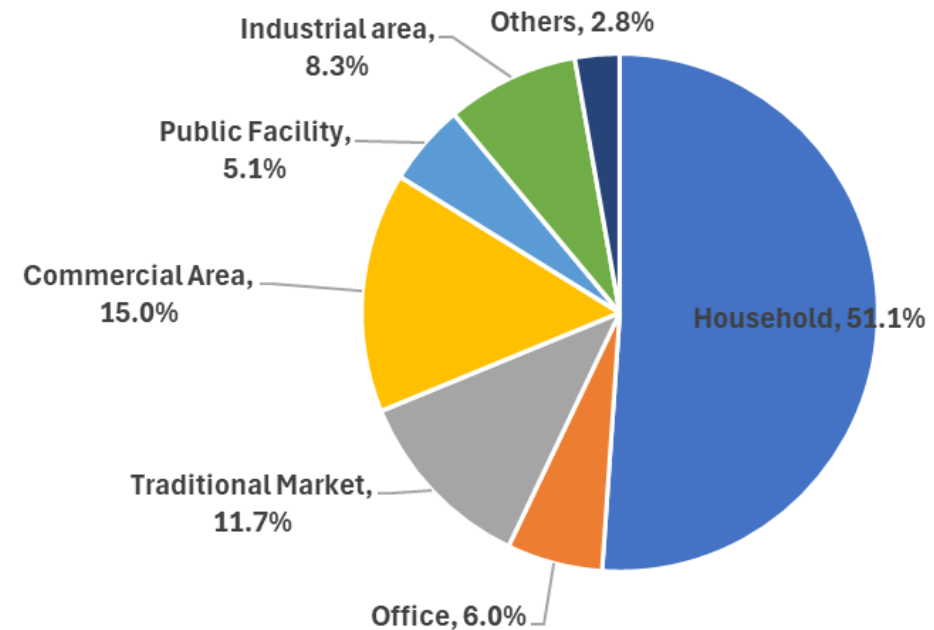
KLHK (2020)

INDONESIA SOLID WASTE MANAGEMENT DATA IN 2023

Waste Composition



Waste Source



Source: sipsn.menlhk.go.id

THE POTENTIAL OF PLASTIC AND PAPER WASTE AS RAW MATERIALS FOR THE RECYCLING INDUSTRY

The potential for plastic consumption in Indonesia is quite large, driven by the high growth of the food and beverage industry (8 - 10% / year), the food and beverage industry is the largest user of plastics (around 40% of plastic for packaging).



Domestic plastic and paper waste generation is high at ±30million tons/year (SIPSN KLHK, 2023)

Plastic:

19.2 % (2023) → 19,5 million ton/year

Paper:

10.2 % (2023) → 11.04 million ton/year (unsegregated condition)

The use of domestic plastic and paper waste for the recycling industry is still low: 46%

(BS KLHK database, BPS, INAPLAS, ITC. Analysis by SWI, 2020)

High demand for raw materials for the plastic and paper recycling industry 7.6 million tons/year

(Darus & Tamimi, M, 2019, *An Overview of Plastic Waste Recycling in Urban Area dan Statistik Industri Kertas Indonesia*, 2020)

Imports of plastic and paper raw materials for the recycling industry are high

3.43 million tons/year (Ministry of Industry, 2019)

INDONESIA'S SOLID WASTE MANAGEMENT REGULATIONS

Law No. 18/2008 on Solid Waste Management

Government Regulation No. 81/2012 on the Management of Household Waste and Waste similar to Household Waste

Government Regulation No. 27/2020 on Specific Waste

Presidential Regulation No 97/2017 on National Policies and Strategies for Managing Household Waste and Waste Similiar to Household Waste

Presidential Regulation No 83/2018 on Marine Waste Management that are oriented towards handling Plastic Waste

Presidential Regulation No 35/2018 Concerning Waste to Electricity Plant

UPSTREAM

- Ministry of Environment and Forestry (MoEF) Regulation No. P.75/2019 on Waste Reduction by Producer Roadmap
- Local Government Regulation on Waste Reduction

Public/Community

- Ministry of Environment and Forestry Regulation No. 14/2021 on Waste Bank
- Roadmap in the context of accelerating the availability of domestic industrial recycling raw materials as a substitute for imported raw materials, especially for plastic and paper
- Circular Letter form Mayor about waste sorting, less-waste lifestyle, *eco-office*, etc.

