

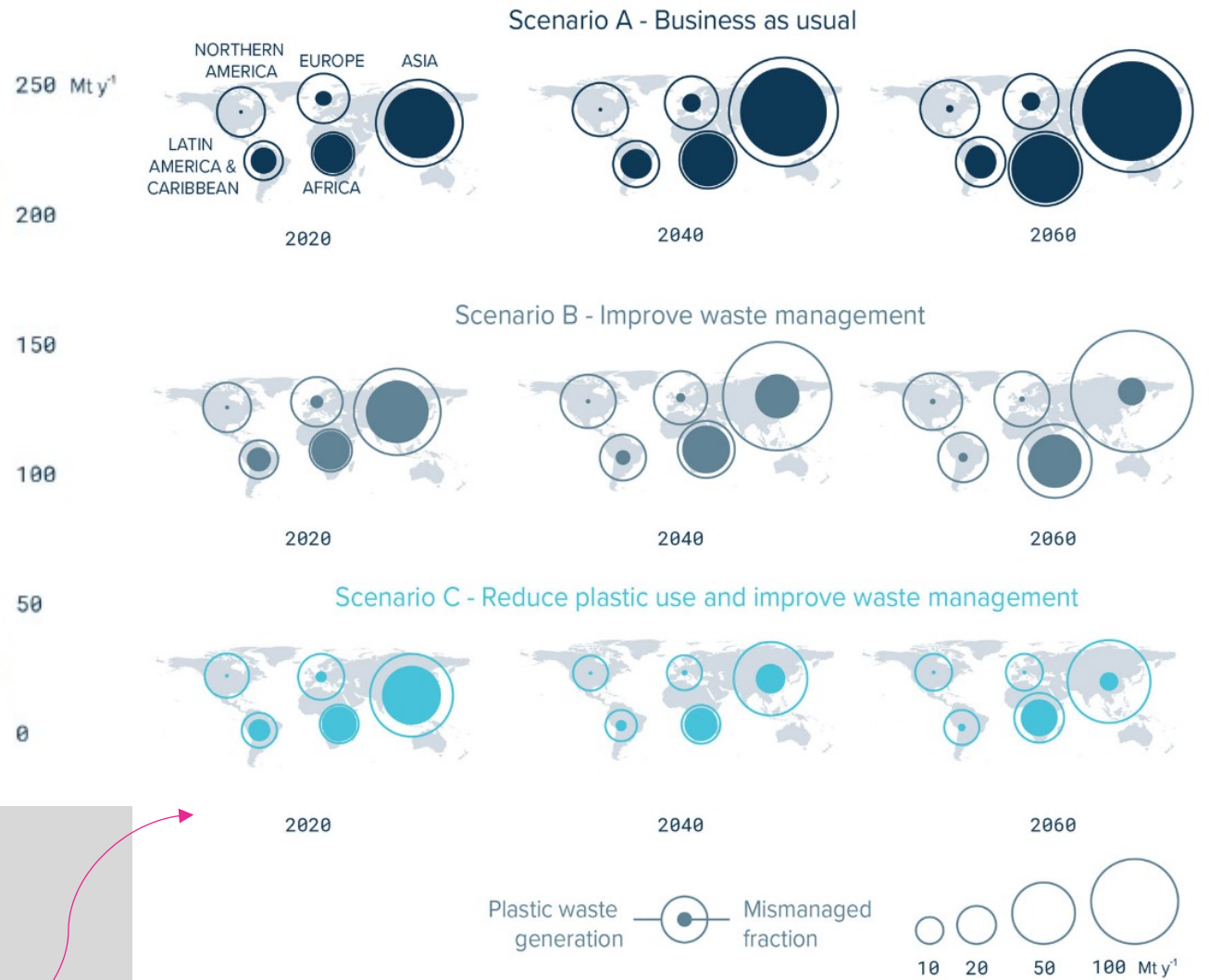
Current Effort and Challenges for Plastics Waste Reduction in Indonesia