Producer

DOWNSTREAM

- Ministry of Public Works Regulation No.3/2013 on Solid Waste Management Infrastructure
- MoEF Regulation No. P.70/2016 on Emission Standard for thermal-based solid waste treatment
- MoEF Regulation No. P.59/2016 on Leachate Quality Standards for Waste Landfill
- MoEF Regulation No. P.10/2018 on Regional Policies and Strategies in Waste Management
- Ministry of Home Affairs Technology No.79/2018 on Regional Public Service Agency (BLUD)
- MoEF Regulation No. P.76/2019 on Adipura
- MoEF No. P.26/2020 on Fly Ash Bottom Ash Handling for thermal-based solid waste treatment
- Ministry of Home Affairs Regulation No. 7/2021 on Solid Waste Management Retribution
- Ministry of Finance Regulation No.26/2021 on State Budget Funding Support for waste management in the regions
- MoEF Regulation No. 6/2022 on National Waste Management Information System (SIPSN)

Local Government

CIRCULAR ECONOMY STRATEGY TO ADDRESS WASTE MANAGEMENT CHALLENGES IN DEVELOPING COUNTRIES

Behaviour Change

- Less-waste lifestyle
- Waste sorting
- Empowerment
- Law enforcement



Extended Producer Responsibility

- Implementing Extended Producer Responsibility (EPR) through 3R concept



Solid Waste Management Infrastructure

- Organic waste treatment facilities
- Material Recovery Facilities (MRF)

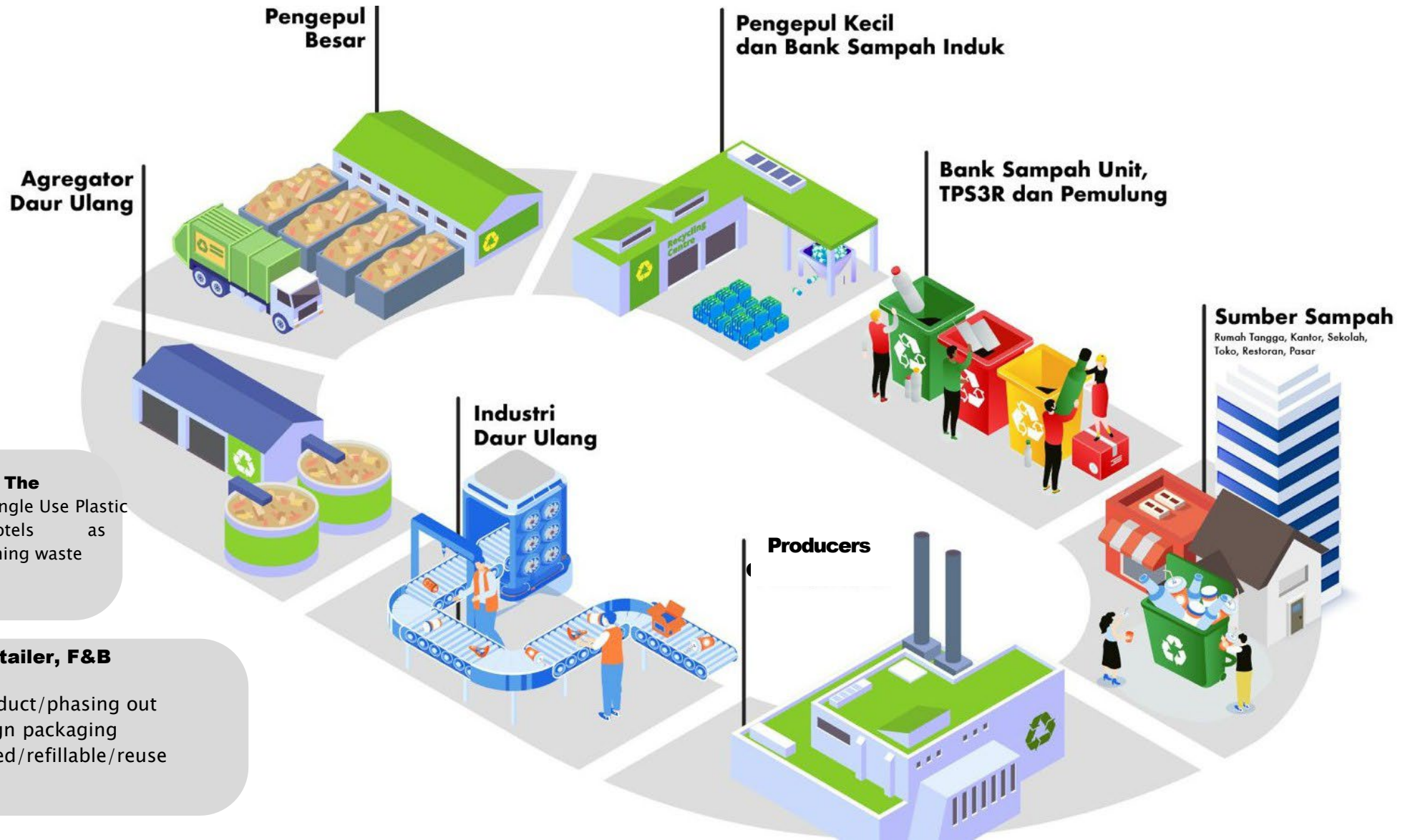


Optimizing National Waste Data Management

- Developing national data platform
- Improving data quantity and quality



THE CIRCULAR ECONOMY IMPLEMENTATION IN INDONESIA



Local Government stipulates The Regulation about Limiting of Single Use Plastic in Retailers, Restaurants and Hotels as well as to the household concerning waste reduction from household

Producers (Manufacturer, Retailer, F&B Service) as users recycled packaging product/phasing out SUP Product/packaging Re-design packaging waste take back (EPR) unpackaged/refillable/reuse sales

PHASE OUT 1 JAN 2030

- PVC and PS packaging
- Sachets <50 ml or <50 g in size
- Dedicated plastic straws
- Plastic shopping bags
- Single-use cutlery including plates, cups, spoons, forks, straws, and plastic foam containers.

REGULATION OF PRODUCTS AND PACKAGING IN THE MINISTER OF ENVIRONMENT AND FORESTRY REGULATION P.75/ 2019

RE-DESIGN

- Using materials that can be recycled or reused
- Using recycled materials (50% recycled content)
- Eliminate labels and plastic seals
- Using mono material (monolayer) raw materials
- PET beverage packaging color is clear or bluish.
- Setting the minimum size of various types of packaging

PACKAGING MARKERS

- compostable
- recyclable
- reusable

ECOLABEL



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Evaluation of Minister of Environment and Forestry Regulation No.75 of 2019 concerning Roadmap for Waste Reduction by Producers