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GLOBAL MISMANAGED PLASTIC WASTE GENERATION



Source: Lebreton and Andrady, 2019

Scenario C reflects a reduction in plastic demand per capita with fraction of plastic in municipal solid waste capped at 10% by 2020 and 5% by 2040, waste management gradually improves as in scenario B

Scenario D – Reduce plastic use, improve waste management and reduce sea-based source

Background: Current model on Plastics Leakage for Indonesia

Authors	Area	Leakage (TPY)
Emmerik et al., 2019	Jakarta Bay	2.1×10^3
Cordova and Nurhayati, 2019	Jakarta Bay	23 ± 7.10 tpd (8.3×10^3)
Schmidt et al, 2017	Global	$0.41 - 4 \times 10^6$
Lebreton et al., 2017	Global	$1.15 - 2.41 \times 10^6$
Jambect et al., 2015	Global	12.7×10^6
Jambect et al., 2015	Indonesia	$0.48-1.29 \times 10^6$
Reports NPAP 2017	Indonesia (Baseline)	0.7×10^6
Report LIPI, 2019	Indonesia (Baseline)	$0.27 - 0.59 \times 10^6$
WB, 2021	Indonesia (Baseline)	$0.201-0.552 \times 10^6$

Current Regulations relates to Solid Waste Management

Act No 18/ 2008 Solid Waste management

- [Government Regulation \(PP\) of the Central Government No.81 of 2012 concerning Management of Household Waste and Waste Similar to Household Waste](#)
- Presidential Decree 97/2017- Indonesian National Policy and Strategy on HH and similar to HH waste 2018-2025
- Presidential Decree 83/2018- National Plan of Action for Combating Marine Litter 2018-2025
- [Regulation of the Ministry of Home Affairs \(Permendagri\) of the Ministry of Home Affairs No.7 of 2021 concerning Procedures for Calculating Levy Rates in the Implementation of Waste Handling](#)
- [Regulation of the Ministry of Home Affairs \(Permendagri\) of the Ministry of Home Affairs No.33 of 2010 concerning Guidelines for Waste Management](#)

[Regulation of the Minister of Public Works and Public Housing of the Ministry of Public Works and Public Housing No.03 / PRT / M / 2013 of 2013 concerning](#) the Implementation of Infrastructure and Waste Facilities in Handling Household Waste and Similar Household Waste

- Regulation of the Minister of Environment and Forestry P.75/MENLHK/SETJEN/KUM.1/10/2019 regarding Road map of producer waste reduction
- [Regulation of the Minister of Environment and Forestry of the Ministry of Environment and Forestry No. P.10 / MENLHK / SETJEN / PLB.0 / 4/2018 of 2018 concerning](#) Guidelines for The Formulation of Policies and Strategies for Areas for The Management of Household Waste and Similar Household Waste
- [Regulation of the Minister of Environment and Forestry of the Ministry of Environment and Forestry No.70 of 2016 concerning](#) Quality Standards for Business Emissions and / or Thermal Waste Processing Activities
- [Regulation of the Minister of Environment and Forestry of the Ministry of Environment and Forestry No.63 of 2016 concerning](#) Requirements and Procedures for Hoarding Hazardous and Toxic Waste in Final Redemption Facilities
- [Regulation of the Minister of Environment and Forestry of the Ministry of Environment and Forestry No.59 of 2016 concerning](#) Leachate Quality Standards for Businesses and / or Activities of Waste Final Processing Site
- [Act No. 11 of 2020 Concerning](#) regarding Job Creation

National Action Plan- To Combat Marine Plastics Debris

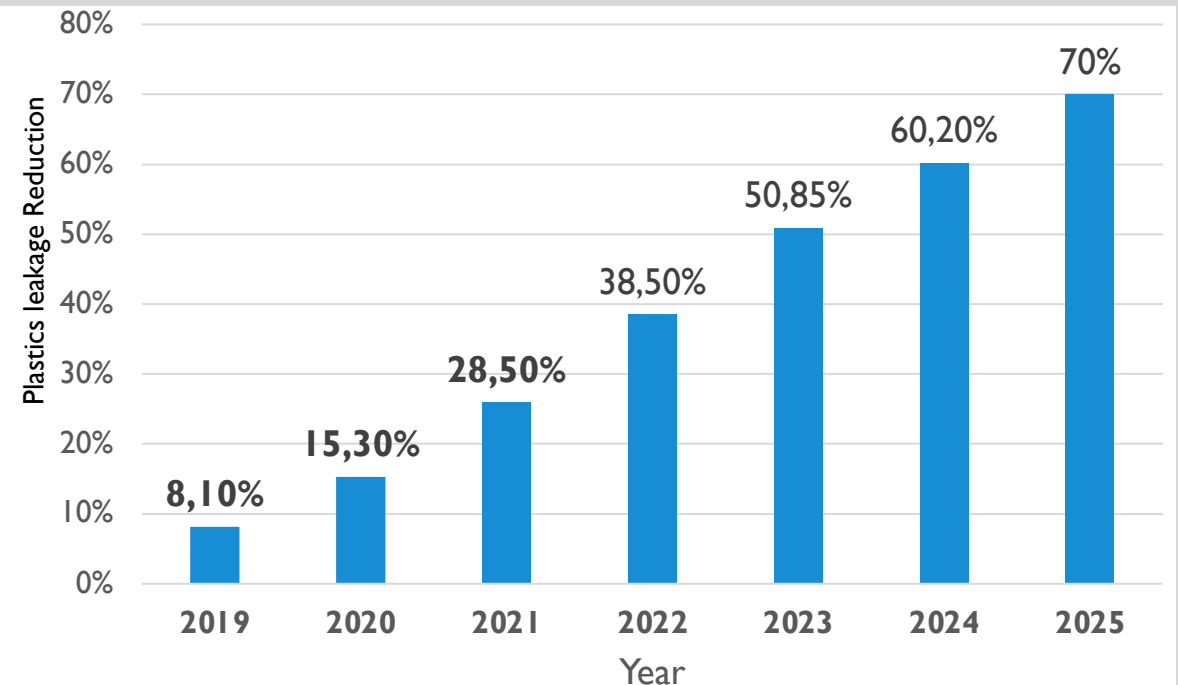
STRATEGY 1. IMPROVING BEHAVIOUR CHANGE

STRATEGY 2. REDUCING LAND BASE- LEAKAGE

STRATEGY 3. COASTAL AND SEA WASTE MANAGEMENT

STRATEGY 4. ENHANCING FUNDING MECHANISM, POLICY REFORM ,AND LAW ENFORCEMENT

STRATEGY 5. RESEARCH AND DEVELOPMENT



Challenges

- Will the strategy eventually reach the 70% of waste of plastics debris reduction by 2025?
- Are the activities of strategies lead to reduction of the plastics debris?
- Which activities will contribute more on forthcoming years?
- Is there any means to fasten the targeted reduction?

Current and improvement Strategy to overcome Plastic Pollution Problem in Indonesia