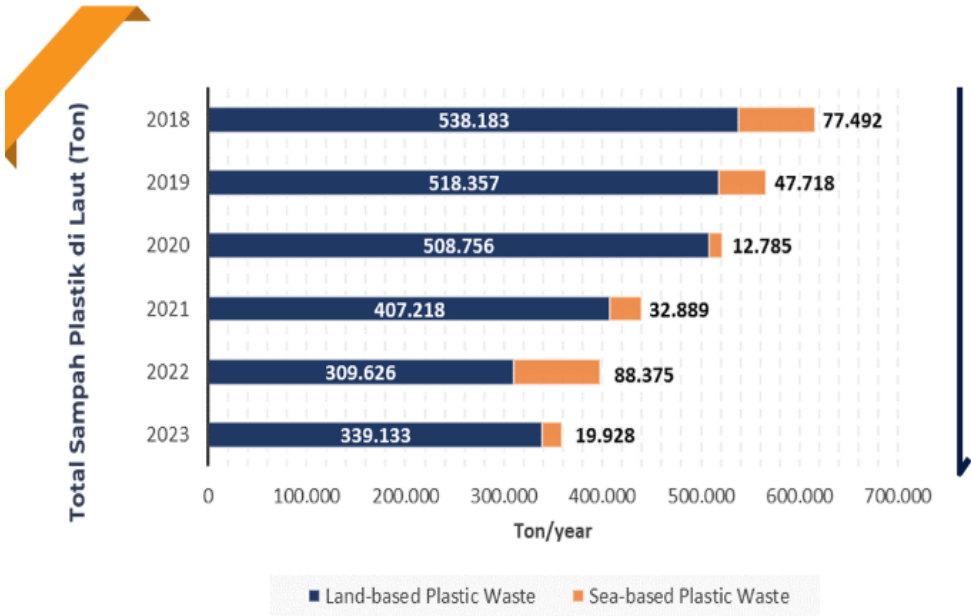
- **The legal umbrella related to EPR is not strong enough, only limited to Ministerial Regulations**
- **Producers (Manufacturing, Retail, F&B) without thresholds so that the target producers are too broad**
- **Law enforcement (sanctions, fines) does not yet exist**
- **Target only at the end of 2029 (30%), no annual target yet**
- **There is no mandate for the establishment of PROs**

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The Existing National Action Plan on Marine Debris Handling

Plastic waste leakage into the sea has decreased by 41.68% from 2018 to 2023



615,675 TON

In 2018

41,68%

359,061 TON

In 2023

Sumber: Data olahan TKNPSL dari berbagai sumber data

Year	Total Plastic Waste (Ton)
2018	615.675
2019	566.075
2020	521.541
2021	440.107
2022	398.001

Source: Secretariat for TKN PSL

Presidential Regulation No. 83/2018 on Marine Debris Management 5 Strategies in the National Action Plan



Strategy 1

National Movement to Raise Stakeholder Awareness



Strategy 2

Management of Land-Based Waste



Strategy 3

Marine and Coastal Debris Management



Strategy 4

Funding mechanisms, institutional strengthening, law enforcement



Strategy 5

Research and Development



Conduct analytical works on key policy and regulatory measures to enable the environment for waste management and circular economy:

- Desk study on existing studies and reports that identify policy, institutional, and regulatory gaps on waste management and marine debris in Indonesia as well as potential for improvement and debottlenecking
- Identify policy, institutional, and regulatory improvement needed that fits with the context of NAP and roles and responsibilities of the NAP stakeholders.
- Identify, if any, knowledge gap in (a) that is critical for the effective marine debris reform implementation in Indonesia and will require further analytical works



The Importance of Coordination with National Coordination Team on on 5 Strategies Presidential Regulation Number 83 of 2018

Strategy 1 - NATIONAL MOVEMENT TO RAISE AWARENESS OF STAKEHOLDERS

Strategy 2 - LAND-BASED WASTE MANAGEMENT

Strategy 3 - COASTAL AND MARINE WASTE MANAGEMENT

Strategy 4 - FUNDING MECHANISMS, INSTITUTIONAL STRENGTHENING,
SUPERVISION & LAW ENFORCEMENT

Strategy 5 - RESEARCH & DEVELOPMENT



**Bersama kita bisa
membuat Indonesia bersih!**

Logo dan Petunjuk Penggunaan Merek #Indonesia Bersih, bisa diunduh via akun
@gerakanindonesiabersih, di aplikasi Instagram