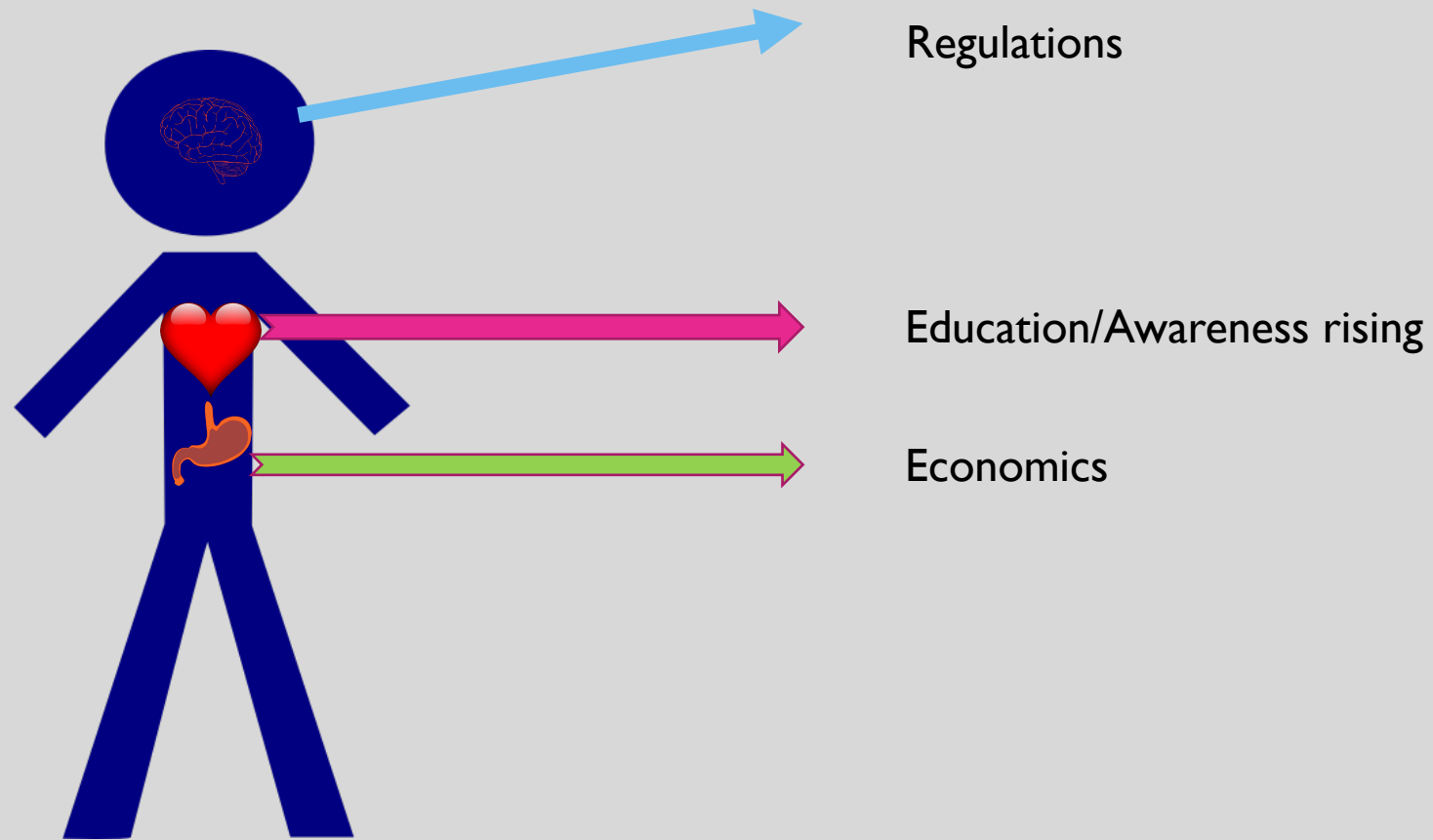
1. Reduce or substitute plastic usage to prevent the consumption of more than 1 million tonnes of plastics per year by 2025
2. Redesign plastic products and packaging for reuse or high-value recycling
3. Double plastic waste collection from 39% to 84% by 2025 by boosting state-funded and informal or private sector collection systems
4. Double current recycling capacity to process an additional 975,000 tonnes per year of recycled plastic by 2025
5. Build or expand controlled waste disposal facilities million tonnes of plastic waste per year by 2025

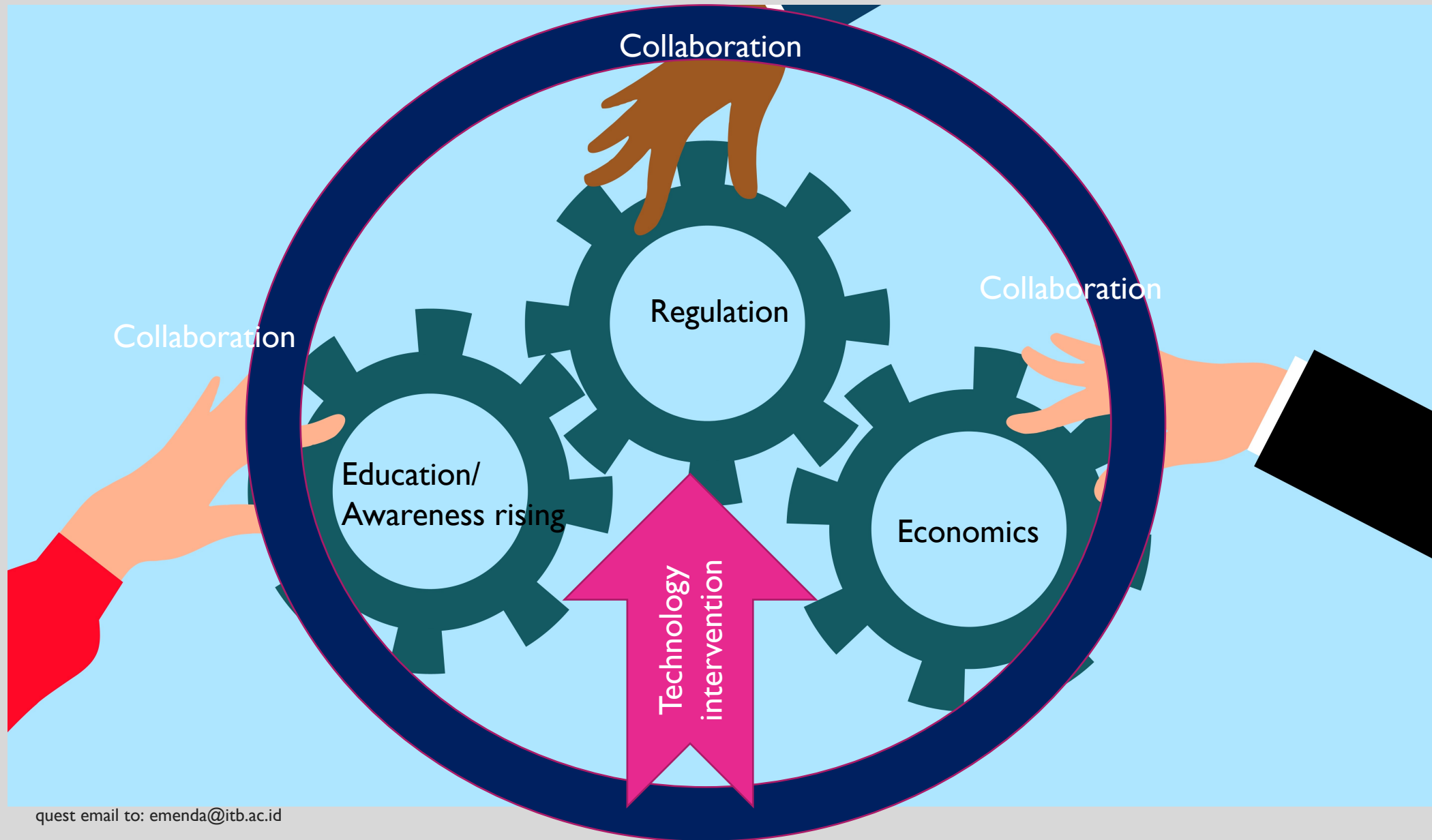
Ten recommendations for stakeholders to reduce plastic pollution include:

- (1) regulation of production and consumption;
- (2) eco-design;
- (3) Increasing the demand for recycled plastics;
- (4) Reducing the use of plastics;
- (5) use of renewable energy for recycling;
- (6) extended producer responsibility over waste;
- (7) improvements in waste collection systems;
- (8) prioritization of recycling;
- (9) use of bio-based and biodegradable plastics;
- (10) improvement in recyclability of e-waste

Prata, et al., 2019

Three approaches/Instruments





Other on going study/ pending implementation/partly applied

Regulations:

- SUP banned
- Regulation on centralize and decentralize connection on waste management program (Ministry of home affair)
- EPR

Technology driven:

- Improvement waste sorting
- Improvement energy recovery technology
- Circular economy technology adjustment

Economic :

- Levy /tax for plastics
- VAT subsidy
- Retribution/collection fee scheme

Education/Awareness :

- National movement
- Early childhood curricula on waste management
- Clean up program

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